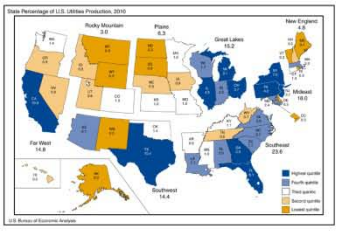
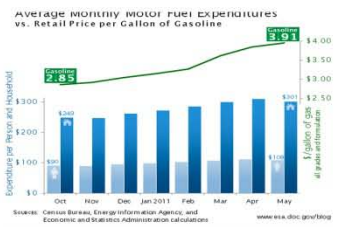
U.S. Department of Commerce

Energy and Environmental Management Manual

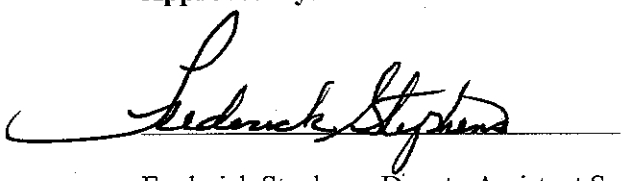
September 2012





This Energy & Environmental Management Manual is approved under the authority of Department Administrative Order 217-16, and holds the same authority as a Department Administrative Order.

Approved By:



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9/13/12

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ABBREVIATIONS

ac	Alternating Current
ACP	Area Contingency Plan
AFFF	Aqueous Film-forming Foam
AFVs	Alternative Fuel Vehicles
AIRFA	American Indian Religious Freedom Act
AL	Action Level
APPS	Act to Prevent Pollution from Ships
AQD	Air Quality District
ARPA	Archaeological Resources Protection Act
AST	Above-ground Storage Tank
AUL	Authorized User List
BA	Biological Assessment
BACM	Best Available Control Measures
BACT	Best Available Control Technology
BMP	Best Management Practice
BOA	Basic Ordering Agreement
BOEMRE	Bureau of Ocean Energy Management, Regulation and Enforcement
C&D	Construction and Demolition
CAA	Clean Air Act
CAM	Commerce Acquisition Manual
CCR	Consumer Confidence Report
CEQ	Council on Environmental Quality
CERCLA	Comprehensive Environmental Response, Compensation and Liability Act (Superfund)
CFC	Chlorofluorocarbon
CFO	Chief Financial Officer
CFR	Code of Federal Regulations
CFST	Contaminated Fuel Settling Tank
CMP	Coastal Management Program
CTG	Control Techniques Guidance
CTS	Compliance Tracking System
CWA	Clean Water Act
CWS	Community Water System
CZMA	Coastal Zone Management Act
CZMP	Coastal Zone Management Plan
DAO	Department Administrative Order
Department	Department of Commerce
dc	Direct Current
DOE	Department of Energy
DOSC	Department On Scene Coordinator
DOT	Department of Transportation

DOTW	Department Owned Treatment Works
DRO	Designated Responsible Official
EA	Environmental Assessment
EEZ	Exclusive Economic Zone
EFH	Essential Fish Habitat
EHS	Extremely Hazardous Substance
EIS	Environmental Impact Statement
EISA	Energy Independence and Security Act
EL	Environmental Liability
EM	Emergency Management
EMS	Environmental Management System
E.O.	Executive Order
EPA	Environmental Protection Agency
EPAct05	Energy Policy Act of 2005
EPAct92	Energy Policy Act of 1992
EPCRA	Emergency Planning and Community Right-to-Know Act
EPEAT	Electronic Product Environmental Assessment Tool
ERC	Emission Reduction Credit
ERP	Emergency Response Plan
ESA	Endangered Species Act
ESC	Executive Steering Committee
ESOH	Environmental, Safety and Occupational Health
ESPC	Energy Savings Performance Contract
FDA	Food and Drug Administration
FEMP	Federal Energy Management Program
FFCA	Federal Facility Compliance Act
FIC	Facility Incident Commander
FIFRA	Federal Insecticide, Fungicide and Rodenticide Act
FIP	Federal Implementation Plan
FOPTW	Federally Owned Pre-treatment Works
FOSC	Federal On-scene Coordinator
FOTW	Federally Owned Treatment Works
FPO	Federal Preservation Officer
FR	Federal Register
FRP	Facility Response Plan
FRPM	Federal Real Property Management
FY	Fiscal Year
GHG	Greenhouse Gas
GOCO	Government-owned, Contractor-operated
GSA	General Services Administration
GWUDI	Ground Water Under Direct Influence
HABs/HAER	Historic American Buildings Survey/ Historic American Engineering Record
HAP	Hazardous Air Pollutants
HAZCOM	Hazardous Communication
HAZWOPER	Hazardous Waste Operations and Emergency Response

HC	Hazardous Chemical
HCHB	Herbert C. Hoover Building
HCFC	Hydrochlorofluorocarbons
HFCs	Hydrofluorocarbons
HM	Hazardous Material
HS	Hazardous Substance
HSPD	Homeland Security Presidential Directive
HSWA	Hazardous and Solid Waste Amendments
HW	Hazardous Waste
I/M	Inspection and Maintenance
IC	Incident Commander
ICP	Integrated Contingency Plan
ICRMP	Integrated Cultural Resources Management Plan
ICS	Incident Command System
ILA	Industrial, Landscaping, and Agriculture
IPM	Integrated Pest Management
IPMP	Integrated Pest Management Plan
ISO	International Organization for Standardization
ISWMP	Integrated Solid Waste Management Plan
kg	Kilogram
lbs	Pounds
LCR	Lead and Copper Rule
LDR	Land Disposal Restriction
LEED	Leadership in Energy and Environmental Design
LEPCs	Local Emergency Planning Committee
LID	Low Impact Development
MACT	Maximum Achievable Control Technology
MCL	Maximum Contaminant Level
MCLG	Maximum Contaminant Level Goal
MMPA	Marine Mammal Protection Act
MPRSA	Marine Protection, Research and Sanctuaries Act
MSDS	Material Safety Data Sheet
MWh	Megawatt Hour
NAAQS	National Ambient Air Quality Standards
NAGPRA	Native American Grave Protection and Repatriation Act
NAICS	North American Industry Classification System
NCP	National Oil and Hazardous Substances Pollution Contingency Plan
NECPA	National Energy Conservation Policy Act
NEPA	National Environmental Policy Act
NESHAP	National Emission Standards for Hazardous Air Pollutants
NHL	National Historic Landmark
NHO	Native Hawaiian Organizations
NHPA	National Historic Preservation Act
NMFS	National Marine Fisheries Service
NIMS	National Incident Management System
NOAA	National Oceanic and Atmospheric Administration

NON	Notice of Noncompliance
NOV	Notice of Violation
NPDES	National Pollutant Discharge Elimination System
NPDWR	National Primary Drinking Water Regulations
NPS	Non-point Service
NRC	National Response Center
NRT	National Response Team
NSPS	New Source Performance Standards
NSR	New Source Review
NTNCWS	Non-transient, Non-community Water System
O&M	Operations and Maintenance
OAS	Office of Administrative Services
OCIO	Office of the Chief Information Officer
OCM	Oil Content Monitor
ODS	Ozone Depleting Substance
OFEE	Office of the Federal Environmental Executive
OMB	Office of Management and Budget
OPA 90	Oil Pollution Act of 1990
ORPP	Office of Real Property Programs
OSBM	Office of Space and Building Management
OSEEP	Office of Sustainable Energy and Environmental Programs
OSHA	Occupational Safety and Health Administration
OU	Operating Unit
OW/WO	Oily Waste/Waste Oil
OWHT	Oily Waste Holding Tank
OWS	Oil/Water Separator
P2	Pollution Prevention
PBT	Persistent, Bioaccumulative, and Toxic
PCB	Polychlorinated Biphenyl
pCi/L	Picocurie per Liter
PE	Professional Engineer
PHMSA	Pipeline and Hazardous Material Safety Administration
Pub. L.	Public Law
PM	Particulate Matter
POTW	Publicly Owned Treatment Works
PP&E	Plant, Property and Equipment
ppb	Parts per Billion
PPE	Personal Protective Equipment
ppm	Parts per Million
PREP	Preparedness for Response Exercise Program
PROTW	Privately Owned Treatment Works
PSD	Prevention of Significant Deterioration
PWC	Public Works Center
PWS	Public Water System
QI	Qualified Individual
QRP	Qualified Recycling Program

RACT	Reasonably Achievable Control Technology
RCP	Regional Contingency Plan
RCRA	Resource Conservation and Recovery Act
REC	Renewable Energy Credit
RQ	Reportable Quantity
RRT	Regional Response Team
SARA	Superfund Amendments and Reauthorization Act
SCP	Spill Contingency Plan
SDWA	Safe Drinking Water Act
SERC	State Emergency Response Commission
SHPO	State Historic Preservation Officer
SIC	Standard Industrial Classification
SIP	State Implementation Plan
SMT	Spill Management Team
SNAP	Significant New Alternatives Policy
SOSCPs	Shipboard Oil Spill Contingency Plan
SPCC	Spill Prevention Control and Countermeasure
SSO	Senior Sustainability Officer
SSPP	Strategic Sustainability Performance Plan
ST	Storage Tank
SWAP	Source Water Assessment Program
SWDA	Solid Waste Disposal Act
SWOB	Ship Waste Offload Barges
SWPPP	Stormwater Pollution Prevention Plan
TC	Toxic Chemical
TCLP	Toxicity Characteristics Leaching Procedure
THPO	Tribal Historic Preservation Officer
TMDL	Total Maximum Daily Load
TNCWS	Transient Non-community Water System
TPQ	Threshold Planning Quantity
tpy	Tons per Year
TRI	Toxic Release Inventory
TSCA	Toxic Substances Control Act
TSD	Treatment, Storage and/or Disposal
UDF	Unidirectional Flushing
USACE	United States Army Corps of Engineers
U.S.C.	United States Code
USCG	United States Coast Guard
USFWS	United States Fish and Wildlife Service
UST	Underground Storage Tank
VOC	Volatile Organic Compound
WCD	Worst Case Discharge
WQS	Water Quality Standard
WSVA	Water System Vulnerability Assessment

ENERGY AND ENVIRONMENTAL MANAGEMENT MANUAL

CHAPTER VS. POSITIONAL CROSS-WALK

This manual is intended primarily for use by the facility manager and his or her staff. While it is preferred that facility managers be familiar with this manual in its entirety, this chapter cross-walk is provided to aid in better ascertaining which chapters and regulations are most pertinent to their job responsibilities. This manual also provides other staff, primarily energy, environmental and sustainability professionals with the same type of information offered to the facility manger and staff. These are recommendations only and are in no way meant to be prescriptive.

Chapter Title	Facility Manager/Operator	SSPP POC	Infrastructure/Real Estate Program Manager	Energy Program Manager	Environmental Program Manager	HZMAT/Hazardous Waste Coordinator	Designated Responsible Official (DRO)
1. Environmental and Energy Policy and Program Organization	X	X	X	X	X	X	X
2. Training	X	X	X	X	X	X	X
3. Awards	X	X		X	X		
4. Environmental Compliance	X	X	X		X	X	X
5. Environmental Management Systems	X		X		X		
6. Environmental Liability	X		X		X		
7. Pollution Prevention	X				X	X	
8. Procedures for Implementing the Emergency Planning and Community Right-to-Know Act	X				X	X	X
9. Air Quality	X				X	X	X
10. Management of Ozone-Depleting Substances	X	X			X	X	
11. Clean Water	X				X	X	X
12. Safe Drinking Water Act Compliance	X				X		X
13. Stormwater Management	X				X		X
14. Oil and Hazardous Substance Spill Preparedness and Response	X				X	X	X
15. Oil Pollution	X				X	X	
16. Storage Tanks	X				X	X	X
17. Hazardous Waste Management	X				X	X	X

Chapter Title	Facility Manager/Operator	SSPP POC	Infrastructure/Real Estate Program Manager	Energy Program Manager	Environmental Program Manager	HZMAT/Hazardous Waste Coordinator	Designated Responsible Official (DRO)
18. Polychlorinated Biphenyl Management	X				X	X	X
19. Solid Waste Management and Resource Recovery	X				X	X	
20. Pesticide Compliance	X				X	X	
21. Procedures for Implementing the National Environmental Policy Act	X				X		
22. Natural Resource Management	X		X		X		
23. Coastal Zone Management	X		X		X		
24. Cultural Resources Management	X		X		X		
25. Sustainable Buildings	X	X	X	X			
26. Greenhouse Gas Emissions	X	X	X	X			
27. Energy Conservation	X	X	X	X			
28. Renewable Energy	X	X	X	X			
29. Facility Metering	X	X	X	X			
30. Water Conservation	X	X	X	X	X		
31. Green Acquisition	X	X	X	X	X		
32. Electronic Stewardship	X	X	X	X	X		

PART I:

GENERAL INFORMATION

CHAPTER 1:
ENERGY AND ENVIRONMENTAL PROGRAM ORGANIZATION

1-1 Scope

1-1.1 Applicability. This manual has been written as an extension of Department Administrative Order (DAO) 217-16, dated April 3, 2012, and is afforded the same status and authority as a DAO. This Manual applies to all Departmental Offices and Operating Units (OUs). Provisions of this Manual also apply to government-owned, contractor-operated facilities and operations, depending on the subject. Specific policies and associated applicability are addressed in subject chapters. This Manual is not intended to create any right or benefit, substantive or procedural, enforceable at law by any party against the Department, its employees, or any person. The intent of this Manual is to serve as one comprehensive source for all facility managers, program managers, and other individuals responsible for operations that must comply with statutory or other energy and environmental regulations or considerations.

1-1.2 Format. This Manual articulates requirements associated with energy and environmental laws, regulations, and Executive Orders (E.O.s). Each chapter has been prepared around a specific environmental or energy topic describing program scope, applicable references, program requirements, Departmental offices and OU responsibilities, and reporting requirements. Specific chapters are not all-inclusive and may not address every possible concern related to the chapter topical area; for more information the reader is encouraged to read the authorities provided in the references section in each chapter and to other related chapters in this Manual, as appropriate. The term "sustainability," as used within the Federal Government, originally referred to a program focused on the integrated planning, design and construction of buildings using environmentally preferable products, maximizing indoor air quality, minimizing waste, and maximizing energy efficiency. However, the term "sustainability" has been broadly expanded by Executive Order to now refer to all environmental stewardship and energy efficiency programs and is used in this context throughout this Manual. Environmental compliance programs, while perhaps related to sustainability, are focused on statutory requirements associated with an environmental media area.

1-2 Community Construct

1-2.1 The Department of Commerce (Department) is comprised of Departmental staff offices and 12 OUs. While some environmental compliance, and/or energy and sustainability requirements apply to all OUs, all requirements do not necessarily apply to all OUs. Requirements may either address OUs or agencies. In this Manual the terms OU and agency are used interchangeably. The Office of the Secretary (OS) (specifically, the Office of Administrative Services/Office of Sustainable Energy and Environmental Programs (OSEEP)) will coordinate with each OU to determine applicable requirements. A point of contact shall be maintained at each OU to enable this coordination with the Office of the Secretary. OUs with more robust energy and environmental programs may choose to have multiple points of contact based on specific program areas (i.e., environmental compliance contact and energy/sustainability contact), while OUs with limited requirements may choose to rely on one point of contact.

The Department's success relies upon the collaborative partnership established and maintained between OS/OSEEP and the 12 OUs.

A Strategic Sustainability Performance Plan (SSPP) was established for the Department in fiscal year 2010 in accordance with E.O. 13514, *Federal Leadership in Environmental, Energy, and Economic Performance*, dated October 5, 2009. The SSPP is updated annually and approved by the Department's Senior Sustainability Officer (SSO). The intent of the SSPP is to articulate an integrated approach and to track progress against various Federal mandates. At a minimum, each OU's sustainability point of contact will be responsible for providing information needed to update the plan annually (see Appendix A, SSPP Template), including the Annual Greenhouse Gas Inventory, Five Year Plan, and Sustainability Data Report (see Appendix B, Sustainability Scorecard; and Appendix C, Data Elements for Scorecards).

1-3 Document Hierarchy

The Energy and Environmental Management Department Administrative Order (DAO 217-16), signed into effect by Secretary John Bryson on April 3, 2012, prescribes the policies and responsibilities for implementing the Energy and Environmental Management Program throughout the Department. The DAO granted authority to the Senior Sustainability Officer to approve and sign into effect this Energy & Environmental Management Manual (E&EMM), and any future updates of the Manual.

The DAO also allows the E&EMM to authorize technical publications to provide examples, approaches and/or templates for the benefit of all Operating Units. The Associate Director, Office of Sustainable Energy & Environmental Programs (OSEEP), is hereby delegated the authority to sign into effect any and all such technical publications related to energy and environmental programs addressed within the E&EMM.

CHAPTER 2:
TRAINING

2-1 Scope

2-1.1 This Chapter provides training requirements and opportunities relative to environmental and energy management responsibilities at the Department of Commerce, its Departmental Offices, and OUs.

2-1.2 Related Chapters. Other chapters that discuss topics pertinent to training include Chapter 5, Environmental Management Systems; Chapter 7, Pollution Prevention; Chapter 9, Air Quality; Chapter 11, Clean Water; Chapter 12, Safe Drinking Water Act Compliance; Chapter 14, Oil and Hazardous Substance Spill Preparedness and Response; Chapter 15, Oil Pollution; Chapter 16, Storage Tanks; Chapter 17, Hazardous Waste Management; Chapter 18, PCB Management; Chapter 19, Solid Waste Management and Resource Recovery; Chapter 22, Natural Resources Management; Chapter 23, Coastal Zone Management; and Chapter 24, Cultural Resources Management.

2-1.3 References.

(a) 40 Code of Federal Register (CFR) Part 262, Environmental Protection Agency (EPA) Regulations for Hazardous Waste Generators;

(b) 29 CFR Part 1910, Occupational Safety and Health Standards; and

(c) 49 CFR Part 172.704, Transportation of Hazardous Material.

2-2 Legislation

2-2.1 Comprehensive Environmental Response, Compensation and Liability Act of 1980 (CERCLA or Superfund)**.** CERCLA authorized Federal action to respond to the release, or substantial threat of release, into the environment of hazardous substances, pollutants, or contaminants that may present an imminent and substantial danger to public health or welfare.

2-2.2 Occupational Safety and Health Act (OSHA)**.** OSHA establishes safety and health standards to ensure that every worker in the nation enjoys safe and healthful working conditions. Federal facilities must comply with OSHA.

2-2.3 Resource Conservation and Recovery Act (RCRA)**.** RCRA governs the disposal of hazardous wastes. All employees who work on site and are exposed to hazardous substances, health hazards, or safety hazards are required to receive 40-hours initial training and an 8-hour annual refresher.

2-2.4 The Clean Air Act (CAA)**.** The CAA specifies air quality management requirements. CAA mandates the prevention and control of air pollution from both stationary and mobile sources. This mandate is carried out through a multitude of permitting, monitoring, and reporting requirements, worker practice standards, emission limits, and restrictions on material use. Many of these requirements involve specific certifications and guidelines that in turn imply the need for training to effectively comply with these complex and stringent requirements. The training requirements are, by and large, divided into categories:

(a) Those affecting personnel who use equipment to measure both mobile and stationary sources.

(b) Those involving personnel who service or work around ozone-depleting chemicals.

2-2.5 E.O. 13423**.** Section 3, paragraph c requires agencies to establish environmental management training.

2-2.6 Energy Policy Act of 2005**.** Section 704.4(D) requires the reporting of energy training and expenditures.

2-3 Requirements

2-3.1 Required Federal Training. Table 2-1 lists training required by Federal Regulation. Table 2-2 lists the major environmental training requirements that will affect Department facilities. This list is not all-inclusive.

Table 2-1. Explicitly Required Training

RCRA Large Quantity Generator (40 CFR Part 262**)**	*To ensure that employees are thoroughly familiar with proper waste handling and emergency procedures, relevant to their responsibilities during normal facility operations and emergencies.*	Emergency procedures, systems, and equipment; Implementation of contingency plan; Emergency equipment, use, repair, inspection, and replacement; Communication/ alarm systems; Release risk assessment; Response to fires and explosions; Spill response; Shutdown of operations; Response to groundwater contamination incidents; Automatic waste feed cutoff; Hazardous waste management procedures; Registration and identification numbers; Hazardous waste identification; Storage and accumulation times
RCRA Small Quantity Generator (40 CFR Part 262**)**	*To ensure that employees are thoroughly familiar with proper waste handling and emergency procedures, relevant to their responsibilities during normal facility operations and emergencies.*	Emergency procedures; Hazardous waste management procedures; Registration and identification numbers; Hazardous waste identification; Storage and accumulation times; Packaging; Labeling; Record-keeping; Manifesting; Inspection; Interaction with Department of Transportation; Preparedness and prevention

TRANSPORTATION OF HAZARDOUS MATERIALS (49 CFR § 172.704**)**	*To ensure that employees are provided training in all elements necessary for proper shipment and transportation of hazardous materials.*	Identification of hazardous materials; Recognition of hazardous materials; Packaging, labeling, marking, and placarding; Shipping papers and manifest; Knowledge of emergency response information, including oil spill plans; Self -protection measures; Accident prevention methods and procedures; Loading and storage procedures; Modal-specific Requirements
Hazard Communication (29 CFR § 1910.1200)	*To ensure that the hazards of all chemicals produced or imported are evaluated, and that information concerning their hazards is transmitted to employers and employees.*	Requirements of 29 CFR 1910.1200-Operations where hazardous materials are present; Location and availability of written hazardous chemical program; Method and observations to detect the presence or release of hazardous materials; Physical and health hazards of hazardous materials; Protective measures and procedures implemented; Symptoms of overexposure; Details of written hazardous chemical program: -Labeling -Material Safety Data Sheet -Obtaining and using hazard information
OSHA HAZWOPER (29 CFR § 1910.120 (q)**)**	*To ensure that emergency response personnel are instructed in their role and responsibilities of chemical incident response.*	Emergency response plan implementation (Level (L)3); Selection and use of personal protective equipment (L2, 3); Specialized chemical personal protective equipment (L3); Notification and recognition of need for additional resources (L1-3); Basic control, containment, confinement (L1-2); Role in emergency response (L1-3); Ability to function in role in ICS (L3); Recognition of presence of hazardous materials (L2,3); Classification and verification of known and unknown hazardous materials (L2,3); Basic hazard and risk assessment techniques (L3); Hazard and risk assessment techniques (L3); Basic hazardous materials terms (L2,3); Chemical and toxicological terminology and behavior (L3); Termination procedures (L3); Use of Department of Transportation emergency response guidebook (L1-3)

Table 2-2. Environmental Training Requirements for Facilities

	RCRA Large Quantity Generators	RCRA Small Quantity Generators	DOT	OSHA Hazard Communication Standard	OSHA Hazardous Waste Operations and Emergency Response (HAZWOPER)	Spill Prevention, Containment and Counter-measures (SPCC)
Applicable to	Facilities that generate more than 1,000 kg/ month of hazardous waste.	Facilities that generate from 100 to 1,000 kg/ month of hazardous waste.	Facilities involved in the transportation, shipment, or preparation for shipment of hazardous materials.	Facilities that handle hazardous chemicals.	Facilities that may be involved in an emergency response operation involving the release of a hazardous substance.	Facilities required to prepare an SPCC Plan.
Who Must Be Trained	Employees who handle hazardous waste.	Employees who handle hazardous waste.	Employees involved in the transportation or shipment of hazardous materials/ wastes.	Employees who may be exposed to hazardous chemicals under normal operating conditions or in foreseeable emergencies.	Employees who participate, or may be expected to participate in emergency response; training based on level of involvement.	Employees involved in the operation and maintenance of equipment that may discharge oil.
When Training Must Occur	Within 6 months after employment or new job assignment; must be supervised until trained. Annual refresher for all employees.	Not specified.	Within 90 days after employment or new job assignment 49 CFR § 172-704(c).	At time of initial assignment. Whenever a new hazard is introduced to the work area.	Initial training prior to taking part in emergency response. Annual refresher.	Spill prevention briefings must be conducted "at intervals frequent enough to assure adequate under-standing of the SPCC Plan."

Record-keeping	Written job title and job description; written description of training required for each position; documenta-tion that training has been provided.	Not required.	Written description of employee information including certification 49 CFR § 172-704(d).	Written description of employee information and training must be included in hazard communication program.	Must certify training or competency, including method used to demonstrate competency.	Logs of personnel attending and topics discussed in training sessions are required.
Regulatory Citation	40 CFR § 262. 34 (a)(4) 40; CFR § 265.16	40 CFR § 262.34 (d)(5)(iii)	49 CFR § 173.1 (b); 49 CFR § 177.800 (a); 49 CFR § 177.816; 49 CFR § 172-700- 704	29 CFR § 1910. 1200 (b)(h)	29 CFR § 1910.120 (q)(5)(6); 29 CFR § 1910.120 (p)(7) and (p)(8)(iii)	40 CFR § 112.7 (e)(10)

(a) **Spill Prevention, Control, and Countermeasures (SPCC).** The 40 CFR § 112.7 specifies SPCC training requirements: (1) At a minimum, train your oil-handling personnel in the operation and maintenance of equipment to prevent discharges; discharge procedure protocols; applicable pollution control laws, rules, and regulations; general facility operations; and, the contents of the facility SPCC Plan. (2) Designate a person at each applicable facility who is accountable for discharge prevention and who reports to facility management. (3) Schedule and conduct discharge prevention briefings for your oil-handling personnel at least once a year to assure adequate understanding of the SPCC Plan for that facility. Such briefings must highlight and describe known discharges as described in § 112.1(b) or failures, malfunctioning components, and any recently developed precautionary measures. Training and refresher information will be given in the form of annual briefings to assure adequate understanding of the SPCC plan for the facility. SPCC requires owners and operators to be responsible for properly instructing their personnel in:

(i) The proper operation and maintenance of equipment to prevent the discharges of oil.

(ii) The instruction of all applicable pollution control laws.

(iii) Rules and regulations.

(b) **Emergency Planning and Community Right-To-Know Act (EPCRA).** 42 U.S.C. 11001-11050 requires that the public be informed of hazardous and toxic chemicals in their communities and emergency procedures in the event of a release of extremely hazardous substances. These requirements establish that individuals must be informed of the potential dangers of hazardous and toxic chemicals and the appropriate emergency planning procedures, thereby assuming that training in some form is necessary to properly disseminate this information.

(c) **Resource Conservation and Recovery Act.** RCRA requires hazardous waste (HW) generators to ensure that all employees who handle HW are thoroughly familiar with proper waste handling and emergency procedures relevant to their responsibilities. The 40 CFR § 262.34(d) specifies RCRA's small quantity generator training requirements. The 40 CFR § 265.16 specifies RCRA's large quantity generator training requirements. Both of these require that all employees who handle HW receive training concerning emergency procedures, systems, and equipment. An annual refresher is required after the initial training is completed. The training program design must ensure that personnel are able to respond effectively to emergencies by including, as a minimum, the following:

(i) Procedures for using, inspecting, repairing, and replacing facility emergency and monitoring equipment.

(ii) Procedures for automatic waste feed cut-off systems, communications, or alarm systems.

(iii) Response to fires, explosions, and groundwater contamination incidents.

(iv) Procedures for shutdown of operations.

(d) **Pesticide Management.** The 40 CFR § 171 specifies pesticide management training and certification requirements. The EPA requires various training and certification procedures depending on whether the pesticide applicator is classified as commercial or private, and the specific category within the type of applicator. In general, all applicators of pesticides must demonstrate a competency in the use and handling of pesticides through the training and certification procedures. This competency may be based on written examinations and appropriate performance testing as outlined in the 40 CFR § 171. These standards for commercial applicators must include the following areas of competency:

(i) Label and labeling comprehension.

(ii) Safety.

(iii) Environment.

(iv) Pests.

(v) Pesticides.

(vi) Equipment.

(vii) Application techniques.

(viii) Applicable laws and regulations.

Initial and refresher training and certification are entirely dependent on the

specific EPA-approved standard used by the pesticide applicator.

(e) **Pollution Prevention.** The Federal Government is challenged by the "Greening the Government" E.O.s and the Pollution Prevention Act of 1990 to apply source reduction in the management of its facilities and in its acquisition practices, thereby creating a need for training individuals to effectively comply with the regulations.

(f) **Wastewater Management.** The Clean Water Act (CWA) and individual state guidelines specify wastewater treatment requirements. Generally, CWA and individual states stipulate that certain certifications are required for the proper maintenance and operation of a wastewater treatment facility and its components. A certification implies that an individual has completed an appropriate level of training to obtain the desired certification. Therefore, training is necessary to effectively comply with the CWA and state requirements.

(g) **Water Treatment.** The 40 CFR § 141-149 specifies water treatment requirements based on the Safe Drinking Water Act (SDWA). Generally, SDWA and individual states require specific guidelines and permitting requirements for the proper maintenance and operation of public water systems. These Federal and state mandated guidelines and requirements invoke training requirements for personnel to properly comply with the multitude of water treatment requirements.

(h) **Transportation of Hazardous Materials.** The 49 § CFR 172.700 specifies Department of Transportation's (DOT) training requirements. DOT requires all employees involved in the transportation or shipment of hazardous materials (HM) to receive general awareness/familiarization, function-specific, and safety training every 3 years. This training must enable the employee to recognize and identify hazardous materials; properly label, mark, package, and placard a hazardous material; properly load, unload, and store hazardous materials; and properly complete shipping papers and manifests.

(i) **HAZWOPER Hazardous Materials Training Requirements.** The 29 CFR § 1910.120 specifies HAZWOPER training requirements relating to facility restoration; treatment, storage and/or disposal (TSD); first responder awareness/operations; hazardous material technician/specialist; on-scene incident commanders; and emergency action plans. These training requirements call for 8-40 hours of initial training, depending on the subject matter, with periodic refresher courses afterwards. Please refer to 29 CFR 1910.120 for complete details.

(j) **Hazard Communication (HAZCOM).** The 29 CFR § 1910.1200 specifies HAZCOM training requirements. HAZCOM requires that the hazards of all chemicals produced or imported be evaluated and information concerning their hazards be communicated to employers and employees. This communication of information will be accomplished by means of comprehensive hazard communication programs. Hazard communication programs must include container labeling and other forms of warning, Material Safety Data Sheets (MSDS), and employee training. Information and training must be provided upon initial assignment and whenever a new physical or health hazard is introduced

into the work area.

2-3.2 Optional Federal Training.

(a) **Natural and Cultural Resources Management.** Natural and cultural resources management requirements are specified and dispersed in numerous Federal statutes such as CWA, Endangered Species Act, National Environmental Policy Act (NEPA), National Historic Preservation Act, and Archaeological Resources Protection Act. These requirements call for the overall identification, protection, restoration, improvement, and proper use of natural and cultural resources. All personnel engaged in natural and cultural resources protection and conservation can receive an appropriate level of training from sources such as the U.S. Fish & Wildlife Service and the Advisory Council on Historic Preservation.

(b) **NEPA.** The 40 CFR § 1500-1508 specifies NEPA's requirements. NEPA mandates that Federal agencies use a systematic approach in the planning and decision-making processes for any action that may have an impact on the environment. NEPA further requires that Federal agencies include a detailed environmental impact statement of major Federal actions that significantly affect the quality of the environment. The EPA and private organizations, such as universities, offer NEPA training.

2-3.3 Departmental Training.

(a) **Commerce Learning Center.** An awareness of environmental requirements and programs is a precursor to actions that are critical to attaining Department pollution prevention, compliance, and other environmental goals. The Department's online learning center offers generalized "all-hands" training in environmental and energy awareness. Topics discussed in this training course include: recycling, power management, conservation laws and regulations, pollution prevention, water conservation, sustainability, green procurement, electronics stewardship, building performance, petroleum conservation, energy conservation, renewable energy, alternative fuel requirements, greenhouse gases, and the Department's environmental management system.

(b) **Office of Sustainable Energy and Environmental Programs (OSEEP) Staff.** OSEEP office staff may be available upon request to train other Departments and OUs at "all-hands" forums.

(c) **New Employee Training.** Training on environmental and energy awareness is given to every new employee at orientation. Topics include: energy and water conservation, recycling, and environmental stewardship.

2-3.3 State Required Training. Medical or Infectious Waste Management. Individual state programs specify medical waste requirements. The state programs dictate the requirements necessary for medical waste management. However, employee training is necessary to inform employees of appropriate worker practice standards and guidelines for the proper procedures of medical or infectious

waste management.

2-4 Responsibilities

2-4.1 The Office of the Secretary. OSEEP shall:

(a) Update the Environmental Stewardship Training course on Commerce Learning Center periodically;

(b) Notify Departmental Offices and OUs of any amendments or changes to current legislation impacting required training on environmental and energy management issues; and

(c) Provide general training to the OUs through the course offered by the Commerce Learning Center. Additional "all hands" training may be provided to Commerce Departments and OUs, upon request.

2-4.2 Departmental Offices and OUs shall:

(a) Ensure compliance with training required by Federal Regulations;

(b) Highly encourage that "all hands" complete the Commerce Learning Center course on general environmental awareness training; and

(c) Track and report, as required, employee training on environmental and energy issues.

2-5 Reporting Requirements

– In accordance with annual energy and environmental reporting requirements and due dates, submit the total number of employees trained and the cost of that training.

CHAPTER 3:
ENERGY AND ENVIRONMENTAL STEWARDSHIP AWARDS

3-1 Scope

3-1.1 General. The Department Energy and Environmental Stewardship Awards recognize individuals, teams, and contractors of the Department, as well as Department partners who have attained exceptional energy and/or environmental achievements within their program, career field, or organization. The Awards recognize recipients for significant projects and efforts that either stand out as innovative and/or are worthy of replication across the Department. This information is intended as general procedural guidance for project managers, facility managers, and leadership who may wish to have a project team members considered for Departmental honors.

3-2 Legislation

3-2.1 E.O. 13514, Federal Leadership in Environmental, Energy, and Economic Performance, dated October 5, 2009;

3-2.2 E.O. 13423, Strengthening Federal Environmental, Energy, and Transportation Management, dated January 24, 2007;

3-2.3 Energy Policy Act of 2005 (Pub. L. No. 109-58); and

3-2.4 Energy Independence and Security Act of 2007 (Pub. L. No 110-140).

3-3 Terms and Definitions

3-3.1 Individual. An employee of the Department of the Commerce.

3-3.2 Team. Department employee or a combination of Department and non-Departmental employees.

3-3.3 Partner. A Departmental partner organization, which may be a contractor, a Federal/state agency, tribal nations or organizations, or non-profit entities, that worked with Departmental employees on a Departmental project.

3-4 Requirements

3-4.1 General. Applicants are required to be in compliance with applicable laws and regulations prior to receiving an award and have no fines, penalties or open audit findings associated with the nomination.

3-4.2 Eligibility. All Department employees are eligible for consideration. Nominations may be submitted as an individual or a team; however, the nomination form must be signed and submitted by a Federal employee.

3-4.3 Frequency of Awards. Annual.

3-4.4 Award Categories. Federal awards and description of awards will change periodically. OSEEP will amend the list as it changes. See the list of award categories in Appendix D. Alternately, contact OSEEP for the latest list.

3-5 Responsibilities

3-5.1 OU Responsibilities.

(a) Submit award nominations online at http://www.osec.doc.gov/oas/OSEEP/energy_environmental_awards_main.html**.** OUs and offices with their own environmental awards programs may elect to only nominate their award recipients for consideration for a Departmental award.

(b) OU award coordinators, in coordination with environmental management staff, must screen nominations for completeness, merit, and appropriateness, as well as environmental compliance. OUs are asked to forward only their best nominations. The following information should be included in the award package:

(i) How the name should appear on the award;

(ii) The recipient's worksite spelled out (no acronyms);

(iii) The recipient's first and second line supervisors;

(iv) Telephone numbers for recipient, and first and second line supervisors; and,

(v) State whether recipient is a Departmental employee, contractor, or partner outside of the agency.

(c) Head of OU must approve the nomination. Nominations must include a short write-up for each project stating the merits of the project and why it is worthy of recognition or replication at other Department facilities. **Note:** By affixing the name of the SES of the OU/Office in the approval details section of the nomination form, OUs certify that the submitted projects have good environmental compliance standing as outlined above.

3-5.2 OSEEP Responsibilities.

(a) OSEEP will evaluate each nomination, and will compare it to other nominations within the same award category. OSEEP convenes a panel of representatives to select and recommend nominations for awards using the established evaluation criteria.

(b) Following the evaluation, OSEEP will determine award winners and will forward these recommendations to the Department's Senior Sustainability Officer (SSO). The Department SSO finalizes the selection of recipients and signs a memorandum announcing Award recipients.

(c) OSEEP will facilitate and organize an annual Awards ceremony. The Awards ceremony and reception are tentatively scheduled to be held annually on or about Earth Day during a celebration at Department headquarters in Washington, D.C. Recognition includes an award presented by a high-level Departmental official. OSEEP will facilitate the ceremony and provide guidance and information regarding the ceremony to recipients and the OU coordinator. OUs are responsible for travel costs associated with their award recipients attending the ceremony.

PART II:

ENVIRONMENTAL COMPLIANCE

CHAPTER 4:
ENVIRONMENTAL COMPLIANCE

4-1 Scope

4-1.1 This chapter describes the requirements for ensuring that Department facilities and operations comply with applicable environmental laws and regulations. Further, it articulates the procedures for inspection, oversight, monitoring and reporting of compliance issues within the Department. The goal of the Department's environmental compliance program is to proactively inspect and assess facilities and operations for compliance with applicable Federal, state, and local environmental laws and regulations, and E.O.s to avoid Notices of Violation (NOV), monetary fines, and criminal penalties, and to remain good stewards of the environment. The provisions of this chapter apply to all Departmental and OU operations and facilities.

4-1.2 **Related Chapters.** Chapter 5, Environmental Management Systems, also discusses environmental compliance. Other chapters that discuss environmental laws and regulations with which Commerce facilities must maintain compliance include Chapter 6, Environmental Liability; Chapter 8, Procedures for Implementing the Emergency Planning and Community Right-To-Know Act; Chapter 9, Air Quality; Chapter 10, Management of Ozone-Depleting Substances; Chapter 11, Clean Water; Chapter 12, Safe Drinking Water Act Compliance; Chapter 13 Stormwater Management; Chapter 16, Storage Tanks; Chapter 17, Hazardous Waste Management; Chapter 20, Pesticide Compliance; and Chapter 22, Natural Resources Management.

4-1.3 **References.**

(a) E.O. 13423, Strengthening Federal Environmental, Energy, and Transportation Management. Section 3(c) requires Federal agencies to establish programs for "environmental compliance review and audit;"

(b) The Council on Environmental Quality's "Instructions for Implementing Executive Order 13423, Strengthening Federal Environmental, Energy, and Transportation Management," dated March 29, 2007;

(c) Department of Commerce Environmental Management System Operating Manual;

(d) EPA Policy Statement: Incentives for Self-Policing: Discovery, Disclosure, Correction and Prevention of Violation. Commonly referred to as the "Audit Policy;"

(e) Federal Facility Compliance Act of 1992 (Pub. L. No. 102-386); and

(f) E.O. 12088, Federal Compliance with Pollution Control Standards (as amended).

4-2 Legislation

4-2.1 Federal Facilities Compliance Act of 1992 **(FFCA) (reference (e)).** The FFCA amended section 6001 of the Resource Conservation and Recovery Act (RCRA) (42 U.S.C. § 6961) to waive any immunity of the United States as it relates to enforcement of solid and hazardous waste laws, such as CERCLA (commonly known as Superfund) and RCRA. This amendment makes Federal facilities subject to "all civil and administrative penalties and fines, regardless of whether such penalties or fines are punitive or coercive in nature" under solid and hazardous waste laws. These penalties and fines can be levied by EPA or by authorized States. It should be noted that Federal agents, employees, and officers are not liable for civil penalties; however, they are potentially subject to criminal sanctions.

4-3 Terms and Definitions

4-3.1 Designated Responsible Official. The Designated Responsible Official (DRO) is the senior individual who assumes responsibility for the accuracy and completeness of permit applications, permits, and statutorily required environmental compliance. A DRO could be subject to criminal sanctions under some environmental laws and regulations. The DRO will also occasionally have to certify ongoing compliance with all permit provisions once the permit is issued. The DRO is typically a facility or program manager with direct responsibility for a facility or program that is subject to environmental requirements.

4-3.2 Enforcement Action or Notice of Violation. An enforcement action or NOV is a formal, written notification by the EPA or other Federal, state, inter-state, regional, or local environmental regulatory agency of violation of any applicable statutory or regulatory requirement. It will cite the relevant standard or criteria to be met and request the facility take corrective action. An NOV only includes warning letters that cite a violation of specific environmental laws or regulations, informal notices of deficiencies, or notices of deficiencies to permit applications. (Note: warning letters or similarly titled formal written notifications from authorized regulators that do cite violations with environmental laws and regulations are considered NOVs.) One written notice, regardless of the number of individual violations, findings, or citations listed in it, counts as one NOV if all violations cited relate to a single statutory category. If the NOV cites violations of more than one statutory category (*e.g.*, Clean Water Act, Clean Air Act, RCRA, Safe Drinking Water Act, etc.) then it is considered as multiple NOVs, one under each applicable statutory category. Items found to be out of compliance during any internal review or audit by Department personnel or contractors are not to be considered an NOV.

4-3.3 Self-Inspection. A self-inspection is an internal inspection conducted by the organization or entity that has direct oversight of an operation or facility that is subject to compliance with Federal, state, and local environmental laws and regulations. For example, a self-inspection of a facility would be conducted by the facility manager or his/her staff.

4-3.4 Second-Party Inspection. A second-party inspection is performed by someone within the organization but at a level of oversight and responsibility higher than the immediate facility manager or operation program manager. For example, an inspection of a NOAA facility by personnel from NOAA's central Safety and Environmental Compliance Office would be considered a second-party audit. An inspection of NOAA's environmental compliance program by personnel from OSEEP would also be considered a second-party inspection. A second-party inspection by OSEEP will only be scheduled upon request by an OU.

4-3.5 Outside Inspection. An outside inspection—also known as a third-party inspection—is a compliance inspection conducted by someone outside the organization, such as another Federal or state regulatory agency. Assistance visits by EPA, state, or local regulatory agencies are also considered outside inspections.

4-3.6 Environmental Quality Assessment (EQA). An EQA is a high-level assessment of the effectiveness of an OU's environmental compliance program. The assessment is conducted by a team comprised of voluntary representatives of OS and other OUs. The results of the EQA will only be provided to the OU's environmental program manager with the intent to help the manager identify strengths and weaknesses at a strategic level within their OU.

4-4 Requirements

4-4.1 Designated Responsible Official. The general duty of the DRO is to ensure day-to-day compliance with all environmental laws, regulations, and requirements imposed on their facility and their facility staff's activities. Each OU shall establish a policy regarding DROs. The policy shall define who are considered DROs and what their duties are. There are several environmental laws and regulations that assign specific responsibilities to responsible officials (e.g. Clean Air Act), therefore care should be taken and coordination should be done with the Department in establishing DROs. OUs shall be responsible for designating the Responsible Official for each facility and permit under their administration. It is generally better to appoint the DRO at the lowest level that still has the authority to submit permit applications and sign reports required by regulatory permits, as he/she will be closer to the operations being certified. The Department recommends that the DRO for a given facility or permit be the facility manager or equivalent. In no case shall the responsibility for permits be any lower than the Federal facility manager, operations director, or the manager responsible for facility operations. If an OU can assure itself that its facilities are not owned and they cannot be classified as the operator of a facility then the paragraph does not apply. Some indications that an OU could be classified as an operator of a facility:

- Does the facility have EPA ID number in the OU's name?
- Does the facility ship hazardous waste under their EPA ID number?
- Does the facility hold registration certificates for USTs in the OU's name?
- Does the facility contract for fuel deliveries under its OU name?
- Does the facility operate and/or accept fuel deliveries under their OU name and address?
- Does the facility hold Clean Water Act, Clean Air Act, or Safe Drinking Water Act operating permits?
- Does the facility report under EPCRA under their OU name and address?

4-4.2 Environmental Compliance Auditing and Reporting System (ECARS). ECARS refers to any web-based automated tool for environmental auditing of facilities. A typical ECARS is designed to maintain a database of all applicable Federal, and state regulations, from which customized checklists are generated for use in facility inspections and audits. ECARS is also designed to record and manage audit findings and corrective action plans.

4-4.3 Environmental Compliance Program. Each OU shall establish an environmental compliance monitoring program covering all owned and leased facilities to include regularly scheduled external and internal audits, documentation and tracking systems, quality control, and tracking of enforcement actions, in compliance with reference (a), (b), and (f). OUs shall conduct risk assessments to determine the necessary frequency of internal and external audits at their facilities. A facility's risk assessment shall be reviewed during each internal or external audit of that facility and adjusted based on changing circumstances.

4-4.4 Self-Inspection. At a minimum, OUs shall ensure that all their owned and leased facilities undergo a self-inspection of their compliance with Federal, state, and local environmental laws and regulations at least once per year, see reference (d). Owned facilities shall undergo self-inspections more often if so determined by a risk assessment, upon review of environmental liabilities, or a track record of recent compliance violations. ECARS, in conjunction with an environmental liabilities inventory, can facilitate a self-inspection through the generation of a user-friendly checklist tailored for a specific facility and operations in a specific state. Self-inspections should be used to the degree deemed necessary by the facility manager to ensure a positive environmental compliance posture and readiness for a state inspection is maintained.

4-4.5 Second-Party Inspection. OUs shall undertake second-party audits of their facilities at a frequency determined by the assessed risk level. Inspection teams can be composed of members from within the organization at a higher level, contracted sources, or representatives from other OUs and OSEEP. Reimbursement for travel and per diem expenses may apply. OUs are encouraged to develop their own internal policy and guidance that establishes their own audit procedures, process and schedule.

4-4.6 Outside Inspection. Federal facilities and operations may be subject to statutory requirements and/or operating permits and may be subject at any time to an inspection by state regulators and enforcement agencies. Incidents of environmental non-compliance discovered during an outside inspection may result in an NOV, a monetary fine, or an enforcement action. Incidents of environmental non-compliance under some statutes may carry criminal penalties if it is determined that negligence is involved. Facility managers should proactively conduct self inspections, per 4-4.4 above, as frequently as desired to ensure that a high level of compliance is maintained. Outside inspections should be taken very seriously. Any non-compliance incidents should be reported and corrected immediately.

4-4.7 Environmental Quality Assessments. The Department will convene a team comprised of representatives from other OUs and conduct an EQA of each OU with owned or delegated leased facilities no less than once every 3 years. The team will conduct 2 EQAs per year. OUs that do not manage owned or delegated leased facilities may still conduct operations out of leased facilities that are subject to compliance with environmental regulations and permit requirements, and therefore should schedule an EQA once every 5 years. Representatives from other OUs (without owned or delegated leased facilities) are encouraged to join an EQA team for professional development and to contribute their subject matter expertise to the OU being

assessed. The resultant report generated after an EQA will be provided to the OU at the level of their Strategic Sustainability Performance Plan (SSPP) point of contact or environmental program manager. It is not intended to be punitive and shall be considered an informal assessment conducted by peers and provided to peers for the benefit of increasing effectiveness of the OU's program and compliance posture.

4-4.8 Inspection Documentation. Self-inspections, second-party inspections and EQAs will rely upon an inspection checklist generated by ECARS. Inspection documentation shall include details of each finding, a root cause, corrective action, timeline for completion, and individual responsible. Photographs or other documentation should be retained where possible as proof that corrective action has been taken and is adequate. Documentation shall be maintained for both internal and external audits for a period of at least nine years. Documentation may need to be maintained for periods greater than nine years in the event of litigation against the Department.

4-4.9 Tracking. OUs shall use ECARS to track the status through to completion of corrective actions addressing findings from all types of inspections.

4-4.10 Quality Control. OUs shall ensure that an environmental protection specialist or other environmental professional verifies the adequacy of corrective actions, either by review of photographs and documentation or by site visit, before closing the finding.

4-4.11 Enforcement Actions. The provisions above also apply to enforcement actions by Federal or authorized state regulatory agencies. OUs should consult with their General Counsel on the payment of civil or administrative penalties levied by Federal, state, or local enforcement agencies.

4-4.12 Closed and Closing Facilities. Facilities remain subject to environmental compliance requirements and shall maintain a compliance program until final property transfer has occurred. Records may be required to be retained longer in the case of closed facilities where hazardous waste or materials were stored for one year or longer or where known environmental contamination occurred. OUs should consult with their General Counsel for further guidance.

4-5 Responsibilities

4-5.1 The Office of the Secretary.

(a) **OSEEP shall:**

(i) Track and report Department and OUs' environmental compliance status to the Chief Financial Officer, through the Director, Office of Administrative Services, on an annual basis through a Management Review of the Department's EMS (see reference (c)), or more frequently as required;

(ii) Schedule and execute team EQAs for all OUs. The National Oceanic and Atmospheric Administration, the National Institute of Standards and Technology, the U.S. Census Bureau, U.S. Patent and Trademark Office, and the National Telecommunications and

Information Administration shall be scheduled for an EQA once every 3 years. The Bureau of Economic Analysis, the Bureau of Industry and Security, the Economic Development Administration, the Economic Statistics Administration, the International Trade Administration, the Minority Business Development Administration and the National Technical Information Service shall be scheduled once every 5 years. This schedule may be adjusted to less frequent EQAs after the first EQA and a team determination that the OU's inventory of environmental liabilities and associated risk of non-compliance is minimal. EQA's are encouraged and completely voluntary. Once a year OSEEP will ask the Bureaus if they would like to schedule an EQA. Those that answer in the affirmative will be added to the annual audit schedule which will then be promulgated.

(iii) Notify Departmental Offices and OUs of any changes, or pending changes, to legislation or E.O.s pertaining to environmental compliance, and track/report compliance with such.

(b) The **Office of Space and Building Management (OSBM) shall** manage environmental compliance for the Herbert C. Hoover Building and shall follow guidance at 4-5.2 below.

4-5.2 OUs shall:

(a) Develop, review, and implement an audit schedule for all leased and owned facilities under their purview, occupancy and/or operation;

(b) Implement ECARS to inspect, track, monitor and report compliance;

(c) Ensure timely reporting of results of significant non-compliance issues (those resulting in an NOV, enforcement action, or monetary fine) to OSEEP via email within 48 hours of receiving notice of such a non-compliance. Send notification to gogreen@doc.gov using the reporting form in Appendix F;

(d) Ensure environmental compliance audits are conducted in accordance with the inspection schedule and provide results of inspections by general category and number in a category (i.e., 20 findings dealing with hazardous waste storage) as determined by reporting software or tool used;

(e) Ensure findings are closed out in a timely manner; and

(f) Provide the Department Environmental Program Manager with the number of open enforcement actions, as well as previously reported enforcement actions which have been closed since the last report, including a description of violations and actions that have been or will be taken to correct violations.

4-6 Reporting Requirements

4-6.1 Reporting to the Office of the Secretary.

(a) OUs shall report the environmental compliance status of their facilities to the Office of the Secretary as part of the annual report data call due on November 1st of each year. The report shall include OU's environmental compliance audit schedule for the next five years (list of facilities scheduled to be audited and type of audit for each year);

(b) OUs shall notify the Department Environmental Manager of significant environmental events as per 4-5.2(c) above; and

(c) OSEEP shall report the Department's environmental compliance status to the SSO at least annually as part of the official annual EMS management review as detailed in the EMS Operating Manual.

4-6.2 Reporting to External Agencies.

- None.

CHAPTER 5:
ENVIRONMENTAL MANAGEMENT SYSTEMS (EMS)

5-1 Scope

5-1.1 This chapter prescribes the objectives, policies, and responsibilities for implementing and maintaining EMS within the Department and its OUs. The Office of the Secretary has two functions in relation to EMS: implementing the Department-level EMS and monitoring and reporting to senior management on implementation of EMSs established within OUs.

An EMS integrates environmental considerations, including both legal requirements and objectives for improvement (e.g. energy conservation, waste reduction, etc.), into an organization's day-to-day activities. It is a formal management framework that provides a systematic way to review and improve environmental performance, create awareness, and manage progress towards the Department's environmental objectives, including Strategic Sustainability Performance Plan goals.

The provisions of this chapter apply to all OUs and their components that have implemented, are implementing, or will implement an EMS. This chapter applies to both the Department-wide EMS and OU EMSs. The Department's organizational EMS does not supersede the management system of any OU, but instead allows OU EMSs to be integrated into the Department's overall EMS schema. OU and lower-tier EMSs should take Department-level goals into consideration when setting their priorities, but the Department-level EMS will not override any part of an OU or lower-tier EMS.

5-1.2 **Related Chapters.** Other chapters that discuss topics pertinent to EMS include Chapter 1, Environmental and Energy Policy and Program Organization; and Chapter 4, Environmental Compliance.

5-1.3 **References.**

(a) E.O. 13423, Strengthening Federal Environmental, Energy, and Transportation Management, dated January 24, 2007;

(b) E.O. 13514, Federal Leadership in Environmental, Energy, and Economic Performance, dated October 5, 2009, Section 2(j);

(c) The Council on Environmental Quality's "Instructions for Implementing Executive Order 13423 Strengthening Federal Environmental, Energy, and Transportation Management," dated March 29, 2007;

(d) Commerce Secretary Locke's memorandum, subject "Department Statement of Environmental Management Policy," dated December 9, 2010;

(e) International Organization for Standardization (ISO) 14001:2004(E) standard for environmental management systems;

(f) The Department of Commerce EMS web portal;

(g) The Department of Commerce Environmental Management System Operating Manual details procedures for implementing the Department-level EMS;

(h) The Office of the Federal Environmental Executive's (OFEE) "Guidance on Implementing Environmental Management Systems," dated October 31, 2008. This guidance recommends that Federal Departments plan, implement, and manage their organizational EMSs at multiple levels. Organizational categories suggested are:

- Highest level: Federal agency or Department headquarters-level (the cabinet-level or other top management level);
- Middle level(s): OUs, services, commands, administrations, or other sub-agency organizations (there may be more than one level here); and
- Lowest level: field facilities or field-level organizations.

(i) The Department-level EMS self-declaration statement.

5-2 Legislation

– None.

5-3 Terms and Definitions

5-3.1 Appropriate Organizational Level. The Department defines an appropriate organizational level for EMS implementation as an organizational level that includes facilities subject to one or more environmental regulatory permits, including permits issued under Title V or VI of the CAA, the CWA's National Pollutant Discharge Elimination System, RCRA, or others. Appropriate organizational levels can include the facility-level, OU-level, or any other level. Each facility subject to regulatory permits must be covered by an EMS; however, if an OU or line office implements an EMS to cover multiple facilities subject to regulatory permits, each covered facility need not establish its own EMS (although they may choose to do so). Likewise, every organizational level that oversees facilities subject to regulatory permits need not implement an EMS so long as every facility subject to regulatory permits is covered by an EMS.

OR

The Department defines an appropriate organizational level for EMS implementation as an organizational level that includes one or more facilities classified as high risk (Tier 1 in NOAA terminology) by facility environmental compliance risk assessments (see Chapter 4). Appropriate organizational levels can include the facility-level, OU-level, or any other level. Each high-risk facility must be covered by an EMS; however, if an OU or line office implements an EMS to cover multiple high-risk facilities, each covered facility need not establish its own EMS, although they may choose to do so. Likewise, every organizational level that oversees high-risk facilities need not implement an EMS so long as every high-risk facility is covered by an EMS.

5-3.2 Declaration of Conformance. A formal, written declaration by the appropriate senior manager accountable for implementation of the EMS that an organization has established and fully implemented an EMS.

5-3.3 External Audit. A second- or third-party audit conducted by a team not under the control or scope of the EMS being audited.

5-3.4 Environmental Management System. "Part of an organization's management system used to develop and implement its environmental policy and manage its environmental aspects" – ISO 14001:2004 standard definition.

5-3.5 Higher-tier EMS. The Department considers any EMS established at the Department level or OU level to be a higher-tier EMS; a higher-tier EMS addresses EMS issues that are best addressed at a high level.

5-3.6 Internal/First-party/Self-Audit. An internal, first-party, or self-audit is conducted by a party under the control or scope of an EMS. For example, an internal audit of a facility EMS would be conducted by facility personnel. An internal audit of an organizational EMS covering multiple facilities could be conducted by staff based at any one of the covered facilities. Such an audit should be performed annually.

5-3.7 Lower-tier EMS. The Department considers the following EMS scopes to be lower-tier:

(a) An EMS limited to a single facility;

(b) An EMS limited to a few facilities, otherwise known as a multi-site EMS; and/or

(c) An EMS limited to any OU sub-unit.

Lower-tier EMSs established within the Department must meet all requirements of the ISO 14001:2004 standard, or equivalent. Any standard proposed to be equivalent must be submitted to the Departmental EMS Coordinator for review and approval.

5-3.8 Non-conformance. Non-fulfillment of an EMS requirement.

5-3.9 Organizational EMS. The EMS of the Department or any organizational component of the Department, including OUs, their sub-units, and individual facilities.

5-3.10 Second-party Audit. An audit led by someone within the Department but outside the control or scope of the EMS being audited. For example, personnel from one OU could audit another OU's EMS. At least one member of the audit team should have some experience or familiarity with EMS, and at least one member of the audit team should have experience or training in auditing.

5-3.11 Third-party Audit. An audit led by someone outside the Department, for example, by a contractor or personnel from another Federal agency.

5-4 Requirements

5-4.1 Lower-tier EMSs. All lower-tier EMSs established within the Department shall be based on the ISO 14001:2004(E) standard (reference (e)) or the latest published version of the ISO 14001 standard.

(a) Lower-tier EMSs must address all 18 elements of the ISO 14001:2004 standard, including:

(i) Defining the scope of the EMS;

(ii) Establishing environmental policy for the facility-level or field-level organization, within the Department-wide policy and that of any applicable middle level(s);

(iii) Defining and communicating responsibilities for environmental management;

(iv) Identifying environmental aspects of its activities;

(v) Identifying legal and other requirements applicable to that organization's aspects;

(vi) Establishing environmental objectives and targets;

(vii) Implementing environmental programs to achieve those objectives and targets;

(viii) Implementing operational controls for activities which could cause significant environmental impacts;

(ix) Management review by senior manager(s) responsible for overseeing that organization's EMS;

(x) Conducting regular evaluations of compliance with legal and other requirements;

(xi) Providing training to employees whose activities could cause significant environmental impacts; and

(xii) Conducting internal audits of the EMS and identifying and correcting non-conformances.

(b) Lower-tier EMSs shall require contractors, tenants, and concessionaires providing direct support to the Department or operating on Department-owned property to abide by the terms of their EMS.

(c) Lower-tier EMSs shall strive to secure the cooperation of co-located Federal, state, and local government agencies.

5-4.2 Higher-tier EMS. Higher-tier EMSs need not address all 18 elements of the ISO 14001:2004 standard, but as per reference (h) should consider addressing policy, accountability, monitoring and reporting, objectives and targets, allocation of resources, accountability, and management review. When establishing an organizational EMS, OUs should make a formal determination in writing as to which elements of the ISO 14001:2004 standard they will address.

5-4.3 Third-party ISO 14001 registration is not required for any Department EMS. Organizations may pursue third-party registration at their own discretion.

5-4.4 Declaration of Conformance Protocol. This protocol provides the Department's procedure for declaring conformance of both lower-tier and higher-tier EMSs with the ISO 14001:2004 standard, E.O. 13423 (reference (a), E.O. 13514 (reference (b), and other Federal guidance (reference (c) and (d)).

(a) Within six months after an EMS has been fully implemented according to 5-4.1 or 5-4.2 above, the organization shall schedule and conduct a formal audit by a qualified party outside the control or scope of the EMS, i.e., a second- or third-party audit.

(b) The organization shall create a corrective action plan to correct any non-conformances that arose during the audit. The corrective action plan shall specify which, if any, corrective actions must be completed before declaring conformance. The senior manager accountable for EMS implementation shall review and approve the audit findings and corrective action plan.

(c) The senior manager accountable for EMS implementation shall make available to the public a memorandum declaring the organization's EMS to be fully implemented in conformance to the ISO 14001:2004 standard, as well as Federal and Department EMS requirements.

(d) The Department's EMS self-declaration statement (reference (i)) can be used as a template for drafting OU and sub-unit EMS self-declaration statements.

(e) Organizations should renew their declaration of conformance, following internal or external audits, every three years.

5-4.5 Audits. Once conformance has been declared, the EMS shall undergo an internal audit at least annually. The EMS shall be audited by a qualified party outside the control or scope of the EMS (i.e., undergo a second-party or third-party audit) at least once every three years. Audit findings shall be briefed to senior management at least annually.

5-4.6 Compliance Evaluations. Evaluations of compliance as per Chapter 4 of this manual shall be carried out to fulfill the requirements of ISO 14001:2004 element 4.5.2, *Evaluation of Compliance*.

5-4.7 Department-level EMS. The Department has established a Department-wide EMS. Specific guidance for implementing the Department-level EMS can be found in reference .

5-5 Responsibilities

5-5.1 The **Secretary of Commerce is** responsible for establishing environmental policy for the Department.

5-5.2 The **Assistant Secretary for Administration/SSO shall** be responsible for:

(a) Leading the Department-wide EMS;

(b) Monitoring progress of lower-tier EMSs; and

(c) Chairing the Environmental Management System and SSPP Executive Steering Committee (ESC).

5-5.3 The **Environmental Management System and SSPP ESC shall** be responsible for:

(a) Providing input and OU perspectives for the overall direction of the Department's EMS;

(b) Advising headquarters and assisting the OUs on devising five-year plans to meet the Department's SSPP goals;

(c) Assisting the SSO in guiding Department-wide policy development and strategic planning to meet SSPP goals;

(d) Reviewing progress on EMS objectives and targets, including SSPP and OMB sustainability scorecard goals;

(e) Reviewing OU budget submissions and implementation plans for SSPP goals;

(f) Monitoring the Department's environmental compliance status;

(g) Monitoring the Department's overall environmental performance;

(h) At least annually: reviewing EMS audit results and tracking corrective actions; reviewing the environmental policy for continuing adequacy and applicability; discussing opportunities for improvement of the Department's EMS and overall environmental performance; reviewing communications from external parties related to sustainability or environmental compliance; reviewing changes in circumstances, such as new environmental laws and regulations, that might affect the EMS or the Department's environmental performance;

(i) Identifying issues and/or policy direction that impact the Department's ability to align strategic investments through the budget process against SSPP goals and related Federal mandates; and

(j) Overseeing and coordinating consistent policy across the OUs.

5-5.4 The **Department EMS Coordinator shall** be responsible for:

(a) Managing the Department's EMS program to ensure the Department maintains conformance with Federal EMS requirements;

(b) Providing guidance to OUs regarding the viability and effectiveness of lower-tier EMSs established at OU, facility, or program levels;

(c) Tracking and reporting on the status of the Department's EMSs to senior management and others as appropriate; and

(d) Reporting to the Office of the Federal Environmental Executive (OFEE) and Office of Management and Budget (OMB) as required on the status of the Department-level environmental management system.

5-5.5 **Departmental Offices and OUs shall** be responsible for:

(a) Determining, in consultation with the Department EMS Manager, which of their "owned facilities" or programs require a lower-tier EMS to be implemented and maintained;

(b) Implementing and maintaining conforming EMSs at all appropriate organizational levels in accordance with 5-4.1 and 5-4.2 above;

(c) Providing at least one representative for the Department-level EMS workgroup; and

(d) Reporting as detailed in 5.6 below to OFEE and the Department on the status of their EMSs.

5-6 Reporting Requirements

5-6.1 **Annual Management Review.** The Department's EMS Coordinator will annually request a status update from each fully-implemented EMS on the date of each EMS's most recent audit and other EMS metrics as necessary. This request will be included as part of the annual SSPP data call, which will also collect information on the environmental compliance status of each organization. This information will be input to the Department's annual EMS management review.

5-6.2 **Annual EMS Report.** In the first quarter of every fiscal year OFEE will open EMS reporting on FedCenter.gov. All OUs with fully implemented EMSs (both higher-tier and lower-tier EMSs) are responsible for reporting on the status of their EMS directly to OFEE via FedCenter.gov. OUs shall notify the Department's EMS Coordinator within one week of reporting their EMS status to OFEE.

CHAPTER 6:
ENVIRONMENTAL LIABILITY

6-1 Scope

6-1.1 This chapter implements policy concerning the identification, inventory and financial accounting of environmental liabilities associated with Department of Commerce activities, operations, and ownership of land, facilities, equipment, and environmental cleanup, known also as environmental restoration. The provisions of this chapter apply to all Department OUs with facilities operations that use, handle, store, or transfer hazardous waste or materials; build, commission, operate, or decommission facilities and/or equipment; and any facility that is sited on a known contaminated site, or conducts or hosts any operations that may lead to contamination of property (owned, leased, or adjacent).

This chapter is primarily geared towards facility managers and environmental program managers. The chapter is intended to provide minimal background and appropriate references should additional detail be required. The references discuss the manner in which financial liabilities must be reported and specify those financial activities that must be performed by Departmental financial professionals. The primary activity that facility and environmental managers are involved in is the cataloging of environmental liabilities. Data from this evolution is then submitted to financial management personnel who convert the facility data into financial reporting data. The explanations and definitions of some of technical terms have been intentionally simplified to enhance the basic understanding. For the full financial technical definitions and for the full regulatory requirements readers are directed to the references.

The 1990 Chief Financial Officers Act requires agencies to report liabilities, including environmental liabilities, in financial statements as is done in the private sector. These requirements were expanded through subsequent legislation including the Government Performance and Results Act, the Government Management Reform Act, and the Federal Financial Management Improvement Act. These statutes require the Federal government to make financial management more effective, improve financial management systems, and provide accurate, complete, reliable, timely, and auditable information for managerial and congressional reporting.

The Department's Office of Financial Management (OFM) is responsible for overseeing financial management of the Department, including financial accounting. OFM is responsible for maintenance of the Department's Accounting Principles and Standards Handbook, hereafter referred to as the Accounting Handbook, which sets forth the accounting principles and standards to be followed in the Department of Commerce, and in the design and operations of an accounting system(s).

The Accounting Handbook provides specific accounting and related principles and standards against which financial management and accounting system(s) can be evaluated and improved. The Accounting Handbook can be found at the following OFM Publications web site: http://www.osec.doc.gov/ofm/Accounting/cover.html. Chapter 9, *Liabilities*, of the Accounting Handbook, sets forth Departmental guidance on liabilities. The accounting system must recognize and record all liabilities on the accrual basis of accounting. Liabilities must be recorded regardless of fund availability and liquidated as payment is made. A liability is a probable future outflow or other sacrifice of resources as a result of past transactions or events. Liabilities recognized according to Federal Accounting Standards Advisory Board (FASAB) standards include both liabilities covered by budgetary resources and liabilities not covered by budgetary resources. This chapter provides general guidance on the recognition points for liabilities associated with different types of events and transactions, including environmental liabilities. Users interested in a discussion of the FASAB standards should refer to

Appendix I.

6-1.2 The term liability applies to both accounting and legal aspects of an agency's financial obligations. Accounting institutions define liability as a probable future sacrifice of economic benefits arising from present obligations to transfer assets or provide services in the future as a result of past transactions or events. More simply, a liability is a present obligation to make an expenditure or to provide a product or service in the future. A liability is a legally enforceable obligation, whether it is voluntarily entered into as a contractual obligation, or is imposed unilaterally, such as the liability to pay monetary fines. The law both establishes liabilities and determines who is responsible for discharging them.

Environmental liabilities arise from a variety of sources. Federal, state, and local environmental statutes, regulations, and ordinances, whether enforced by public agencies or through private citizens' suits, give rise to many types of environmental liabilities. Another legal source of these liabilities is "common law" (i.e., judge-made law) that can vary from state to state.

6-1.3 The recognition of an environmental or other contingent liability is not based on the future availability of funds. All liabilities meeting the requirements described in this chapter will be properly recorded in the system of record and reported to all concerned parties as required.

6-1.4 **Related Chapters.** Other chapters that discuss topics pertinent to environmental liabilities are Chapter 4, Environmental Compliance; Chapter 7, Pollution Prevention; Chapter 8, Procedures for Implementing Emergency Planning and Community Right-to-Know Act; Chapter 9, Air Quality; Chapter 12, Safe Drinking Water Act Compliance; Chapter 14, Oil and Hazardous Substance Spill Preparedness and Response; Chapter 15, Oil Pollution; Chapter 16, Storage Tanks; Chapter 17, Hazardous Waste Management and Resource Recovery; Chapter 18, Polychlorinated Biphenyl (PCB) Management; Chapter 19, Solid Waste Management; and Chapter 20, Pesticide Compliance.

6-1.5 **References:**

(a) 42 U.S.C. § 9601 et seq., Comprehensive Environmental Response, Compensation and Liability Act;

(b) 42 U.S.C. § 6901 et seq., Resource Conservation and Recovery Act;

(c) 49 CFR Part 173, Shippers - General Requirements for Shipments and Packaging;

(d) 29 CFR Part 1910.1200, OSHA Hazard Communication Standard;

(e) 40 CFR Part 370, Hazardous Chemical Reporting: Community Right-to-Know;

(f) Federal Accounting Standards Advisory Board Handbook on Federal Accounting Standards and Other Pronouncements, as Amended, Statement of Federal Financial Accounting Standards 23 and 35;

(g) Chief Financial Officers Act of 1990, Pub. L. No. 101-576;

(h) Government Management Reform Act of 1994, Pub. L. No 103-356; and

(i) OMB Circular A-136, Financial Reporting Requirements; and

(j) 40 CFR Part 261, Identification and Listing of Hazardous Waste.

6-2 Legislation

6-2.1 CERCLA or "Superfund Law" is the primary regulatory driver of the environmental site assessment process and defines what parties must do to exercise "due diligence" in assessing and acting on potential site contamination. CERCLA Section 120 holds Federal agencies jointly, strictly, and severably liable for cleaning up contamination at sites they either own or operate, or where they have been found to have contributed to site contamination. Reference (a) provides more information.

6-2.2 RCRA. RCRA requires cradle-to-grave management of hazardous waste. The Act also encourages beneficial reuse of solid waste through recycling and reuse as an energy source. The 1984 RCRA amendments require generators and facility owners to certify that the generator has a program in place to "reduce the volume or quantity and toxicity" of waste and that the method minimizes the threat to health and the environment. Reference (b), provides more information.

6-3 Terms and Definitions

6-3.1 Environmental liability. A legal obligation to make a future expenditure due to the past or ongoing manufacture, use, release, or threatened release of a particular substance, or other activities that adversely affect the environment.

6-3.2 Environmental Site Assessment. The process of determining whether contamination is present on a parcel of real property.

6-3.3 Hazardous Material (HM). In general, any material, which because of its quantity, concentration, or physical, chemical, or infectious characteristics, may pose a hazard to human health or the environment. This definition includes all extremely hazardous substances, hazardous chemicals, hazardous substances, and toxic chemicals. HMs include any material that is regulated as a HM per reference (c), requires a material safety data sheet per reference (d), or, which during end use, treatment, handling, packaging, storage, transportation, or disposal, meets, has components which meet, or has the potential to meet the definition of hazardous waste contained in reference (e) subparts A, B, C, and D.

6-3.4 Hazardous Waste. A solid waste, or combination of solid wastes, which because of its quantity, concentration, or physical, chemical, or infectious characteristics may, per reference (j), section 261.10:

- Cause or significantly contribute to an increase in mortality or an increase in serious irreversible or incapacitating reversible illness; or

- Pose a substantial present or potential hazard to human health or the environment when improperly treated, stored, transported, disposed of, or otherwise managed.

6-3.5 Potential Environmental Liability. A potential legal obligation to make a future expenditure due to the ongoing or future manufacture, use, release, or threatened release of a particular substance, or other activities that adversely affect the environment. An obligation is potential when it depends on future events or when a law or regulation creating the liability is not yet in effect. A "potential environmental liability" differs from an "environmental liability" because an organization has an opportunity to prevent the liability from occurring by altering its own practices or adopting new practices in order to avoid or reduce adverse environmental impact. A probable environmental liability exists when it is more likely than not (>50%) that the liability resulted from operations where the Department was likely involved.

6-3.6 Measurable Environmental Liability. A measurable environmental liability exists when a dollar value can be estimated for the cleanup costs or study needed to define further cleanup parameters.

6-3.7 Supplemental Environmental Projects. An environmentally beneficial project related to the violation executed in exchange for mitigation of the penalty to be paid.

6-3.8 Property, plant and equipment (PP&E). PP&E is all property, facilities, infrastructure and equipment.

6-4 Requirements

6-4.1 Obligations.

(a) **Compliance obligations.** Obligations related to laws and regulations that apply to the manufacture, use, disposal, and release of chemical substances and to other activities that adversely affect the environment. As laws and regulations are enacted that apply to the manufacture, use, or release of regulated substances, facilities find themselves facing future compliance costs. In evaluating business plans, some facilities may also consider the possibility that new laws and regulations will be enacted. Additionally, a facility may discover that it is not in compliance with existing laws and regulations. The costs of coming into compliance can range from modest outlays required to conform to administrative requirements (e.g., recordkeeping, reporting, labeling, training) to more substantial outlays, including capital costs (e.g., to pretreat wastes prior to land disposal or release to surface waters, to contain spills, to "scrub" air emissions). Laws and regulations also impose "exit costs" (e.g., to properly close waste disposal sites and provide for post-closure care, and to decommission nuclear power reactors at the end of their useful lives).

(b) **Remediation Obligations.** Obligations (existing and future) related to contaminated real property obligations to pay civil and criminal fines and penalties for statutory or regulatory non-compliance. Remediation obligations are sometimes subsumed under "compliance" because some property clean-up requirements have been enacted as part of regulatory programs applicable to operating facilities under, for example, RCRA and Safe Drinking Water Act's Underground Injection Control program. Also, it is easy to blur the distinction between the compliance obligation of routine closure of facilities at the end of their useful lives and the remediation obligation for cleaning up pollution posing a risk to human health and the environment. Additionally, meeting current

compliance obligations may help minimize future remediation obligations. Nevertheless, remediation obligations are considered a separate category because of some distinguishing characteristics of the liability and the attention that has been paid to this category of environmental liability. Remediation tends to be expensive, ranging up to many millions of dollars, and can include excavation, drilling, construction, pumping, soil and water treatment, and monitoring; and can include the response costs incurred by regulatory agencies. Remediation costs also can include the provision of alternate drinking water supplies for affected community residents, and, in some circumstances, purchase of properties and relocation expenses. Technical studies and the expenditure of management, professional, and legal resources add to the cost of remediation. The remediation obligation is distinctive because a facility may face remediation obligations due to contamination at inactive sites that are otherwise unregulated; at property formerly but not currently owned or used; at property it never owned or used, but to which its wastes were sent; and, at property it acquired but did not contaminate (e.g., in "Superfund liability" scenarios). Because significant funding may be required in the near-term to remediate existing environmental contamination, particularly at inactive and abandoned sites, these liabilities often dominate (and can distort) an OU's assessment of its environmental liabilities. Therefore, it is helpful to distinguish between remediation obligations for existing contamination and potential remediation obligations for future contamination.

(c) **Obligations to pay civil fines and penalties for statutory or regulatory non-compliance.** Facilities that are not in compliance with applicable requirements may be subject to civil fines or penalties for noncompliance and/or expenses for projects agreed to as part of a settlement for noncompliance. Such payments fulfill punitive and deterrent functions and are in addition to the costs of coming into compliance. Fines and penalties (and related outlays for supplemental environmental projects) can range from modest amounts to a few million dollars per violation. Generally, a civil penalty is assessed that is at least equal to the costs a facility saved through noncompliance, thus removing any financial incentive to ignore a law. Other factors may add to or reduce the penalty amount assessed for a violation.

(d) **Obligations to compensate private parties for personal injury, property damage, and economic loss.** Under common law and some state and Federal statutes, facilities may be obligated to pay for compensation of "damages" suffered by individuals, their property, and businesses due to use or release of toxic substances or other pollutants.

(e) **Obligations to pay "punitive damages" for grossly negligent conduct.** To supplement compensatory payments to those harmed by the actions of others, some laws allow the imposition of what are called "punitive damages" to punish and deter conduct viewed as showing a callous disregard for others. Unlike compensatory liability, the measure of punitive damages is not directly tied to the actual injuries sustained. Punitive damages are often many times larger than the costs of compensation; although rarely assessed, punitive damages in environmental litigation usually exceed $1 million.

(f) **Obligations to pay for natural resource damages.** Established by state and Federal statutes, notably Section 311 of the Clean Water Act; Section 107 of

CERCLA; and Section 1006 of the Oil Pollution Act, this liability generally relates to injury, destruction, loss, or loss of use of natural resources that do not constitute private property. Rather, the resources must belong to or be controlled by Federal, state, local, foreign, or tribal governments. Such resources include flora, fauna, land, air, and water resources. The liability can arise from accidental releases (e.g., during transport) as well as otherwise lawful releases to air, water, and soil.

6-4.2 Cataloging Environmental Liabilities.

(a) Facility managers are responsible for collaborating with operations and program managers to identify and inventory environmental liabilities associated with operations and real property owned or managed. A comprehensive inventory of environmental liabilities should help build an inspection checklist generated by an ECARS system to focus a facility's self inspection on the areas of highest risk and vulnerability, and shall encompass all obligation types discussed in paragraph 6-4.1.

(b) Facility managers are responsible for ensuring that the catalog of environmental liabilities is kept current on at least a five year cycle.

(c) The following is only a partial list what should be evaluated to determine environmental liabilities, and is by no means limiting solely to these activities or equipment: any activity or equipment that requires a permit or registration such as storage tanks (underground and aboveground); hazardous and/or universal waste storage areas; industrial and stormwater point source discharge points; PCB and PCB-contaminated items and equipment including transformers; any Clean Air Act covered or permitted equipment, such as stack discharges, paint booths, fume hoods, emergency generators, degreasing tanks/operations, bag houses, etc.; any discharge or encroachment on wetlands and/or floodplains; and pesticide storage areas.

(d) Although considered by the financial community to be broadly included as environmental liabilities, workforce safety and exposure liabilities such as asbestos, mold, noise, and lead paint are regulated by OSHA and EPA , but under other laws than CERCLA and RCRA. Nothing in this manual should be construed as attempting to supersede guidance on workforce health and safety published separately by the Office of Human Resources Management.

(e) Contamination can occur from past or current operations (i.e., solid waste landfills, treatment, storage, or disposal facilities, ware storage yards, firing ranges, etc.) or from unsanctioned activities, such as illegal dumping, that results in the release of hazardous substances. Though OUs are required to routinely attempt to identify contamination at Department facilities, in many circumstances environmental assessment activities are necessary to confirm the presence of contamination at suspect areas to determine whether further action is warranted. For example, the illegal dumping of solid waste does not in and of itself mean that an area is contaminated. An area containing solid waste with no release of hazardous substances to the environment would not be an environmental liability.

(f) In general, environmental compliance and operation and maintenance activities

are not considered an EL. Examples of activities that are NOT ELs include:

(i) Permit requirements such as monitoring and reporting under RCRA, NPDES, or other permits;

(ii) Indoor air quality corrective measures, with the exception of actions required as part of a cleanup;

(iii) Radon mitigation;

(iv) Environmental audits;

(v) Water and sewage system maintenance and monitoring;

(vi) Routine disposal of hazardous materials and chemicals or Federal personal property; or

(vii) UST/AST operation costs (i.e., installation of leak detectors, upgrading fill pipes, tank replacements, writing of SPCC plans, etc.).

(g) OUs maintain a property and facility inventory. Property and facilities shall be routinely evaluated to identify areas where releases of hazardous substances may have occurred, or have the potential to occur. These areas should be inspected routinely. Physical indicators of a possible release may include:

(i) Stained soil;

(ii) Solvent or petroleum odor;

(iii) Scorched earth;

(iv) Discolored vegetation;

(v) Illegal dumps;

(vi) Dead animals, discolored water in a stream; or

(vii) Surface water sheen.

The presence or suspected presence of contamination will be confirmed through due diligence by or under the oversight of an environmental professional, as defined in 40 CFR § 312.25. Activities conducted during the due diligence process include but are not limited to:

(viii) Review of record of chain-of-title documents;

(ix) Review of aerial or satellite photographs that reflect prior uses of the property or areas of distressed vegetation;

(x) Investigation of complaints regarding abnormal health conditions or concerns raised by the public;

(xi) Visual site reconnaissance;

(xii) Collection and analysis of selected media samples;

(xiii) Documentation of findings.

If the results of the due diligence activities indicate that it is likely that contamination is present at a concentration that requires further study or future cleanup, the site shall then be classified as an EL. If, however, contamination is not present, the level of contamination is NOT significant enough to warrant further study or cleanup, or cleanup is warranted but the volume is NOT significant and can be accomplished under current routine operation and maintenance or infrastructure costs then the site in NOT an EL.

(h) Many OUs have facilities that contain regulated materials (i.e., asbestos, lead-based paint, etc.) used in the construction or past renovation of the facility. These regulated materials, while in an undisturbed or encapsulated state (i.e., non-friable asbestos, non flaking lead-based paint), are not subject to cleanup under applicable law solely because they present. The generally recognized best management practice for such materials is to monitor them, but leave them undisturbed. Only if they become degraded and are released to the environment would they be considered contaminants requiring cleanup. If a facility (or other structure) containing regulated materials (including utilities and equipment) is not an EL, and the facility or structure is scheduled for deconstruction, or demolition, or renovation, the costs to appropriately abate and dispose of the hazardous materials under all applicable regulations is considered part of the deconstruction/demolition/renovation costs and is NOT an EL. If the abatement is improperly conducted and a release to the environment occurs, the cleanup costs are then an EL.

6-4.3 Determining Classification of Environmental Liabilities.

The probability classifications are as follows:

A liability should be recognized when all of the following three conditions are met:

- A past event or transaction has occurred (e.g., a Federal entity has violated a National Pollutant Discharge Elimination System permit with a state entity).

- A future outflow or other sacrifice of resources is probable (e.g., the nonfederal entity has filed a legal claim against a Federal entity for breach of contract and the Federal entity's management believes the claim is likely to be settled in favor of the claimant).

- The future outflow or sacrifice of resources is measurable (e.g., the Federal entity's management determines an estimated settlement amount).

The estimated liability may be a specific amount or a range of amounts. If some amount within the range is a better estimate than any other amount within the range, that amount

is recognized. If no amount within the range is a better estimate than any other amount, the minimum amount in the range is recognized and the range and a description of the nature of the contingency should be disclosed.

A liability should be disclosed in the footnotes to the financial statements if any of the conditions for liability recognition are not met and there is at least a reasonable possibility that a loss or an additional loss may have been incurred.

(a) Probable: The future confirming event or events are more likely than not to occur, with the exception of pending or threatened litigation and unasserted claims. For pending or threatened litigation and unasserted claims, the future confirming event or events are likely to occur. Amounts classified as probable and measurable are recognized in the Department's integrated accounting systems and reported on the consolidated balance sheet.

(b) Reasonably possible: The chance of the future confirming event or events occurring is more than remote but less than probable. Amounts reported as "reasonably possible" are disclosed in the footnotes to the financial statements. An environmental liability should be disclosed in the notes to the financial statements if any of the conditions for liability recognition (probable and measurable) are not met and there is a reasonable possibility that a loss or additional loss may have been incurred. Disclosure should include the nature of the contingency and an estimate of the possible liability, an estimate of the range of the possible liability, or a statement that such an estimate cannot be made. Amounts that are probable, but not measureable, are also disclosed in the footnotes.

(c) Remote: The chance of the future event or events occurring is slight. Amounts reported as "Remote" are not included in the reports.

6-4.4 Elements for Determining Probability of Occurrence. Various key factors (tests) must be considered in determining whether a future outflow of resources from a Federal agency for environmental cleanup is probable. A detailed explanation of these factors can be found in reference (f). The factors are:

(a) Likely Contamination;

(b) Government Related and Legally Liable;

(c) Government Acknowledged Financial Responsibility;

(d) Monies Appropriated/Transaction Occurred; and/or

(e) No Known Remediation Technology Exists.

6-4.5 Elements for Determining Whether Future Outflows of Resources Can be Reasonably Estimated for Environmental Cleanup. Various key factors (tests) should be considered in determining whether future outflows of resources can be reasonably estimated. The factors are:

(a) Completion of a Remedial Investigation/Feasibility Study (RI/FS) or other study (a RI/FS is a comprehensive environmental data collection and site

characterization (RI) that evaluates alternative cleanup actions and recommends one (FS));

(b) Experience with Similar Site and/or Conditions; and

(c) Availability of Remediation Technology.

These tests for reasonably estimable are applied after a transaction or event has occurred that meets the definition of "probable." The analysis should consider all significant sites, with the information rolled up into an entity-wide estimate. Cost estimates should be based on current technology. Diagram 2.1 of Technical Release 2 illustrates the application of these tests. A discussion of each of the three tests follows Diagram 2.1 in Technical Release 2. The discussion concludes with issues related to quantification of the estimate and guidance for active sites. Overall, it must be emphasized that every effort should be made to develop an estimate.

6-4.6 Liability Cost Estimates.

(a) Liability cost estimates shall be prepared for all environmental liabilities that are classified as probable and measurable and for all environmental liabilities that are classified as reasonably possible and measurable.

(b) All liabilities that are classified as probable, reasonably possible, or remote, but not measurable are not required to be cost estimated.

(c) Liability cost estimates may be prepared at the Operating Unit or other organizational level. Cost estimates prepared for this purpose shall consider the anticipated costs of the level of effort required to cleanup (i.e., remove, contain, or dispose of) hazardous waste, or contamination resulting from past transactions in accordance with applicable Federal, state, and local requirements. Cost estimates shall be revised when there is evidence that significant changes in the cost estimates have occurred. These liability cost estimates should be reviewed as required.

(d) Liability cost estimates are subject to audit. The preparation of cost estimates may involve the application of specialized tools, methods, accumulation and study of historical costs, and/or the conduct of technical analyses. Organizations that prepare cost estimates must retain adequate documentation to identify data sources, estimating methods, and rationale used. Documentation of management reviews must also be retained. Any estimate produced must be based on site-specific information, engineering estimates, and/or validated cost models.

(e) If an EL has a liability status of *probable* or *reasonably possible*, every effort should be made to develop a total cleanup cost estimate. If the total cleanup cost is not reasonably estimable at the time of the reporting is due, the portion of the cleanup cost that is reasonably estimable should be reported. Cost estimates should be based on the application of professional environmental engineering knowledge using all relevant information and meaningful site comparisons. Estimates shall be reproducible and documentation supporting the estimates shall be maintained.

(f) Elements of the Cost Estimates. EL cost estimates shall include any cleanup activity or portion of an activity that has not yet been completed, such as:

(i) Studies, plans, designs, removal activities, cleanup activities, and cleanup operations (to include operation and maintenance (O&M) costs of cleanup systems) necessary to comply with applicable legal and regulatory requirements, and the costs of contractors, engineers, and consultants. **Do not include O&M costs associated with routine operations.** Only the O&M costs associated with actions to close the operation in accordance with environmental regulatory permits should be included;

(ii) Machinery and equipment dedicated to a response action (removal or remedial) that do not have alternative uses, and their associated O&M costs would be an EL cost element;

(iii) Compensation and benefits of government personnel that devote significant time (> 0.25 Full-Time Equivalent) to an environmental cleanup effort would be an EL cost element; and

(iv) Long-term monitoring associated with a response action would be an EL cost element.

(g) Quantification of the Cost Estimate. Cost estimates must be based on site-specific information, and can be calculated using engineering estimates or cost models. Cost estimates are subject to audit, and therefore, adequate documentation identifying data sources, estimating method, rational used, and assumptions must be maintained in the project files. If a cost model is used for estimating EL costs, the model must be accredited for estimating environmental cleanup costs. Cost data can be obtained from a variety of sources:

(i) Cost estimating guides and references;

(ii) Cleanup action vendors or contractor quotes;

(iii) Professional judgment based experience with similar projects;

(iv) Engineer design cost estimates or schedules; or

(v) Cost estimating software or databases.

Cost estimating guides or references (i.e., unit price books) can provide costs for a variety of construction activities, including those related to remedial actions. Some guides are specifically tailored to estimating costs for environmental remediation projects.

Quotes from cleanup action vendors or construction contractors can provide costs that are more site-specific in nature than costs taken from standard guides and references. These quotes usually include contractor markups and are usually provided as a total cost. If possible more than one vendor quote should be obtained. Quotes from multiple sources can be averaged, or the highest quote

can be used in the cost estimate if the collected quotes seem to be at the low end of the industry range.

(h) Cost Estimate Review and Updates. Changes and updates to cleanup cost estimates are required so that the periodic financial statements are fairly presented. Future costs can not be known with certainty; therefore, estimating requires the exercise of judgment. At least annually or when there is a material change in the status of the site, the cost estimate will be reviewed and adjusted as needed. Any changes to the estimate must be documented in the detailed backup materials that support the cost estimate. The receipt of new facts or clarifying information that would affect a cost estimate may include:

(i) The type and extent of contamination at the site;

(ii) The identification, number and financial position of Potentially Responsible Parties (PRP);

(iii) The allocation of costs among PRPs based on judgment, assessments, or consent decrees;

(iv) Data regarding the remediation experience at other sites;

(v) Results of site-specific environmental studies;

(vi) Approval of a Record o Decision;

(vii) Refinements of a remediation plan;

(viii) The type of technology available to remediate;

(ix) Unanticipated problems identified during remediation;

(x) The type and duration of post-closure monitoring period;

(xi) Unanticipated problems identified during the post-closure period;

(xii) New regulations regarding the appropriate method of disposing of hazardous wastes; or

(xiii) New laws regarding the acceptable levels of contamination.

6-4.7 Liability for Cleanup of General PP&E.

(a) The total cleanup costs shall be estimated when the PP&E is placed in service. The estimated cost shall be based on the current cleanup cost and shall be revised periodically to account for material changes such as changes in regulations, plan, and/or technology.

(b) Recognition of the expense and accumulation of the cleanup liability shall begin on the date that the PP&E is placed in service, continue each period that operation continues, and completed when the PP&E ceases operation.

(c) Payments of cleanup costs shall be recognized as a reduction in the liability for cleanup costs.

6-5 Responsibilities

6-5.1 The Office of the Secretary.

(a) **The Office of Financial Management (OFM) shall:**

(i) Provide guidance to the departmental offices and OUs on the preparation of annual auditable financial statements in accordance with the Chief Financial Officers Act of 1990 (reference (g)) and the Government Management Reform Act of 1994 (reference (h)). Collaborate with OAS/OSEEP to identify a comprehensive list of environmental liability categories. Provide guidance and oversight to OUs on the methodology to financially assess all identified environmental liabilities. Collaborate with OHRM on environmental liabilities associated with workforce safety and exposure (i.e., asbestos, lead paint, etc.).

(ii) Initiate a data call to the OUs for quarterly, unaudited financial statements in accordance with OMB Circular A-136 Revised (reference (i)). Agencies must report information on environmental liabilities in these financial statements.

(iii) Assimilate and submit quarterly financial statements for the entire Department to OMB.

(b) **OSEEP shall:**

(i) Identify categories, in collaboration with OFM, of environmental liabilities and initiate an inventory with all OUs that is kept current.

(ii) Review, assimilate, and maintain OU environmental liability inventories.

(ii) Incorporate a review of the OU's inventory, and total environmental liabilities, reviewed by OFM, into annual Management Reviews of the Department's Environmental Management System.

6-5.2 Departmental Offices and Operating Units shall:

(a) Identify and inventory environmental liabilities and assess a probability of likely occurrence to each.

(b) Conduct a financial assessment of each identified environmental liability in accordance with guidance from OFM.

(c) Prepare an auditable financial statement annually, and unaudited financial

statements quarterly, that accounts for all environmental liabilities.

(d) Maintain and keep current the environmental liabilities inventory.

6-6 Reporting Requirements.

- None

CHAPTER 7:
POLLUTION PREVENTION

7-1 Scope

7-1.1 Summary. This chapter provides pollution prevention (P2) policies and procedures applicable to all Department facility operations, unless otherwise specified.

7-1.2 Related Chapters. Chapter 3, Awards; Chapter 5, EMS; Chapter 8, Procedures for Implementing the Emergency Planning and Community Right-to-Know Act; Chapter 17, Hazardous Waste Management; Chapter 19, Solid Waste Management and Resource Recovery; and Chapter 31, Green Acquisition.

7-1.3 References.

(a) 40 CFR Part 355, Regulations for Emergency Planning and Notification under EPCRA and CERCLA (Superfund);

(b) 49 CFR Part 173, Shippers - General Requirements for Shipments and Packaging;

(c) 29 CFR Part 1910.1200, OSHA HAZCOM Standard;

(d) 40 CFR Part 261, Identification and Listing of Hazardous Waste;

(e) 40 CFR Part 302, EPA Designation, Reportable Quantities and Notification Requirements for Hazardous Substances under CERCLA;

(f) 40 CFR Part 372, Toxic Chemical Release Reporting, Regulations;

(g) E.O. 13423, Strengthening Federal Environmental, Energy, and Transportation Management, dated January 24, 2007;

(h) Commerce Acquisition Manual, Chapters 1323.70 and 1313.301; and

(i) E.O. 13514, Federal Leadership in Environmental, Energy, and Transportation Management, dated October 5, 2009.

7-2 Legislation

7-2.1 Pollution Prevention Act of 1990**.** The Pollution Prevention Act focused industry, government, and public attention on reducing the amount of pollution through cost-effective changes in production, operation, and raw materials use. Opportunities for source reduction are often not realized because of existing regulation, and the industrial resources required for compliance focus on treatment and disposal. Source reduction is fundamentally different and more desirable than waste management or pollution control.

Pollution prevention also includes other practices that increase efficiency in the use of energy, water, or other natural resources, and protect our resource base through conservation. Practices include recycling,

source reduction, and sustainable agriculture.

7-2.2 Resource Conservation and Recovery Act (RCRA)**.** RCRA requires cradle-to-grave management of hazardous waste (HW). The Act also encourages recycling of solid waste, and its reuse as an energy source. The 1984 amendments to RCRA require HW generators and facility owners to certify that the generator has a program in place to "reduce the volume or quantity and toxicity" of waste and that the method minimizes the threat to health and the environment. In addition, the Act requires generators to report the changes in volume and toxicity of waste actually achieved during the year of the report (in comparison with previous years).

7-3 Terms and Definitions

7-3.1 Authorized Use List (AUL). The list of all HM needed to support the requirements of a facility.

7-3.2 Green Procurement. Purchasing products or services that have a lesser or reduced effect on human health and the environment when compared with competing products or services that serve the same purpose. Refer to Chapter 31 or reference (i) for further information.

7-3.3 Extremely Hazardous Substance (EHS). Any substance listed in Appendices A and B of reference (a).

7-3.4 Hazardous Material. In general, HM is any material that, because of its quantity, concentration, or physical, chemical, or infectious characteristics, may pose a substantial hazard to human health or the environment. This definition includes all extremely hazardous substances, hazardous chemicals, hazardous substances, and toxic chemicals. HM is any material *regulated as HM*, per reference (b), or any material that requires a material safety data sheet (MSDS), per reference (c). HM is also any material having components which meet or have potential to meet the definition of HW per reference (d), subparts A, B, C, and D, during any phase of its existence: end use, treatment, handling, packaging, storage, transportation, or disposal.

Designation of a material as HM does not eliminate the need for adherence to hazard-specific guidance, which for control purposes, takes precedence over this chapter when a material is separately regulated or controlled by other instructions or directives. Such materials include ammunition, weapons, explosives and explosive-actuated devices, propellants, pyrotechnics, medical and pharmaceutical materials, medical waste and infectious materials, bulk fuels, radioactive materials, and other materials such as asbestos and mercury. These materials are HM to the extent that personnel exposure may occur during manufacture, storage, use, and disposal of these items.

7-3.5 Hazardous Substance (HS). Any substance listed in table 302.4 of reference (e).

7-3.6 Hazardous Waste. A solid waste, or combination of solid wastes, that because of quantity, concentration, or physical, chemical or infectious characteristics may:

- Cause, or significantly contribute to, an increase in mortality or an increase in serious irreversible or incapacitating reversible, illness.
- Pose a substantial present or potential hazard to human health or the environment when improperly treated, stored, transported, disposed of or otherwise managed.

7-3.7 Pollution/Pollutants. Gaseous, liquid or solid by-products of industrial, agricultural or even natural processes, which after recycling, treatment, or other mitigating processes, still produce undesirable environmental or health effects.

7-3.8 Pollution Prevention. Source reduction and other practices that reduce or eliminate the creation of pollutants through:

- Increased efficiency in the use of raw materials, energy, water, or other resources;
- Protection of natural resources by conservation;
- Reduction/elimination of the use of dangerous, toxic and hazardous materials; and
- Recycling/reuse of materials.

Examples of P2 techniques include:

- Material substitution;
- Product reformulation;
- Process change;
- Process modification;
- Process elimination;
- Improved operation and maintenance;
- Integrated recycling; and
- Material management.

7-3.9 Recycled Material. Previously used materials, substitutable for a raw or source material in the manufacturing process. If not so used, this material would become waste.

7-3.10 Recycling. Reusing, or reclaiming materials, including processes that regenerate a material or recover a usable product from it.

7-3.11 Source Reduction. Any practice which:

- Reduces the amount of any hazardous substance, pollutant, or contaminant entering any waste stream or otherwise released into the environment (including fugitive emissions) prior to recycling, treatment, and disposal; and
- Reduces the hazards to public health and the environment associated with the release of such substances, pollutants, or contaminants.

The term includes equipment or technology modifications, process or procedure modifications, reformulation or redesign of products, substitution of raw materials, and improvements in housekeeping, maintenance, training, or inventory control.

7-3.12 Toxic Chemical. Any substance listed in reference (f).

7-3.13 Toxic Chemical Use Reduction. P2 actions to reduce, avoid, or eliminate the use of toxic chemicals.

7-3.14 Toxic Chemical Use Substitution. P2 actions to substitute non-toxic or less toxic chemicals in maintenance/operations/industrial processes.

7-3.15 Used/Excess HM. HM for which there is no further, immediate use at the facility possessing the material. Another facility or commercial industry may ultimately use such material for the same purpose or for purposes other than those for which it was initially manufactured.

7-3.16 Waste. See "Pollution/Pollutants."

7-3.17 Waste Minimization/Reduction. Source reduction and the following types of recycling:

– Beneficial use/reuse; and

– Reclamation.

Waste minimization does not include disposal or burning for energy recovery.

7-4 Requirements

7-4.1 P2 Program Drivers. The Department defines as "Level 1," those environmental requirements derived from Federal, state, or local environmental laws, regulations, or E.O.s. Level 1 program drivers for the P2 program include:

– Reference (g) requires Federal agencies to prevent pollution whenever feasible, incorporate waste prevention and recycling into daily operations, increase procurement of environmentally preferable items, expand existing affirmative procurement and recycling programs, establish model facility demonstration projects, integrate P2 and affirmative procurement into acquisition programs, and establish goals for reduction of solid waste generation and increased procurement of environmentally preferable items. Chapter 22 contains policy and guidance related to solid waste reduction, recycling and affirmative procurement. Reference (g) also reemphasizes Federal agency requirements to reduce pollutant releases to the environment, prevent pollution, source reduction, and to use P2 as the preferred method of environmental compliance.

– RCRA requires that facilities which dispose of hazardous wastes have programs in place to minimize the generation of such hazardous waste.

7-4.2 Green Procurement Program. Reference (h) establishes policy, assigns responsibility, and prescribes procedures for Green Procurement. For more information, see also Chapter 31, Green Acquisition.

7-4.3 Pollution Reduction. All facilities should identify and implement source reduction opportunities to reduce releases of toxic chemicals to the environment, off-site transfer of such toxic chemicals for treatment and disposal, and generation and disposal of hazardous and non-hazardous solid wastes. Facilities should wherever feasible, find opportunities to substitute less hazardous chemicals and substances in their processes in accordance with the Department's green procurement program. Department facilities will endeavor to increase on- and off-site recycling of hazardous wastes, increase diversion of non-hazardous solid wastes for recycling or composting and increase procurement of environmentally preferable products and services.

7-4.4 Hazardous Material Control. Facilities can reduce the amount of HM used, and HW generated through up front HM control in procurement, supply, and use by:

(a) Developing local mechanisms at facilities to identify materials in use that are hazardous and limiting quantities of HM procured and stored. Facilities shall establish HM AULs to control the quantity of HM procured and stored.

(b) Establishing methods for substituting a less HM or non-HM for HM where possible.

(c) Developing and incorporating new technology or materials that have a reduced impact upon the environment, are safer and healthier, or result in reduced emissions.

(d) Developing and implementing accurate HM inventory controls to reduce the generation of waste because of shelf life expiration, when possible.

(e) Actively seeking out other authorized users of HM to avoid shelf life expiration and the creation of HW.

(f) Modifying units of issue to reduce the generation of waste because of unused surplus material.

(g) Reviewing local documentation that directs the use of HM to determine possible changes to minimize further the use of HM and generation of HW.

(h) Reviewing standardized documents, including specifications and standards, to identify opportunities to stop or reduce use of extremely hazardous substances and toxic chemicals, consistent with the safety and reliability requirements of its mission.

(i) Integrating Environmental Safety and Occupational Health (ESOH) considerations into all acquisition and procurement actions.

7-4.5 Training. One of the most effective P2 techniques is to train personnel properly. Chapter 2 provides overall environmental training requirements. Individual chapters of this manual also discuss the training necessary to achieve compliance with specific environmental laws and regulations.

7-4.6 P2 Committee. P2 is a multi-disciplinary effort that requires participation from many functional areas of Department organizations to be successful. While organization environmental personnel can and should take the lead to implement P2 opportunities, successful implementation requires the participation and support of functional areas including supply, acquisition/contracts, safety, systems maintenance, public works, and operational elements.

Facilities that require a permit from their state for generation and/or storage of hazardous waste are encouraged to establish a P2 committee to advise management on P2. The primary responsibility of the committee should be the establishment of an integrated organizational P2 program and the development and implementation of policies and procedures that comply with the requirement of this Manual. The P2 committee should be multi-disciplinary and bring together the various organizations and groups having functional responsibilities and authority over HM acquisition and use, etc. The facility manager should designate the chairperson of the committee and delegate him or her sufficient authority to ensure that the committee obtains required participation and cooperation.

7-4.7 Green Procurement. All Department personnel shall consider green products and/or services as the first choice in all procurements, including service contracts. Green procurement is the cornerstone of source reduction to prevent pollution. See Chapter 31 for further guidance on Green Procurement.

7-5 Responsibilities

7-5.1 Office of the Secretary.

(a) **OSEEP shall:**

(i) Identify Department opportunities for P2 and facilitate transfer of P2 information and technology; and

(ii) Actively participate with industry and other Departments through joint initiatives to eliminate or reduce shared HM procurement, use, and requirements.

(b) **OSBM** is responsible for ensuring compliance within the Herbert C. Hoover Building.

7-5.2 OUs shall:

(a) Ensure that activities under their cognizance attempt to develop, review, revise, and implement P2 plans per the guidance of this chapter;

(b) Plan, program, budget, and allocate funds for all facility P2 projects identified in facility P2 plans which support cost-effective environmental compliance, support achievement of the Department measure of merit goals, reduce generation of pollutants, or reduce the overall life cycle cost of the activities environmental program;

(c) Endeavor to develop and implement HM elimination or substitution processes for all systems and operations under their cognizance. These processes should include the identification, evaluation, and use of the least hazardous material

available;

(d) Attempt to develop processes to ensure that the facility AUL incorporates the least hazardous, technically acceptable materials;

(e) Take necessary actions to support achievement of the Department's P2 goals;

(f) Work with acquisition program managers to aggressively incorporate ESOH into systems engineering, including pursuing the reduction of HM used in acquisition of systems. Inclusion of P2 practices in an acquisition program, such as designing systems to use less HM or emit fewer emissions, reduces risks and total ownership costs, and helps the Department meet P2 goals;

(g) Work with the acquisition program managers to ensure a HM AUL is prepared for facilities;

(h) Assess ESOH effects of chemicals, processes and materials posing a high hazard potential. Use the results in all life cycle cost and trade-off decisions;

(i) Review and revise standardized documents under their cognizance, including specifications, standards, technical manuals and handbooks to reduce/eliminate requirements for hazardous material/toxic substances and other pollution sources. Reviews should occur with sufficient frequency to take advantage of P2 opportunities created by changes to management practices, technologies, materials, processes and requirements, as appropriate. Plan, program and budget for these P2 reviews and revisions;

(j) When requested, assist facility managers by providing life cycle costs for HM being considered for acquired systems;

(k) Develop HM shelf-life policies and procedures to support the goal of eliminating disposal of unused HM as hazardous waste. Provide guidance to facility-level supply functions in establishing and managing local shelf-life control and management programs;

(l) Provide guidance to and coordinate efforts of the OU-wide HM substitution efforts;

(m) Develop policies and procedures to reduce or minimize the entry of new HM into the supply system;

(n) Ensure that organizations with established EMS programs incorporate P2 as an overarching EMS objective in their environmental policy and develop environmental management programs to support this objective;

(o) Attempt to develop, revise as necessary, and implement facility level HM AULs using an inventory that identifies and quantifies HM, including categorizing the material as an extremely hazardous substance, hazardous substance, or toxic chemical as defined under EPCRA (see Chapter 8);

(p) Wherever practicable limit local purchases of HM to purchases for which a stock

numbered product is unavailable from the supply system and for which there is a valid requirement (e.g., maintenance manual, or similar document);

(q) Review one industrial process annually and attempt to eliminate or reduce any HM in the waste stream; and

(r) Report periodically on progress with P2 implementation as per 7-6 below.

7-6 Reporting Requirements

7-6.1 Reporting to the Office of the Secretary.

OUs shall report to OSEEP via the annual SSPP data call, or more frequently as requested and/or required on:

(a) Reduction in the acquisition, use, and disposal of hazardous chemicals and materials; and

(b) Implementation of acceptable alternative chemicals and processes.

See Appendix A for further information on reporting requirements.

7-6.2 Reporting to External Agencies.

(a) Facilities and Departmental organizations with established EMS programs shall report on their progress implementing P2 to the Office of the Federal Environmental Executive through the EMS annual report on FedCenter.

(b) OSEEP will consolidate reporting from OUs and report on P2 on behalf of the Department through the Strategic Sustainability Performance Plan as required by reference (g) and other reports as required.

CHAPTER 8:
PROCEDURES FOR REPORTING ON USE AND STORAGE OF HAZARDOUS MATERIALS AND IMPLEMENTING THE EMERGENCY PLANNING AND COMMUNITY RIGHT-TO-KNOW ACT (EPCRA)

8-1 Scope

8-1.1 This chapter provides EPCRA policies and procedures applicable to all Department facility operations in any state of the United States, the District of Columbia, the Commonwealth of Puerto Rico, Guam, American Samoa, the United States Virgin Islands, the Northern Mariana Islands, and any other territory or possession over which the United States has jurisdiction. This chapter shall not impose any requirements directly upon ships. Cognizant shore facilities shall account in their reporting requirements for HM transferred to and from Department ships.

8-1.2 **Applicability.** All facilities shall determine if they meet or exceed the following threshold reporting requirements under EPCRA:

(a) Each facility that meets or exceeds a threshold planning quantity for an extremely hazardous substance (as defined in 8-3.6 below) is subject to reporting under EPCRA Section 302.

(b) If a hazardous chemical (as defined in 8-3 below) is present at any one time in amounts equal to or greater than 10,000 pounds at a facility, it is reportable under EPCRA Sections 311 and 312. If the hazardous chemical is an extremely hazardous substance and the amount present at any one time is equal to or greater than 500 pounds or its threshold planning quantity (as defined in 8-3 below), whichever is less, it is also reportable.

(c) Any facility that releases an extremely hazardous substance or a hazardous substance (as defined in 8-3 below), into any environmental media over a 24-hour period in an amount equal to or in excess of the reportable quantity for that substance must report in accordance with EPCRA section 304.

(d) Toxic Chemical Release Inventory reporting is required under EPCRA Section 313 for each facility meeting the following criteria:

(i) The facility has 10 or more full-time employees; and

(ii) Either:

- The facility manufactured (including importing) or processed a toxic chemical (as defined in 8-3 below) in quantities in excess of 25,000 pounds over the course of a calendar year; or
- The facility otherwise used a toxic chemical in quantities in excess of 10,000 pounds over the course of a calendar year; or
- The toxic chemical is defined as persistent, bioaccumulative, and toxic (PBT) (as defined in 8-3.13 below) and the PBT-specific threshold established in § 372.28 of reference (h) for manufacturing, processing,

etc., is exceeded.

These criteria are toxic chemical- and activity-specific, and do not include storage or the amount present at any one time.

The manufacturing criteria must include all toxic chemicals (including PBT) created at the facility, regardless of whether they are created intentionally (*e.g.*, as a product) or unintentionally (*e.g.*, coincidentally manufactured as a byproduct of treatment or product of combustion). Toxic chemicals (including PBTs) created as a result of exempt activities (*e.g.*, burning fuel for personal comfort) are also considered manufactured and must be included in a threshold determination.

8-1.3 Related Chapters. Chapter 4, Environmental Compliance.

8-1.4 References. Relevant references are:

(a) 41 U.S.C. § 11001 et seq., the Emergency Planning and Community Right-To-Know-Act;

(b) 40 CFR Part 355, Emergency Planning and Notification;

(c) 29 CFR Part 1910.1200, OSHA Hazard Communication Standard;

(d) 40 CFR Part 370, Hazardous Chemical Reporting: Community Right-to-Know;

(e) 49 CFR Part 173, Shippers - General Requirements for Shipments and Packaging;

(f) 40 CFR Part 261, Identification and Listing of Hazardous Waste;

(g) 40 CFR Part 302, Designation, Reportable Quantities, and Notification; and

(h) 40 CFR Part 372, Toxic Chemical Release Reporting: Community Right-to-Know.

8-2 Legislation

8-2.1 Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA), commonly known as Superfund, 42 U.S.C. § 9601 et seq**.** CERCLA provides funding and enforcement authority for the cleanup of waste disposal sites and for reporting of and responding to hazardous substance spills. CERCLA establishes a comprehensive response program for past hazardous waste facilities, and the planning and response framework for hazardous substance releases.

8-2.2 Emergency Planning and Community Right-to-Know Act (EPCRA). This Act, (reference (a)) also known as Title III of the Superfund Amendments and Reauthorization Act, was created to help communities plan for emergencies involving hazardous substances. To that end, EPCRA encourages and supports emergency planning and provides timely and comprehensive information to the public about the hazards associated with chemicals present at facilities and toxic chemical releases. Most notably, facilities are required to immediately notify state and local emergency response planners upon

the release of extremely hazardous substances (as defined by EPCRA) or hazardous substances (as defined by CERCLA). Additionally, EPCRA requires facilities to coordinate with state and local emergency response planners in the formulation of response action plans for chemical emergencies. EPCRA further requires the submission and public disclosure of information related to chemical inventories and releases.

8-2.3 Occupational Safety and Health Act (OSHA)**, 29 U.S.C. § 651 et seq.** OSHA directs employers to establish and maintain comprehensive and effective occupational safety and health programs.

8-3 Terms and Definitions

8-3.1 Agency. An executive agency of the Federal government (i.e., Department of Commerce).

8-3.2 Article. A manufactured item formed to a specific shape or design during manufacture; has end-use functions dependent in whole or in part upon its shape or design during end use; and which does not release, or otherwise result in exposure to, a toxic chemical under normal conditions of use.

8-3.3 Authorized Use List. An AUL is a list of all hazardous materials that are approved for use and necessary to support the requirements of an OU or facility.

8-3.4 Covered Facility. Any Department facility could be a "covered facility" if it meets one or more of the threshold reporting requirements under any section of EPCRA. These threshold reporting requirements are discussed in detail in section 8-4 of this Chapter by reference to specific EPCRA sections.

8-3.5 Designated Responsible Official. The DRO is the senior individual who assumes responsibility for the accuracy and completeness of permit applications, permits and statutorily required environmental compliance. A DRO could be subject to criminal sanctions under some environmental laws and regulations. The DRO will also at times have to certify ongoing compliance with all permit provisions once the permit is issued. The DRO is typically a facility or program manager with direct responsibility for a facility or program that is subject to environmental requirements.

8-3.6 Extremely Hazardous Substance. EHSs are a subset of hazardous chemicals, as defined in section 8-3.8 of this Chapter. Any substance listed in Appendix A or B of reference (b) is an EHS.

8-3.7 Facility. All buildings, equipment, structures, and other stationary items located on a single site or on contiguous or adjacent sites, owned or operated by the same person, otherwise known as the "host" or the "fence line owner." For the purposes of Section 304 of EPCRA (the emergency release provisions), the term includes motor vehicles, rolling stock, and aircraft.

8-3.8 Hazardous Chemical (HC). A chemical that is a physical or health hazard as defined in either reference (c) or (d).

8-3.9 Hazardous Material (HM). In general, any material, which because of its quantity, concentration, or physical, chemical, or infectious characteristics, may pose a hazard to human health or the environment. This definition includes all EHSs, HCs, hazardous substances, and toxic

chemicals. HMs include any material that is regulated as a HM per reference (e), requires a material safety data sheet per reference (c), or, which during end use, treatment, handling, packaging, storage, transportation, or disposal, meets, has components which meet, or has the potential to meet the definition of hazardous waste contained in reference (f) subparts A, B, C, and D.

Any other hazard-specific guidance (instructions or directives) takes precedence over the instructions contained in this Chapter for purposes of controlling particular HMs. Materials that may have such specific guidance include: ammunition, weapons, explosives and explosive actuated devices, propellants, pyrotechnics, medical and pharmaceutical materials, medical waste and infectious materials, bulk fuels, radioactive materials, asbestos, and mercury. These materials are hazardous and exposure to personnel may occur during manufacture, storage, use, and demilitarization of these items.

8-3.10 Hazardous Substance (HS). Any substance listed in Table 302.4 of reference (g).

8-3.11 Local Emergency Planning Committees (LEPCs). LEPCs work to understand chemical hazards in the community, develop emergency plans in case of an accidental release, and look for ways to prevent chemical accidents. LEPCs are made up of emergency management agencies, responders, industry and the public.

8-3.12 Material Safety Data Sheet (MSDS). OSHA Form 174, or an equivalent form containing identical data elements, used by manufacturers of chemical products to communicate to users the chemical, physical, and hazardous properties of their products.

8-3.13 Persistent Bioaccumulative and Toxic (PBT). Under EPCRA, Section 313, EPA has established a subset of the toxic chemical list for those chemicals identified as being PBT chemicals in the environment after being released. PBTs have assigned threshold levels that range from 0.1 grams to 100 pounds per year and the *de minimis* exemption found in reference (h) (40 CFR § 372.45(d)(1)) may not be applied. PBTs and their respective threshold levels for Section 313 are identified in the toxic chemical list in § 372.28 of reference (h).

8-3.14 Release. Under EPCRA, the term “release” means any spilling, leaking, pumping, pouring, emitting, emptying, discharging, injecting, escaping, leaching, dumping or disposing into the environment (including the abandonment or discarding of barrels, containers, and other closed receptacles) of any HC, EHS, toxic chemical, or CERCLA HS.

8-3.15 Reportable Quantity (RQ). The specified amount in pounds of any EHS or HS, which when released in a 24-hour period in excess of or equal to that amount to the environment, requires reporting under EPCRA, Section 304. Appendices A and B of reference (b) and Table 302.4 of reference (g) list RQs for EHSs and CERCLA HSs, respectively.

8-3.16 State Emergency Response Commission (SERC). The Governor of each state has designated a SERC that is responsible for implementing EPCRA provisions within the state. The SERC's duties include:

(a) Establishing procedures for receiving and processing public requests for information collected under EPCRA;

(b) Reviewing local emergency response plans;

(c) Designating local emergency planning districts;

(d) Appointing a Local Emergency Planning Committees (LEPC) for each district; and

(e) Supervising the activities of the LEPCs.

8-3.17 Threshold Planning Quantity (TPQ). The established amount in pounds of an EHS, which when present on-site at a facility at any one time in quantities equal to or greater than the TPQ, requires notification under EPCRA, Section 302. Appendices A and B of reference (b) list TPQs.

8-3.18 Tier I Report. An annual inventory report that provides an estimate of the different types of hazardous chemicals in categories of health and physical hazards that were stored on-site during the preceding calendar year. It also provides the estimate of the maximum and average amounts of these categories of hazardous chemicals on-site, and their general locations. This Tier I information is now generally always provided on a Tier II report.

8-3.19 Tier II Report. An annual inventory report that provides Tier I information plus additional detail, including: chemical storage locations on site; names and 24-hour contact information for the emergency contacts at a facility; Standard Industrial Classification (SIC) or North American Industry Classification System (NAICS) codes for the type of business; and other details.

8-3.20 Toxic Chemical (TC). Any substance listed in reference (h).

8-4 Requirements

8-4.1 Designated Responsible Official. The general duty of the DRO is to ensure day-to-day compliance with all environmental laws, regulations, and requirements imposed on their facility and their facility staff's activities. Each OU shall establish a policy regarding DROs. The policy shall define who are considered DROs and what their duties are. There are several environmental laws and regulations that assign specific responsibilities to responsible officials (e.g. Clean Air Act), therefore care should be taken and coordination should be done with the Department in establishing DROs. OUs shall be responsible for designating the Responsible Official for each facility and permit under their administration. It is generally better to appoint the DRO at the lowest level that still has the authority to submit permit applications and sign reports required by regulatory permits, as he/she will be closer to the operations being certified. The Department recommends that the DRO for a given facility or permit be the facility manager or equivalent. In no case shall the responsibility for permits be any lower than the Federal facility manager, operations director, or the manager responsible for facility operations. If an OU can assure itself that its facilities are not owned and they cannot be classified as the operator of a facility then the paragraph does not apply. Some indications that an OU could be classified as an operator of a facility:

- Does the facility have EPA ID number in the OU’s name?
- Does the facility ship hazardous waste under their EPA ID number?
- Does the facility hold registration certificates for USTs in the OU’s name?
- Does the facility contract for fuel deliveries under its OU name?
- Does the facility operate and/or accept fuel deliveries under their OU name and address?

- Does the facility hold Clean Water Act, Clean Air Act, or Safe Drinking Water Act operating permits?

- Does the facility report under EPCRA under their OU name and address?

8-4.2 Overview of EPCRA Requirements for Federal Agencies. The primary purpose of emergency planning and release notifications is to protect public health, safety and the environment, and to establish and coordinate the nation's chemical emergency planning activities.

(a) **EPCRA Section 302** requires facilities to inform state and local emergency planners about the presence of EHSs. A facility that has, on-site, any EHS in a quantity equal to or in excess of its applicable TPQ as established in Appendices A and B of reference (b), shall provide a one-time notification to the SERC and LEPC (or equivalent for your jurisdiction) that the facility is subject to the emergency planning requirements of EPCRA. Include the facility name, facility point of contact (that will serve as the Facility Emergency Coordinator per EPCRA Section 303), an alternative point of contact, and phone numbers. Thereafter, if any information in the original notification is no longer current (and needs to be updated), the facility shall amend the original notification to the SERC and LEPC (or equivalent for your jurisdiction) to include the additional information within 60 days of receiving the new information or the EHS. If no notification has been required to date (because a TPQ for an EHS was not met or exceeded) and then an EHS becomes present at the facility in excess of its TPQ for the first time, or the EHS list is revised and the facility has an EHS present in excess of the TPQ, the facility shall submit the EPCRA Section 302 notification within 60 days of the determination that reporting is required based on the new information.

(b) **EPCRA Section 303** requires a covered facility to provide any emergency planning information requested by the LEPC (or equivalent for its jurisdiction). At minimum, a facility subject to EPCRA reporting requirements must appoint a facility representative, the Facility Emergency Coordinator, to actively serve on the LEPC (or equivalent for its jurisdiction).

(c) **EPCRA Section 304** protects the public in the event of EHS or HS releases through the establishment of local and state emergency response capabilities. A facility where an EHS or HS is produced, used, or stored shall provide an immediate verbal and as soon as practicable written follow-up notice of any EHS or HS released over a 24-hour period into any environmental media that meets or exceeds the established RQ as established by Appendices A and B of reference (b) or Table 302.4 of reference (g). The facility experiencing the release shall notify all SERCs and LEPCs (or equivalent for its jurisdiction) for areas likely to be affected by the release. This notice does not relieve the facility of any notification requirements required under other environmental regulations. Notification to the SERC or LEPC (or equivalent for its jurisdiction) is not required for releases that result in exposure to personnel solely within the boundaries of the facility, regardless of whether the RQ for the substance was met or exceeded. Notification to the SERC or LEPC (or equivalent for its jurisdiction) is also not required for releases exempted per 40 CFR § 355.31.

(d) **EPCRA Section 311** is intended to increase emergency planner and community awareness of chemical hazards. Under OSHA, facilities are required to maintain copies of an MSDS for HCs stored or used at the facility. Any facility that maintains such an MSDS must also make a one-time submission of copies of those MSDSs or a list of the HCs grouped by hazard category to the SERC, LEPC (or equivalent for its jurisdiction), and the local fire department with jurisdiction over the facility if: (1) any HC is present on-site at any one time in an amount equal to or greater than 10,000 pounds or (2) any EHS is present at any one time in an amount equal to or greater than 500 pounds or the applicable TPQ (whichever is less). Facilities should contact the local agency to identify their preference for data submission. Thereafter, should an HC not previously reported become present in amounts equal to or over established thresholds, or should significant new information be discovered concerning the HCs for which a submission was previously made (*e.g.*, new hazard information), the facility shall provide a new or revised submission within 3 months. Should the SERC, LEPC (or equivalent for its jurisdiction), or local fire department with jurisdiction over the facility request an MSDS not previously submitted, the facility shall submit the requested MSDS within 30 days of receipt of the request. The minimum threshold for reporting in response to a request for submission is zero.

(e) **EPCRA Section 312** provides comprehensive information about the identity and amounts of stored HCs and makes the information available to the public, emergency planners, and responders. In addition to the one-time submission required under EPCRA Section 311, facilities are also required to submit an annual Emergency and Hazardous Chemical Inventory Form (Tier I or Tier II). The reporting thresholds for these annual inventories are the same as required under Section 311, namely: (1) any HC requiring an MSDS under OSHA present on-site at any one time in an amount equal to or greater than 10,000 pounds, or (2) any EHS present at any one time in an amount equal to or greater than 500 pounds or the applicable TPQ (whichever is less).

The annual submission is due on 1 March for the previous calendar year. Should the SERC, LEPC (or equivalent for its jurisdiction), or local fire department with jurisdiction over the facility request a Tier II form not previously submitted, the facility shall submit the requested form within 30 days of receipt of the request. The minimum threshold for reporting in response to a written request for submission is zero, provided the request includes a written statement of need.

Federal EPCRA law only requires submission of Tier I information, and leaves it to the SERCs or LEPCs to request a Tier II report. As a practical matter, EPCRA Tier II reports are almost always the form submitted as SERCs and LEPCs have almost universally requested the Tier II reports instead of Tier I information.

(f) **EPCRA Section 313** supports state and local planning efforts and informs the public about routine releases of TCs to the environment by establishing a facility-wide inventory of TC releases into all environmental media. A facility that has 10 or more full-time employees and manufactures or processes any TC listed in reference (h) in excess of 25,000 pounds in a calendar year, or that otherwise uses any listed TC in a quantity over 10,000 pounds in a calendar year, or that manufactures, processes, or otherwise uses a PBT in excess of the PBT-specific

threshold in a calendar year given in § 372.28 of reference (h), is required to submit individual release data, a Form R, for each reportable TC. The annual submission deadline for the Form R is 1 July covering releases for the previous calendar year. Form R shall be submitted by the reporting facility to EPA and the state. As of reporting year 2005 (reports due 1 July 2006), EPA only accepts electronic submissions of Form R. States may still receive hard copy submittals if they are not able to accept electronic submittals.

8-4.3 General Guidance on Compliance with Federal EPCRA Requirements. All Department facilities in any state of the United States, the District of Columbia, the Commonwealth of Puerto Rico, Guam, American Samoa, the United States Virgin Islands, the Northern Mariana Islands, and any other territory or possession over which the United States has jurisdiction shall use the following procedures in complying with EPCRA requirements:

(a) **Definition of a Facility for Purposes of EPCRA reporting.** All facilities shall define the facility fenceline and operations within that fenceline that shall be considered part of the facility and included in EPCRA efforts.

(i) Property lines most appropriately define the facility fenceline with the fenceline owner responsible for all Department tenants. The fenceline owner shall file the necessary reports for the entire facility for each section of EPCRA requiring a report. All threshold calculations will include combined totals from within the fenceline. Release calculations for Section 313 will account for all non-exempt releases within the fenceline, reported according to guidance for reporting of range activities on a separate Form R.

Department facilities shall not report actions of other Federal agencies.

In addition, if there is property within the fenceline that is leased to any entities outside the Department of Commerce, including commercial entities (*e.g.*, privatization efforts or temporary leases), and there is only a real-estate interest with no other value gained other than the real estate value, then these activities also shall not be reported by the Departmental facility.

(ii) Department tenants of non-Department of Commerce host facilities are independently responsible for meeting their EPCRA reporting requirements.

(iii) Ships at sea are not considered facilities and are not subject to EPCRA.

(iv) The owner of geographically separated portions of a facility may treat each establishment it operates as a separate facility. Independent owners of contiguous or adjacent sites are individually responsible for complying with EPCRA requirements. For example, a National Oceanic and Atmospheric Administration facility and a National Institute of Standards and Technology facility that share a fenceline report as two separate facilities under EPCRA.

(v) Regionalized areas may apply the definition of facility. For regionalized

areas where components are adjacent and contiguous, components should be combined into a single regionalized facility for threshold calculations and reported under the name of the regionalized base. For regionalized areas where components are not adjacent and contiguous (i.e., geographically separated), components should be considered as separate facilities for threshold calculations under EPCRA. Where reporting is triggered, the name of the component should be reported as "Regionalized Facility Name."

(b) For the purposes of EPCRA, private contract operations on Department facilities are to be accounted for in the Department facility's calculations.

(c) Government-Owned, Contractor-Operated (GOCO) facilities are legally required to comply with all provisions of EPCRA to the extent that their operations meet threshold and other requirements of the statute and implementing regulations. The Department encourages GOCO facilities to support Department efforts in meeting any additional reporting requirements.

(d) Any EHS, HC, or TC stored or used aboard a ship while a ship is in port does not become part of the shore facility's threshold calculations and is not reported on any report by the shore facility. Material maintained under the ship's custody is not subject to any EPCRA reporting requirements.

(e) Department facilities shall refer to Departmental guidance when complying with EPCRA. Department facilities may also refer to EPA EPCRA policy; however, should EPA and Departmental policy conflict, EPA policy shall take precedence. If a conflict between Department and EPA EPCRA policy causes a discrepancy to arise during an EPCRA inspection, the Departmental facility shall refer the matter through its chain of command to the Department.

(f) Each facility shall meet the reporting deadline requirements of EPCRA regulations.

(g) Facilities crossing state and local boundaries should report to all applicable state and local jurisdictions.

(h) Prior to the submission of any reports to the SERC, LEPC (or equivalent for your jurisdiction), or non-Department fire departments, EPA, or the state, facilities shall review the information to prevent the release of classified information. In cases where information regarding the use of a substance is classified, the facility shall develop alternative procedures for protecting the facility and off-site personnel.

(i) Facilities shall ensure documentation is in place to support EPCRA reporting efforts, including the decision not to report. Facilities should have documentation and calculations for threshold and release decisions available to support any inquiries. Facilities shall maintain support documentation for a minimum of 5 years, unless a cross governing regulation (*e.g.*, the Resource Conservation and Recovery Act (RCRA)) requires the facility to retain the records for a longer period.

(j) Facilities shall fully cooperate with EPA Headquarters and Regional personnel conducting EPCRA inspections and reviews. EPA EPCRA inspections and reviews may be part of other media-specific or multi-media inspections.

While EPA does not have the authority to penalize (*e.g.*, fine) Department facilities for EPCRA noncompliance, EPA may issue Notices of Noncompliance (NON) or Notices of Violation (NOV) for EPCRA violations (*e.g.*, a failure to report TC releases, a failure to maintain TC release records). OUs shall respond to EPCRA Administrative Compliance Orders (ACO), NONs or NOVs.

Facilities shall immediately forward all EPCRA NONs/NOVs received to OU headquarters, and the OU in turn shall forward a copy to the Department.

(k) EPCRA does not require Departmental facilities to comply with state and local right-to-know requirements. Department facilities are encouraged to comply with state and local right-to-know requirements to the extent that it is not overly burdensome to do so. Departmental facilities cannot pay state and local right-to-know fees. Departmental facilities shall forward all state and local right-to-know fee invoices and reimbursement requests to their legal office for review.

8-4.4 EPCRA Section 302 reporting requirements for EHSs. For purposes of **EPCRA Section 302** emergency planning, all facilities shall determine whether they meet or exceed threshold requirements for any EHS present at the facilities. Each Departmental facility that exceeds a threshold is subject to the reporting requirements of EPCRA for emergency planning and is required to provide information to support emergency planning. Host facilities shall calculate thresholds using the entire facility.

(a) **Applicability:**

(i) The facility may apply any of the exemptions available in § 355.31 (reference (b)) and should document where and when they are applied.

(ii) Each facility that meets or exceeds a TPQ for an EHS is subject to reporting under EPCRA Section 302.

(b) **Reporting:** Each applicable facility shall notify the SERC and the LEPC (or equivalent for its jurisdiction) and provide a facility emergency point of contact (i.e., Facility Emergency Coordinator), an alternative point of contact, and telephone numbers.

(i) If no notification has been made under EPCRA Section 302 (because a threshold was not exceeded) and an EHS later becomes present at the facility in excess of its TPQ, or if the EHS list is revised and the facility has present an EHS in excess of the TPQ for the first time, the facilities shall submit an original notification to the SERC and LEPC (or equivalent for its jurisdiction) within 60 days.

(ii) If a notification has been made under EPCRA Section 302 and the information provided in the most recent notification has changed (*e.g.*, the identity of the Facility Emergency Coordinator has changed), the facilities shall submit a notification letter to the SERC and LEPC (or

equivalent for its jurisdiction) with the updated information within 60 days of receiving the updated information.

(c) Each covered facility shall request to participate in local emergency planning functions and appoint a facility representative to actively serve on the LEPC (or equivalent for its jurisdiction). Pursuant to EPCRA Section 303, each covered facility shall provide any emergency planning information requested by the LEPC (or equivalent for its jurisdiction).

8-4.5 EPCRA Section 304 Emergency Release Notification Requirements.

(a) **Applicability:** Any facility that releases an EHS or HS, into any environmental media over a 24-hour period in an amount equal to or in excess of the RQ for that substance is subject to EPCRA section 304 reporting requirements.

(b) **Required Reporting and Notifications:**

(i) A subject facility shall immediately notify the SERCs and LEPCs (or equivalent for its jurisdiction) for all areas likely to be affected by the release of that substance. The facility shall also notify the Department's Office of Sustainable Energy and Environmental Programs (OSEEP) of the release as soon as practicable after the release has occurred.

(ii) As soon as practicable after the release, the facility shall submit a written follow-up notification of the release and response actions taken to the relevant SERCs and LEPCs. To expedite the notification process, the facility shall prepare and use a standard form and approval chain in the event of a reportable release.

(iii) The facility is not required to notify the SERC or LEPC (or equivalent for your jurisdiction) of releases that result in exposure to personnel solely within the boundaries of the facility regardless of whether the RQ for that substance was met or exceeded.

(iv) The facility may apply any of the exemptions available in § 355.31 of reference (b) and should document where and when they are applied.

(v) Each Departmental facility reporting a release of a CERCLA HS under EPCRA Section 304 may also have reporting responsibilities under CERCLA Section 103 (i.e., notification to the National Response Center).

8-4.6 Reporting/Notification of Presence of Hazardous Chemicals on Site. For **EPCRA Section 311** community awareness, all facilities shall determine if they meet or exceed threshold requirements for any HC that is present on site. Each Departmental facility that exceeds the threshold is subject to the reporting requirements of EPCRA for community right-to-know provisions.

(a) **Applicability:** If the quantity of an HC is present at any one time in amounts equal to or greater than 10,000 pounds, it is reportable. If the HC is an EHS and the amount present at any one time is equal to or greater than 500 pounds or its TPQ, whichever is less, it is reportable. Applicable facilities must also report under EPCRA Section 312 (see 8-4.7 below).

(b) **Reporting Requirements:**

(i) For each reportable HC, facilities shall provide a one-time submission of a copy of the MSDS or a list of reportable HCs, grouped by hazard category, to the SERC, LEPC (or equivalent for your jurisdiction), and the fire department with jurisdiction over the facility. Facilities should contact local agencies to identify their preferred method of data submission.

(ii) If a facility submits a list, it shall contain the following information:

- A list of the HCs for which an MSDS is required under OSHA regulations, grouped by hazard category. Only include those chemicals (either in mixtures or in the pure form) that meet or exceed threshold levels.
- The HC listed under all applicable hazard categories.
- The chemical and common name of each HC as provided on the MSDS.

(iii) State and local regulators cannot waive Departmental facility EPCRA reporting requirements by allowing EPCRA Section 312 annual hazardous chemical inventory reporting to substitute for EPCRA Section 311 MSDS or list reporting.

(iv) Departmental facilities should make the EPCRA Section 311 submission to the fire department that would routinely be the first alerted during an emergency. Where a Departmental facility fire department exclusively serves the facility, the facility fire department is considered the local fire department and shall receive the EPCRA Section 311 submission.

(v) Should the SERC, LEPC (or equivalent for your jurisdiction), or local fire department with jurisdiction over the facility request an MSDS not previously submitted, the facility shall submit the requested MSDS within 30 days of receipt of the request. The minimum threshold for reporting in response to a request for submission is zero.

(vi) Should an HC become present over established thresholds or should significant new information concerning the HCs for which a submission

was previously made become available, the facility shall provide a new or revised submission within 3 months after discovery of this new information.

8-4.7 Comprehensive Chemical Hazard Reporting for Hazardous Chemicals on Site. For **EPCRA Section 312** comprehensive chemical hazard reporting, facilities meeting or exceeding HC threshold requirements shall submit Emergency and Hazardous Chemical Inventory Forms for those HCs to the SERC, LEPC (or equivalent for their jurisdiction), and the local fire department with jurisdiction over the facility by 1 March, annually, that cover the previous calendar year's inventory. Host facilities shall calculate threshold using the entire facility.

Applicability: If the quantity of an HC is present at any one time in amounts equal to or greater than 10,000 pounds, it is reportable. If the HC is an EHS and the amount present at any one time is equal to or greater than 500 pounds or its TPQ, whichever is less, it is reportable.

Facilities may submit either Tier I or Tier II information; however, they are not required to comply with requests to use any form other than the Federal Tier I or Tier II forms. Most SERCs and LEPCs prefer the Tier II or a state developed form.

Some states have adopted their own right-to-know provisions that may include lower thresholds or state-developed reporting forms. Departmental facilities are only required to comply with the Federal program; however, facilities are encouraged to comply with state programs if it is not overly burdensome to do so, to the extent that resources allow, and provided such compliance does not interfere with mission accomplishment or other legal obligations. For example, Department facilities may substitute state and local Tier II inventory forms provided all the information reported from the EPA Tier II inventory form is included within state forms and the state form does not include extensive data elements that are burdensome to collect.

(a) Departmental facilities may file EPCRA Section 312 inventory forms electronically using the EPA's Tier2 Submit (or other EPA software), state-specific software, or other electronic means (*e.g.*, a web portal) where available.

(b) The SIC code for Departmental facilities is "9199." No other or additional SIC codes shall be reported. If or when EPA begins use of the NAICS code to replace SIC codes, Department facilities shall report "921190." No other or additional NAICS codes shall be reported.

(d) The facility manager is not required to sign the Tier II, or state-equivalent, reporting form, for EPCRA Section 312. Any responsible management official may sign the report.

(e) Facilities should make the EPCRA Section 312 submission to the fire department that would routinely be the first alerted during an emergency. The submission should be made in whatever format the fire department requires, e.g. electronically or in hard copy. Where a fire department exclusively serves the facility, the facility fire department is considered the local fire department and shall receive the EPCRA Section 312 submission.

(f) The SERC and LEPC (or equivalent for their jurisdiction) have the authority to request a Tier II submission for HCs present at the facility below threshold levels if the requester provides a written statement of need. Should the SERC, LEPC (or

equivalent for their jurisdiction), or local fire department with jurisdiction over the facility request a Tier II form not previously submitted, the facility shall submit the requested form within 30 days of receipt of the request. The minimum threshold for reporting in response to a request for submission is zero.

8-4.8 Reporting on the Manufacture, Processing, and Use of Toxic Chemicals. For the **EPCRA Section 313** facility-wide TC release inventory, all facilities shall determine if they meet the reporting requirements for Toxic Release Inventory (TRI) reporting, and, if so, submit EPA Form R. Host facilities shall ensure thresholds are calculated using the entire facility.

(a) **Applicability:** TRI reporting is required if the following criteria are met:

(i) The facility has 10 or more full-time employees; and

(ii) Either:

- The facility manufactured (including importing) or processed a TC in quantities in excess of 25,000 pounds over the course of a calendar year; or
- The facility otherwise used a TC in quantities in excess of 10,000 pounds over the course of a calendar year; or
- The TC is a PBT and the PBT-specific threshold related to manufacturing (including importing), and processing established in § 372.28 of reference (h) is exceeded.

These criteria are TC- and activity-specific, and do not include storage or the amount present at any one time.

The manufacturing criteria must include all TCs (including PBTs) created at the facility, regardless of whether they are created intentionally (*e.g.*, as a product) or unintentionally (*e.g.*, coincidentally manufactured as a byproduct of treatment or product of combustion). TCs (including PBTs) created as a result of exempt activities (*e.g.*, burning fuel for personal comfort) are also considered manufactured and must be included in a threshold determination.

(b) Departmental facilities shall use the EPA's reporting software to report Form R electronically to EPA. Departmental facilities shall not use the alternative threshold certification statement option, Form A.

(c) Departmental facilities will make every attempt to submit Form Rs to EPA covering GOCO information as required in this chapter. The facility shall provide Departmental GOCO information on a separate government-submitted Form R. The government Form R submission shall list U.S. Department of Commerce as the "parent company" under section 5.1 of the form. By entering only the government-submitted form to the automated EPA database, EPA will avoid database double-counting of these releases.

(d) TCs stored or used aboard ship while a ship is in port do not become part of the shore facility's threshold calculations and are not reported on a Form R by the

shore facility if reporting is required. Material maintained under ship's custody is not subject to reporting requirements. The transfer of a TC to or from a Departmental ship is not considered to be a manufacture, process, or otherwise use of a TC and, therefore, shall not be used by a facility to calculate threshold requirements. If the TC has triggered the reporting requirement based on activities at the shore facility, then the facility shall include transfers to ships as off-site transfers in the Form R release calculations. Consider floating dry-docks as part of the shore facility and report them accordingly.

(e) EPCRA Section 313 regulations provide certain exemptions that are intended to relieve facilities from the burden of making threshold and release calculations based on small or ancillary uses of listed TCs. Five primary categories exist under the exemptions, including *de minimis*, article, use, laboratory, and property ownership. In general, the use exemptions do not apply to TCs manufactured or processed. In addition, the *de minimis* exemption may not be applied to PBTs.

The coincidental manufacture of TCs as a result of an exempt use is considered manufactured and must be included in threshold calculations. Examples of exempt activities that coincidentally manufacture TC that must be included in threshold calculations include burning of fuels for personal comfort heating (byproducts of combustion) and sanitary wastewater treatment.

TCs that are coincidentally manufactured from non-exempt activities, such as burning fuel in nonmotor vehicles and waste treatment have always been subject to EPCRA Section 313 and must be included in threshold determinations and release estimates.

The **exemptions** apply to Departmental facilities in the following manner:

(i) In general, when a mixture contains a non-PBT TC at a concentration of less than 1 percent by weight, or less than 0.1 percent by weight if the TC is an OSHA-defined carcinogen, the Departmental facility is not required to consider the quantity of the TC when making a threshold quantity determination or calculating the amount of a release to be reported. This *de minimis* exemption only applies to mixtures as received and cannot be applied to a concentration of chemicals in diluted waste streams or to TCs that are manufactured.

NOTE:
The *de minimis* exemption does not apply to PBT TCs, and any concentration of a PBT chemical must be considered in threshold quantity calculations and release reports.

(ii) A facility may exempt from threshold quantity determinations and release reporting TCs present in an article when the article is present at a facility. An "article" is a manufactured item that is formed to a specific shape or design during manufacture; that has end-use function dependent in whole or in part upon its shape or design during end-use; and that does not release a TC under normal conditions of the processing or otherwise use of that item at the facility. The article exemption does not apply to article manufacture, and TCs processed into articles produced at a

facility must also be considered in threshold quantity calculations and release reports. If a release of a TC occurs as a result of the processing or use of a manufactured item at a facility, that item does not meet the definition of article as applied in the exemption.

(iii) The structural component category exempts TCs that are structural components of the facility or that are used to ensure or improve structural or functional integrity. The facility can apply this exemption to listed TCs found in material that is part of the facility's structure (i.e., copper in copper piping used for the plumbing in the facility). The facility does not have to account for releases resulting from passive degradation that naturally occurs in structural components of a facility.

Maintenance and repair activities performed by facility maintenance to the facility infrastructure are also consistent with the "structural component" exemption. Painting to maintain the physical integrity or function of the facility is included in the exemption. The exemption also covers small amounts of material passively abraded or corroded from pipes and other facility equipment. The following non-exhaustive list of structures is considered part of the facility's infrastructure and thus subject to the structural exemption: buildings, roads, runways, fencelines, and utilities.

(iv) The routine janitorial and grounds maintenance category exempts the use of TCs contained in products for routine janitorial and facility grounds maintenance. The routine maintenance exemption covers janitorial or other custodial maintenance and all other facility grounds maintenance for activities using substances such as cleaning supplies, fertilizers, pesticides, fungicides, herbicides, rodenticides, and insecticides similar in type and concentration to consumer products. For example, facilities do not have to report the use of TCs for lawn maintenance, building maintenance, and grounds maintenance.

(v) The personal use category exempts the personal use of listed TCs in products used by employees or other persons at the facility. This exemption also covers activities associated with facility operated cafeterias, medical facilities or facilities associated with morale, welfare, and recreation (MWR). "Personal use" products include foods, drugs, cosmetics, office supplies, and other personal items, including TCs in fuel and any other materials related to personal automobiles. The personal use exemption also covers TCs used strictly for reasons of personal comfort, necessity, or other such purposes, including, for example, heating and air conditioning units or lighting fixtures. Departmental policy exempts activities associated with hospitals and other medical facilities from toxic release inventory threshold and release calculations as such activities are exempted under the personal use exemption of the EPCRA regulations.

(vi) The motor vehicle maintenance exemption exempts TCs contained in products used for the purpose of maintaining motor vehicles (e.g., ships, aircraft, and cars) operated by a facility. Facilities are exempt from

reporting the use of TCs associated with the maintenance of motor vehicles, such as staff cars, maintenance and support vehicles, and privately owned vehicles used on the facility. Large combined fleets of motor vehicles maintained at one central location are not exempt.

Facilities are not exempt from reporting the TCs used at central locations where aircraft and ships are maintained. Shore facilities are not exempt from reporting TCs used by shore based maintenance in repairing and painting ships that are in port or in dry-dock. TCs used on board a ship by the ship's company for organizational level maintenance are exempt. Minor maintenance carried out at locations other than central maintenance locations is exempt. For example, field or organizational level units are exempt from reporting TCs used in the maintenance of vehicles outside central maintenance shops. Similarly, personnel maintaining aircraft and vehicles under field conditions and personnel maintaining ships at sea are exempt from reporting their use of TCs.

(vii) The motor vehicle maintenance exemption exempts TCs associated with the transfer of fuel from non-stationary sources of fuel, for example tanker trucks. The fueling of vehicles from stationary sources of fuel and bulk fuel storage, including movable bulk storage tanks, is exempt from threshold and release calculations. Specifically, refueling of motor vehicles owned or under operational or custodial control of a Departmental facility remains exempt under the motor vehicles maintenance exemption. Similarly, releases from the fuel transfer and fueling activities from both mobile and stationary sources remain exempt when the fuel is used for Departmental facility motor vehicle refueling.

Departmental facilities cannot claim the motor vehicle maintenance exemption for refueling of motor vehicles that are not under the operational or custodial control of the Department facility (i.e., transient vehicles). Transient motor vehicles are motor vehicles, including ships and aircraft, that only stop at a Departmental facility for fuel or rest and have no other mission at the Departmental facility. Therefore, fueling of these transient vehicles should be included when determining the otherwise use threshold and release calculations for TCs in these fuels. In addition, other products provided to transient motor vehicles are considered otherwise used and must be included in threshold and release calculations.

Emissions from all motor vehicles (transient and non-transient) are exempt. Motor vehicles include Departmental motorized vehicles such as cars, trucks, cranes, forklifts, aircraft, ships, and locomotives.

(viii) The intake water/air category exempts facilities from reporting TCs present in process water or non-contact cooling water as drawn from the environment or from municipal sources. The exemption also covers TCs present in air used either as compressed air or as part of combustion.

(ix) The laboratory use exemption applies to those listed TCs manufactured, processed, or otherwise used in a laboratory for quality control, Research

and Development (R&D), and other laboratory activities. This exemption should be applied as narrowly as possible. It is not intended as a blanket exemption for any facility that has the title "laboratory" in its name. To qualify, the listed TCs must be directly used in, or produced by, a laboratory activity at a Departmental facility. The manufacture, processing, or other use must occur under the supervision of a technically qualified individual. Generally, consider bench-scale activities exempt. Activities that do not directly support R&D, sampling and analysis or quality assurance and quality control are not exempt. Specialty chemical production and pilot plant scale activities do not qualify for the laboratory activities exemption. Departmental facilities shall also consider the laboratory exemption to apply to the cleaning of equipment within a laboratory, as well as to the standards and test samples that are necessary to set up and calibrate laboratory equipment.

(x) The property owner exemption excludes property owners from all EPCRA Section 313 reporting responsibilities where there is only a real-estate interest with no other value gained other than the real estate value. This exemption includes leases to any non-Departmental entities, including commercial entities (*e.g.*, privatization efforts or temporary leases).

(f) Facilities shall follow these guidelines when complying with EPCRA Section 313:

(i) Facilities shall ensure documentation is in place to support EPCRA reporting efforts, including the decision to not report. Facilities should have documentation and calculations for threshold and release decisions available to support any inquiries. Facilities shall maintain support documentation for a minimum of 5 years; unless a cross governing regulation (*e.g.*, RCRA) requires the facility to retain the records for a longer period.

This documentation is required for ALL facilities that are subject to EPCRA and is NOT limited only to those facilities that must submit a report.

(ii) Facilities shall submit a separate and complete electronic Form R to the EPA and the state for each TC meeting threshold requirements. Departmental facilities shall not use the Form A. The Form R shall cover not only the triggering activity but all non-exempt uses of the TC at the facility. The annual submission is due by 1 July covering the previous calendar year releases. Facilities are responsible for submitting Form Rs to EPA and the state in advance of the reporting deadline. In addition, facilities shall submit an electronic copy of all Form Rs to the cognizant OU who shall forward the electronic form to OSEEP by 1 August for accurate measurement of the total annual releases and off-site transfers of reported TCs by Department facilities.

(iii) The SIC code for Department facilities is "9199." No other or additional SIC codes shall be reported. If or when EPA begins use of the NAICS

code to replace SIC codes, Departmental facilities shall report "921190." No other or additional NAICS codes shall be reported.

(iv) Departmental facilities shall not use range codes to report release estimates on the Form R. Only numeric values shall be entered.

(v) The Departmental facility manager shall sign the Form R report(s), unless the facility manager delegates this authority, in writing, to a subordinate.

(vi) Departmental facilities shall submit revised Form R report(s) to EPA, the state, and its OU when necessary to correct errors or omissions in a prior year's reporting.

(vii) Departmental facilities shall cooperate fully with EPA regional personnel conducting EPCRA compliance reviews and inspections. Facilities should be prepared to provide, in a timely manner, information related to the calculation and preparation of all EPCRA reports. If information requested is not available or questioned by EPA personnel, facilities shall explain in writing and should reference Departmental guidance as applicable. If Departmental policy or guidance is questioned, facilities shall refer EPA personnel to OSEEP. Facilities shall not take any action inconsistent with Departmental policy without approval from OSEEP.

(viii) The Department's policy is to make Form Rs readily available to the public upon request without requiring Freedom of Information Act requests.

(ix) Prior to the release of any reports to the SERC or LEPC (or equivalent for your jurisdiction), non-Departmental fire departments, EPA, or the state, facilities shall review the information to prevent the release of classified information. In cases where information regarding the use of a substance is classified, the facility shall develop alternative procedures for protecting the facility and off-site personnel.

(x) Chapter 14 of this Manual (Oil and Hazardous Substance Spill Preparedness and Response) describes Departmental policy and planning in relation to an accidental release of a HS.

8-5 Responsibilities

8-5.1 The Office of the Secretary.

(a) **OSEEP shall:**

(i) Develop and oversee the proper implementation of Departmental EPCRA policy as necessary; and

(ii) Provide technical advice to OUs.

(b) **OSBM** shall manage EPCRA compliance at the Herbert C. Hoover Building.

8-5.2 OUs shall:

(a) Program, budget, and allocate funds for all identified facility EPCRA requirements;

(b) Ensure that facilities identify to the OU, funding needed to support all EPCRA requirements;

(c) Ensure that facilities define their fenceline, including all tenants, to support EPCRA reporting requirements;

(d) Ensure that facilities calculate all thresholds using the entire facility inventory and meet all EPCRA reporting requirements for that facility;

(e) Ensure that DROs sign all required EPCRA reporting forms, including Tier I or Tier II reports and Form R reports as the validating official or designate in writing some alternate validating official;

(f) Ensure timely reporting of results of significant non-compliance issues (those resulting in an NOV, enforcement action, or monetary fine) to OSEEP via email within 48 hours of receiving notice of such a non-compliance. Send notification to gogreen@doc.gov using the reporting form in Appendix F;

(g) Ensure facility information is reported to the state, SERC, LERC (or equivalent) and local fire departments in accordance with 8-4 above;

(h) Ensure that facilities review all publicly available data to prevent sensitive or classified information from being released;

(i) Ensure that facilities incorporate EPCRA data and reporting requirements into their comprehensive Pollution Prevention Plans;

(j) Honor public requests for EPCRA information in a timely and informative manner. Ensure the public affairs office is aware of the information and concurs on any such communication;

(k) Ensure that facilities develop and implement a local HM AUL using an inventory that identifies and quantifies HM, including whether the material is an EHS, HS, or TC;

(l) Assist in developing and maintaining a centralized list of authorized HM or the approved, less hazardous substitutes. In support of reducing EPCRA reporting requirements, ensure that facilities under their cognizance use only those HMs that appear on the HM AUL;

(m) To support reduced EPCRA reporting, ensure that facilities establish and implement procedures to control, track, and reduce the variety and quantities of HM in use, in storage or stock, or disposed of as HW;

(n) Develop and implement HM elimination/substitution processes for all systems and operations under their cognizance to support the reduction of EPCRA reporting;

(o) Develop processes that ensure that the least hazardous, technically acceptable materials are incorporated into the facility AUL to improve EPCRA reporting efforts (see Chapter 7, Pollution Prevention, for further details); and

(p) Compile and review facility information on the number of facilities meeting reporting requirements under all sections of EPCRA.

8-6 Training Requirements

– None

8-7 Reporting Requirements

8-7.1 Reporting to the Office of the Secretary.

In accordance with 8-4.5 above, any facility that releases an EHS or HS, into any environmental media over a 24-hour period in an amount equal to or in excess of the RQ for that substance shall notify OSEEP of the release as soon as practicable after the release has occurred.

8-7.2 Reporting to Federal, State, and Local Agencies.

OUs shall ensure that facility information is reported to EPA, the state, SERC, LERC (or equivalent) and local fire department as detailed in Section 8-4 above.

CHAPTER 9:
AIR QUALITY

9-1 Scope

9-1.1 This chapter applies to air emissions from all stationary sources, i.e., facilities with the potential to emit air pollutants requiring a permit under Title V of the Clean Air Act and synthetic minor sources, and mobile sources, i.e., fleet vehicles, ships, and boats, owned or operated by the U.S. Department of Commerce and operated domestically.

9-1.2 Related Chapters. Chapter 4, Environmental Compliance; and Chapter 10, Management of Ozone-Depleting Substances. NOAA promulgates guidance on control of air emissions from ships and aircraft.

9-1.3 References.

(a) 42 U.S.C. § 7401 et seq., the Clean Air Act;

(b) 40 CFR Parts 50-98 and 1039-1068, EPA Air Programs Regulations;

(c) 10 CFR Part 490 Alternative Fuel Transportation Program; and

(d) The Energy Policy Act of 1992, Pub. L. No. 102–486.

9-2 Legislation

9-2.1 Clean Air Act (CAA), as Amended. The purpose of the CAA is "to protect and enhance the quality of the Nation's air resources so as to promote public health and welfare and the productive capacity of its population..." To achieve this goal, the CAA established two strategies for setting standards: (1) National Ambient Air Quality Standards (NAAQS) for six criteria pollutants; and (2) national emission standards for individual sources of hazardous air pollutants (HAPs). In addition, the CAA requires regulation of mobile sources of air emissions and a permit program for stationary sources. Refer to reference (b) for complete details of these requirements.

Achieving CAA standards is the responsibility of the state which must develop State Implementation Plans (SIPs) that outline to EPA how each state will achieve and maintain the standards. A SIP is a collection of the regulations, programs and policies that a state will use to clean up polluted areas through implementation of various CAA programs, such as the Title V operating permit, new source performance standards (NSPS), new source review (NSR), and national emission standards for hazardous air pollutants (NESHAPs) at the state and local level. States may require pollution control and prevention measures which are more stringent than those mandated by EPA, but may not allow measures which are less stringent. Federal agencies must comply with the requirements of Federal, state, interstate, and local air pollution control regulations in the same manner and to the same extent as any nongovernmental entity.

The 1990 Amendments to the CAA introduced sweeping changes to the legislation. In order to improve air quality nationwide, the 1990 Amendments mandate the implementation of more stringent pollution control and prevention measures which include: reclassification of nonattainment areas,

regulation of mobile sources, regulation of 187 HAPs, regulation of sulfur dioxide (SO_2) and oxides of nitrogen (NO_x) for acid deposition control, implementation of an extensive operating permit program, and strengthening of the powers that allow EPA and state agencies to better enforce the provisions of the CAA.

9-2.2 Emergency Planning and Community Right to Know Act of 1986**.** This Act, also known as Title III of the Superfund Amendments and Reauthorization Act, addresses the release of hazardous substances to the environment. EPCRA calls for reporting releases of certain extremely hazardous substances to the environment. Certain chemicals subject to the HAPs and risk management provisions of section 112 of the CAA are also subject to Title III. See Chapters 6 and 15 of this manual for detailed requirements.

9-2.3 The Energy Policy Act (EPAct) of 1992, as Amended. This Act seeks to enhance the long-term energy security of the nation by reducing dependency on imported oil and providing for improved energy efficiency. The EPAct encourages automobile manufacturers and fuel suppliers to expand the commercial availability of alternative fuels and vehicles by increasing Federal demand for such products. Under EPAct, 75% of light-duty vehicle acquisitions in covered fleets must be alternative fuel vehicles (AFVs) and these vehicles must be operated using alternative fuels (as defined in EPAct and 9-4 below) unless a waiver is granted. Refer to reference (d).

9-3 Terms and Definitions

9-3.1 Acid Rain. The acidic precipitation formed by the atmospheric chemical transformation of SO_2 and NO_x emissions.

9-3.2 Air Pollution Emergency Episodes. Air pollution emergency episodes exist when the accumulation of air pollutants in any place is attaining or has attained levels which could, if such levels are sustained or exceeded, lead to a substantial threat to the health of individuals. Specific meteorological conditions, such as low winds and a temperature inversion, often contribute to the incidence of an air pollution emergency episode.

9-3.3 Alternative Fuels. Motor vehicle emission regulations (40 CFR § 86.000-2) define "alternative fuels" as any fuel other than gasoline and diesel fuels, such as methanol, ethanol, and gaseous fuels. EPAct regulations (reference (d)) define alternative fuels to include: methanol, denatured ethanol and other alcohols; mixtures containing 85 percent or more alcohol with the balance consisting of gasoline or other such fuels; natural gas; liquefied petroleum gas; hydrogen; coal-derived fuels; fuels (other than alcohol) derived from biological materials (including neat biodiesel); electricity; and other substantially nonpetroleum based fuels. This definition is required for compliance with EPAct regulations, as opposed to the definition of "Clean Alternative Fuel," in 9-3.9 below, which is applicable only to Clean Air Act regulations

9-3.4 Area Source. An area source is any stationary source that is not a major source. The term does not include motor vehicles or nonroad vehicles subject to regulation under Title II of the CAA.

9-3.5 Attainment Area. An area where ambient pollutant concentrations meet the NAAQS.

9-3.6 Best Available Control Measures (BACM). The most effective emission control measures that achieve the greatest possible reduction in the emission of particulate matter from

sources such as roadway dust, soot and ash from woodstoves and open burning of rush, timber, grasslands, or trash.

9-3.7 Best Available Control Technology (BACT). Emission control technology to be applied to new or modified emission sources located in areas that are in attainment of the NAAQS for each criteria pollutant emitted from the new source. The determination of BACT is made through the Prevention of Significant Deterioration Program (see 9-3.33 below). States apply BACT on a case-by-case basis, taking into account energy, environmental, economic, and other costs. BACT must be at least as stringent as the NSPS for similar facilities.

9-3.8 Clean-Fuel Vehicle. Any vehicle in a class or category of vehicles which has been certified to meet the clean-fuel vehicle standards applicable under Title II of the CAA for that class or category.

9-3.9 Clean Alternative Fuels. Any fuel (including methanol, ethanol, fuel blends containing 85 percent or more alcohol, reformulated gasoline, diesel, natural gas, liquefied petroleum gas, and hydrogen) or power source (including electricity) used in a clean-fuel vehicle that meets the requirements and emission standards of the CAA. Please note that this definition is distinct from the definition of "alternative fuel" in 9-3.3 above, which is applicable to EPAct.

9-3.10 Control Techniques Guidelines (CTG). Documents published by EPA designed to assist the States/localities in selecting the most appropriate technologies to apply in order to control major sources of air pollution.

9-3.11 Criteria Pollutants. Six air pollutants that are known to be hazardous to human health and for which EPA is required to set NAAQS. The six criteria pollutants include: ozone (O_3), carbon monoxide (CO), particulate matter (PM) regulated as PM-10 (10 microns or smaller) and PM2.5 (2.5 microns or smaller), sulfur dioxide (SO_2), nitrous oxides (NO_x), and lead (Pb).

9-3.12 Federal Implementation Plan (FIP). A Federally-imposed air quality plan which supersedes a SIP when a state has not developed an adequate plan to achieve and maintain the NAAQS.

9-3.13 Hazardous Air Pollutants (HAPs). Air pollutants regulated under Section 112 of the CAA because they may present a threat of adverse human health effects or adverse environmental effects. Such pollutants include asbestos, beryllium, mercury, benzene, coke oven emissions, radionuclides, and vinyl chloride.

9-3.14 Large Boiler. Boilers with a heat input capacity equal to or greater than 10 million British thermal units per hour (Btu per hr).

9-3.15 Lowest Achievable Emission Rate. Rate of emissions that reflects the most stringent emission limitation contained in the implementation plan of any state for such class or category of source, or the most stringent emission limitation achieved in practice by such class or category of source, whichever is more stringent. The application of Lowest Achievable Emission Rate shall not permit a proposed new or modified source to emit any pollutant in excess of the amount allowable under applicable NSPS.

9-3.16 Maintenance Area. An area which has attained the NAAQS for a particular pollutant and has been redesignated to attainment. These areas must submit and implement a maintenance plan in accordance with Section 175(A) of the CAA, to ensure continued attainment.

9-3.17 Major Source. Any stationary source or group of stationary sources located within a contiguous area and under common control which emits, or has the potential to emit, air pollutants in excess of specified threshold levels. The threshold amounts vary according to the attainment classification of the area in which the source is located, the pollutant(s) emitted, and the applicable section of the CAA. The term does not include motor vehicles or nonroad vehicles subject to regulation under Title II of the CAA. Unless otherwise specified, the major source threshold is 100 tons per year (tpy).

9-3.18 Mandatory Reporting Rule. The Mandatory Reporting of Greenhouse Gases Rule (74 F.R. 56260) requires reporting of greenhouse gas (GHG) data and other relevant information from large sources and suppliers (emitting 25,000 metric tons or more of GHGs annually) in the United States. The purpose of the rule is to collect accurate and timely GHG data to inform future policy decisions. In general, the Rule is referred to as 40 CFR Part 98 (Part 98). Implementation of Part 98 is referred to as the Greenhouse Gas Reporting Program.

9-3.19 Marine Engine. An engine that is installed or intended to be installed on a marine vessel. This definition does not include portable auxiliary engines for which the fueling, cooling and exhaust systems are not integral parts of the vessel.

9-3.20 Maximum Achievable Control Technology (MACT). Emissions control technology that achieves the maximum emission reduction as determined using criteria consistent with Section 112(d)(3) of the CAA. MACT is applicable only to those pollutants listed as HAPs under Section 112 of the CAA.

9-3.21 National Ambient Air Quality Standards. Air quality standards established by EPA for six criteria pollutants in order to provide an adequate margin of safety in protecting the general health and welfare of the public.

9-3.22 National Emissions Standards for Hazardous Air Pollutants. Standards established for categories of stationary sources that emit one or more of the HAPs listed under CAA section 112.

9-3.23 New Source Performance Standards (NSPS). National emission standards that limit the amount of pollution allowed from new or modified sources. These standards are specific for each type of source such as boilers or petroleum storage tanks.

9-3.24 New Source Review (NSR). Federal permit program for reviewing new sources and modifications to existing sources prior to construction. The program is referred to as NSR for major stationary sources in nonattainment areas, prevention of significant deterioration (PSD) for major stationary sources in attainment areas, and minor NSR for non-major projects in all areas. As with most Clean Air Act programs, NSR programs are typically implemented by the States.

9-3.25 Nonattainment Area. An area that does not meet (or that contributes to ambient air quality in a nearby area that does not meet) the NAAQS for one or more of the criteria pollutants.

9-3.26 Nonroad Engine. Any internal combustion engine: (i) in or on a piece of equipment that is self-propelled or serves a dual purpose by both propelling itself and performing another function (such as garden tractors, off-highway mobile cranes and bulldozers); or (ii) in or on a piece of equipment that is intended to be propelled while performing its function (such as lawnmowers and string trimmers); or (iii) that, by itself or in or on a piece of equipment, is portable or transportable, meaning designed to be and capable of being carried or moved from one location to another. Indicators of

transportability include, but are not limited to, wheels, skids, carrying handles, dolly, trailer, or platform. Nonroad engines do not include engines in highway vehicles, marine vessels or stationary engines.

9-3.27 Nonroad Vehicle. A vehicle powered by a nonroad engine and that is not a motor vehicle or a vehicle used solely for competition.

9-3.28 Offsets. Emission reductions obtained from one source in order to compensate for increased emissions from another.

9-3.29 Oxygenated Gasoline. Gasoline which is blended with additives in order to increase the oxygen content.

9-3.30 Ozone (O_3). The atmosphere has two distinct layers of ozone; ground level and stratospheric. The major constituent of "smog," ozone is formed when volatile organic compounds (VOCs) and NO_x react in sunlight. For air quality purposes, interest rests in the formation and transport of ground level ozone. At ground level, ozone has been shown to adversely affect the respiratory system and has proven to be the most frequent criteria pollutant causing regions to be declared in nonattainment of the NAAQS. At altitudes above 7 miles, stratospheric ozone plays a vital role in blocking out dangerous ultraviolet radiation. Recent evidence of a decline in stratospheric ozone levels has resulted in a world-wide call for the banning of ozone-depleting substances (see Chapter 10 of this Manual).

9-3.31 Ozone-Depleting Substances (ODSs). Any chemical listed as a Class I or Class II substance in Section 602 of the CAA (see Chapter 10 of this Manual).

9-3.32 Particulate Matter. A criteria air pollutant that includes dust, soot, and other heterogeneous small, solid materials released into and transported by the air. PM-10 is that portion of the total suspended particulate matter with an aerodynamic diameter of 10 microns or less. PM2.5 is that portion of the particulate matter with an aerodynamic diameter of 2.5 microns or less.

9-3.33 Prevention of Significant Deterioration Program (PSD). Federal permit program for reviewing new major stationary sources and modifications to existing major stationary sources located in attainment areas prior to construction. As with most Clean Air Act programs, the PSD program is typically implemented by the States.

Note: There are many triggers for PSD applicability, not all of which are fully discussed in this chapter; the CFR & EPA permitting guidance should be reviewed for full PSD applicability.

9-3.34 Reasonably Available Control Technology (RACT). Emission control technology that achieves the lowest possible emissions level and is reasonably available and both technologically and economically feasible. RACT is usually applied to existing stationary sources in nonattainment areas and often involves the installation of new control equipment on older sources. RACT can be considered the equivalent to BACT, but for existing sources.

9-3.35 Reformulated Gasoline. Gasoline which has undergone special distillation processes in order to meet performance requirements for NO_x emissions, oxygen content, benzene, heavy metals, VOCs, and toxic air pollutants.

9-3.36 State Implementation Plan. An EPA approved plan developed by each state to implement, maintain, and enforce the NAAQS and other CAA goals within that state. While States have the primary responsibility for implementing the CAA, EPA maintains strong oversight in this process.

9-3.37 Stationary Source. Any fixed-site source of an air pollutant. This excludes those emissions resulting directly from an internal combustion engine for transportation purposes or from a nonroad engine or nonroad vehicle. Uninstalled engines may be considered part of a stationary source when operated in a test cell/stand.

9-3.38 Synthetic Minor Source. A major source that accepts Federally enforceable limits on its potential to emit to below the major source threshold, thereby deferring it from Title V major source operating permit requirements. These limits generally are in the form of operational or production limits. Recordkeeping and reporting of emissions are typically required to demonstrate compliance. This is an example of minor NSR, and a synthetic minor source is also sometimes referred to as a "conditional major source."

9-3.39 Title V Operating Permit. A Federally enforceable document issued by the States (or in certain situations by EPA) to major sources and certain area sources of air pollution that defines emission standards, operational procedures, and all obligations of the source under the CAA.

9-3.40 Unclassifiable Area. An area that cannot be classified on the basis of available information as meeting or not meeting the NAAQS for a particular criteria pollutant.

9-3.41 Unleaded Gasoline. Gasoline which is produced without the use of any lead additive and which contains not more than 0.05 gram of lead per gallon and not more than 0.005 gram of phosphorus per gallon.

9-3.42 Volatile Organic Compounds (VOC). Any compound of carbon that participates in atmospheric photochemical reactions unless specifically excluded in 40 CFR § 51.100. Some of the carbon compounds excluded from the definition of VOC are: carbon monoxide, carbon dioxide, carbonic acid, metallic carbides or carbonates, ammonium carbonate, methane, ethane, methyl formate, methylene chloride, 1,1,1-trichloroethane, acetone, and perchloroethylene. Some ODSs and other refrigerant substitutes are also excluded. Refer to a current version of 40 CFR § 51.100 for a complete list of exclusions.

9-4 Requirements

9-4.1 Regulatory Scheme. EPA designates all areas in the country as unclassifiable, attainment, nonattainment, or maintenance with respect to the NAAQS for each criteria pollutant. Certain regulatory requirements are fundamental and apply to all areas, regardless of their attainment status, while other more specific and stringent requirements apply only to nonattainment and maintenance areas. For help in determining attainment designations, contact the state or local air pollution control office, or the appropriate EPA Regional Office.

9-4.2 General Requirements: Enforcement/Citizen Suit Provisions.

(a) **Waiver of Sovereign Immunity.** The broad waiver of Federal sovereign immunity in CAA Section 118(a) subjects Federal facilities to all Federal, interstate, state, and local air pollution requirements, to the same extent as any nongovernmental entity. States or local air districts generally enforce these CAA requirements; however, EPA also has enforcement authority for most CAA violations. Methods of enforcement include compliance orders, field citations, administrative assessment of civil penalties, civil judicial enforcement, and criminal enforcement. The CAA provides for civil penalties of up to $37,500 per

day for each violation. EPA periodically adjusts the penalty rate for inflation. Current maximum penalties can be found in 40 CFR § 19.4.

(b) **Punitive State Civil Penalties.** Although facilities are subject to CAA penalties assessed by EPA, the applicability of state and local air district punitive penalties for past violations of the CAA is not clear due to conflicting court opinions. In U.S. v. Tennessee Air Pollution Control Board, 185 F.3d 529 (6th Cir. 1999), the Sixth Circuit Court of Appeals found that CAA Section 118(a) waives Federal sovereign immunity for punitive civil fines and penalties assessed by a state government. In City of Jacksonville v. Department of the Navy, 348 F.3d 1307 (11th Cir. 2003), the Eleventh Circuit Court of Appeals found no waiver of Federal sovereign immunity. **Because of the conflict in court opinions, all penalty assessments for past violations of the CAA should be coordinated with the Office of General Counsel.**

(c) **Citizen Suits.** Civil actions may be brought against any person (including the United States) for present or past (if repeated) CAA violations of an emission standard, limitation, or order issued by EPA or a state. In addition, actions may be brought against any person who constructs without a required permit.

9-4.3 Provisions for Stationary Sources. In addition to compliance with the general requirements outlined above, the following additional standards apply to stationary sources only.

(a) **Title V Operating Permits.** Title V of the CAA created an operating permit program which the States must develop and implement per EPA regulations establishing minimum requirements for state programs. Although the States are responsible for implementing and enforcing the permit program, EPA retains significant authority to oversee state implementation. EPA must review and approve state permit programs, review proposed permits, veto improper permits and, if a state fails to adopt or implement an approved program, EPA will develop and implement a Federal permit program. EPA also issues Title V permits to sources in Indian country and in other situations, as needed. EPA-issued permits are called part 71 permits.

The Title V permit program attempts to clarify, in a single document, all the requirements applicable to a source, including requirements from the SIP, the acid rain program, and the air toxics program. The Title V permit program also includes a requirement for payment of permit fees to finance the state operating permit programs. After the effective date of any permit program approved under Title V, it is unlawful to violate any requirement of such a permit, or to operate a source subject to the permit program, except in compliance with a Title V permit.

The program applies to all stationary sources of air pollution that are subject to Federal regulation under the CAA, including those operated on Federal facilities. Assuming restrictions in order to be classified as a synthetic minor source for a particular criteria pollutant or HAP usually allows the source to avoid many of the requirements of a major source.

(i) **Responsible Official.** The Responsible Official assumes responsibility for the accuracy and completeness of permit applications and could be

subject to criminal sanctions if the application is deficient. The Responsible Official will also have to certify ongoing compliance with all permit provisions once the permit is issued. OUs shall be responsible for designating the Responsible Official for each Title V operating permit under their administration. It is generally better to designate the Responsible Official at the lowest level that still has the authority to submit permit applications as he/she will be closer to the operations being certified. The Department recommends that the Responsible Official for a given Title V operating permit be the facility manager or equivalent. In no case shall the responsibility for Title V permits be any lower than the Federal facility manager, operations director, or the manager responsible for facility operations.

(ii) **Permit Application.** Applications must be "timely" and "complete." An application is "timely" if it is submitted within 1 year of either the date of state program approval or of commencing operations for sources required to obtain preconstruction permits under major source NSR. States must establish specific criteria to define a "complete" permit application. An "application shield" is created, if a timely and complete application is filed, which protects the source from enforcement action due to not having a permit (assuming the source has a preexisting permit, either a construction permit or a previous permit that is being renewed) during the time the permit application is being processed. It is important to note that the more restrictive of the two permits applies during this time, i.e., if the preexisting permit allowed 800 tons of emissions and the new permit increases the emission allowance to 1,000 tons, the source must not emit more than 800 tons during the time the permit application is being processed. The reviewing agency has 60 days to inform the source of any deficiencies; if none are noted the application shield automatically goes into effect. A permit must be issued within eighteen months of receipt of a complete application.

(iii) **Certification.** A Responsible Official must certify permit applications as to their truth, accuracy and completeness after making reasonable inquiry. The certification must include the compliance status of the facility, and the method used to determine the compliance status.

(iv) **Reasonable Inquiry.** If the permit is properly written, reasonable inquiry constitutes a logical, systematic review of the Mandatory Reporting Rule data. Not all records must be reviewed, but a sufficient number must be reviewed given site-specific factors including the magnitude of emissions, degree of risk posed by the pollutant, how close the emissions are to the standard, reliability of the monitoring/record-keeping system, whether there is a history of past compliance or operational problems, and the experience of the employees in the "reasonable inquiry" data gathering process. There is no affirmative requirement to do more than the specified Mandatory Reporting Rule, but the Responsible Official also cannot ignore other "credible evidence" that a deviation has occurred. A written procedure should also be in place to ensure that:

- Each step of the review process is documented;
- The Responsible Official has a "back-up" staff member with the required knowledge of the process;
- A process is in place to identify omissions of any obligations;
- There is a process to ensure that corrective action information has been effectively communicated; and
- There is a signature chain.

(b) **Hazardous Air Pollutants.** EPA regulates the emission of 187 HAPs under Section 112 of the CAA. EPA designates sources emitting each regulated pollutant as a "major source" or "area source." All "major sources" and certain designated "area sources" are regulated.

(i) **Source Categories.** EPA maintains and periodically revises a list of the major and area sources, grouped into categories and subcategories, that emit significant quantities of HAP or that must be regulated to meet a specific provision of the CAA. EPA issues regulations establishing emission standards for the source categories and subcategories.

(ii) **Major Source Thresholds.** For HAPs, the thresholds are 10 tons per year (tpy) or more of any HAP, or 25 tpy or more of any combination of HAPs.

(iii) **Emission Standards.** EPA must initially establish technology-based emission standards that achieve the maximum degree of emissions reduction possible for new and existing sources in the appropriate category while giving consideration to cost, non-air quality health and environmental impacts, and energy requirements. Measures to achieve the desired emissions standards include: implementation of process changes; material substitutions; and measures to treat or control emissions, generally through the application of MACT. Eight years after each MACT standard is issued, EPA must assess the remaining or residual risk. If the risk is too high, EPA must issue additional emission standards.

- **Aerospace and Marine Coatings.** As required by the CAA, EPA issued NESHAPs and CTGs to control emissions from aerospace manufacturing and rework and shipbuilding and ship repair operations. Activities and facilities related to coating of aircraft and ships are found at some Department facilities. The rules establish MACT and BACT requirements for aircraft and ship activities such as cleaning, painting, de-painting, maskant application, and waste handling. Generally, facilities will achieve the necessary emission reductions through the use of compliant materials or control devices. Other requirements include

testing, recordkeeping, and reporting protocols. Implementation of these rules may incur substantial cost and labor impacts.

- **Other HAP Source Categories.** In addition to aerospace and marine coatings, 40 CFR Parts 61 and 63 contain standards that are applicable to major and/or area sources found at Department facilities. Some of the source categories that are regulated under the NESHAPs include chromium electroplating and anodizing, dry cleaning, boilers, and halogenated solvent cleaners. Other NESHAPs may also apply to Department operations. All have specific applicability thresholds as well as compliance requirements. Contact your permitting authority for guidance on identifying NESHAPS to which your facility may be subject.

- **Accidental Releases/Risk Management Plans.** Owners and operators of stationary sources that manufacture, process, use, handle or store EPA-regulated substances which exceed specified thresholds are required by CAA Section 112(r) to identify hazards from releases of such substances and to design and maintain a safe facility to prevent releases and minimize the consequences of any accidental releases. Facilities that exceed the threshold limits must submit Risk Management Plans (RMPs) to EPA.

  Facilities are responsible for updating their RMPs at least once every five years, or sooner if updates and resubmissions are required per 40 CFR § 68.190(b) or corrections are required per 40 CFR § 68.195. If a stationary source is no longer subject to this part, the owner or operator shall submit a de-registration per 40 CFR § 68.190(c) to EPA within six months indicating that the stationary source is no longer covered.

- **Solid Waste Combustion.** Section 129 of the CAA directs EPA to establish NSPS and Emission Guidelines for solid waste incineration units pursuant to Section 111 of the CAA for units combusting municipal solid waste, hospital, medical and infectious waste, commercial or industrial solid waste, and other unspecified categories of solid waste. Section 129 of the CAA also requires training and certification of operators of solid waste incineration unit and high-capacity fossil fuel fired plants.

- **Area sources.** For the purposes of HAPs area sources are those sources that emit less than 10 tons annually of a single hazardous air pollutant or less than 25 tons annually of a combination of hazardous air pollutants. Contact your permitting authority for guidance on whether your facility is subject to regulation as an area source under NESHAPS.

9-4.4 Additional Provisions for Attainment Areas. The CAA mandates the implementation of emission limits and other measures for prevention of significant deterioration of air quality in those areas designated as being in attainment of the NAAQS. Facilities located in attainment areas must obtain a permit before any new construction or modification of a major source begins. The PSD permit application must include BACT review and selection, a growth-related impact analysis, ambient air quality analysis, and other information relative to preserving air quality.

9-4.5 Additional Provisions for Nonattainment and Maintenance Areas. The CAA mandates that the SIP contain emission limitations and control measures for the modification and construction of major stationary sources to assure that the NAAQS are achieved within the appropriate schedules and timetables. Facilities located in nonattainment areas must obtain an NSR permit before any new construction or modification of a major source begins, and comply with applicable emission offset requirements. Permit application must include the review and selection of the appropriate RACT.

(a) **General Conformity Rule.** Section 176(c) of the CAA prohibits Federal agencies from engaging in, supporting, providing financial assistance for, licensing, permitting, or approving any activity that does not conform to an applicable SIP or FIP. EPA issued criteria and procedures for determining conformity, found in 40 CFR Part 93 subpart B. Federal agencies must make a determination that a Federal action conforms to the SIP or FIP before proceeding with the action. Conformity determinations will typically be done as part of NEPA analysis and documentation procedures for the planned action (See Chapter 21 and Appendix B of this Manual).

(b) **Ozone (O_3).** Section 182 of the CAA describes the state requirements for compliance with the ozone NAAQS. The requirements below are based on a primary 8-hour ozone NAAQS of 0.085 parts per million (ppm) and secondary standard of 0.075 ppm set in 2008. The primary standard is intended to protect the health of "sensitive" populations such as people with asthma, children, and older adults.

(i) **Nonattainment Areas.** States with areas classified as nonattainment areas for O_3 must institute the following provisions in the area:

- The application of NSR requirements to major NO_x sources;
- The completion of an emissions inventory from all sources, to be updated every 3 years; and
- The implementation of an offset program that requires each new or modified major source of VOCs or NO_x be offset in a ratio of at least 1 to 1.

(ii) **Marginal Ozone Nonattainment Areas (0.121 to 0.138 ppm).** States with areas classified as marginal nonattainment for O_3 pursuant to section 181 of the CAA must institute the following provisions in the area:

- The application of NSR requirements to major NO_x sources;
- The completion of an emissions inventory from all sources, to be

updated every 3 years;

- The application of RACT requirements that were in effect prior to enactment of the CAA;

- A construction and operating permit program for new and modified sources (with respect to ozone) in the area;

- An emissions statement from the owner or operator of each stationary source emitting VOCs and NO_x showing the actual emissions of oxides of nitrogen and volatile organic compounds from that source; and

- The implementation of an offset program that requires each new or modified major source of VOCs or NO_x be offset in a ratio of 1.1 to 1. In marginal nonattainment areas, a major source is defined as one which has the potential to emit 100 tpy or more of VOCs or NO_x.

(iii) **Moderate Ozone Nonattainment Areas (0.138 to 0.160 ppm).** In addition to meeting the requirements of marginal areas, States with areas classified pursuant to section 181 of the CAA as moderate ozone nonattainment areas must also:

- Apply RACT to all major stationary VOC and NO_x sources;

- Require Stage II vapor recovery systems for all facilities that distribute more than 10,000 gallons of gasoline per month. Requirements for installation and operation of Stage II controls are effective for new facilities (built after enactment of the CAA) within 6 months after a rule requiring Stage II controls is adopted in the state where the facility is located; within 1 year after adoption for existing facilities with 100,000 gallons or greater capacity (average monthly sales for 2 years prior to rule adoption date); or within 2 years for all other facilities;

- Initiate a basic vehicle Inspection/Maintenance (I/M) program; and

- Implement an offset program that requires each new or modified major source of VOCs or NO_x be offset in a ratio of 1.15 to 1. In moderate nonattainment areas, a major source is defined as one which has the potential to emit 100 tpy or more of VOCs or NO_x.

(iv) **Serious Ozone Nonattainment Areas (0.160 to 0.180 ppm).** In addition to meeting the requirements of moderate nonattainment areas, States with areas classified pursuant to section 181 of the CAA as serious ozone nonattainment areas must also:

- Institute an enhanced vehicle I/M program to be enforced through denial of vehicle registration;

- Establish a clean-fuel fleet program in those areas having a 1980 census population of 250,000 or more; and

– Implement an offset program that requires each new or modified major source of VOCs or NO_x to be offset in a ratio of at least to 1.2 to 1. In serious nonattainment areas, a major source is defined as one which has the potential to emit, 50 tpy or more of VOCs or NO_x.

(v) **Severe Ozone Nonattainment Areas (0.180 to 0.280 ppm).** In addition to meeting the requirements of serious nonattainment areas, States with areas classified pursuant to section 181 of the CAA as severe ozone nonattainment areas must also:

– Identify and adopt enforceable transportation control measures to offset growth in vehicle miles traveled. States with severe ozone nonattainment areas may require employers to implement programs to reduce work-related vehicle trips and miles traveled by employees if the state implements one or more alternative methods that will achieve equivalent emission reductions. However, although States are not required to include trip reduction requirements for employers in their SIPs, some may choose to do so;

– Implement an offset program that requires each new or modified major source of VOCs or NO_x to be offset in a ratio of at least 1.3 to 1; and

– Submit a plan detailing enforcement provisions to EPA. In severe nonattainment areas, a major source is defined as one which emits, or has the potential to emit, 25 tpy or more of VOCs or NO_x.

(vi) **Extreme Ozone Nonattainment Areas (0.280 ppm and above).** In addition to meeting the requirements of severe nonattainment areas, States with areas classified pursuant to section 181 of the CAA as extreme ozone nonattainment areas must also:

– Implement an offset program that requires each new or modified major source of VOCs or NO_x to be offset in a ratio of at least 1.5 to 1. An increase in emissions at a major source is not considered to be a modification subject to the 1.5 to 1 offset requirement if the owner/operator of the source elects to offset the increased emissions by a reduction in emissions from other operations, units, or activities within the source at an internal offset ratio of at least 1.3 to 1. In extreme nonattainment areas, a major source is defined as one which emits, or has the potential to emit, 10 tpy or more of VOCs or NO_x; and

– Develop a plan requiring existing, new, or modified electric utility and industrial and commercial boilers emitting more than 25 tpy NO_x to burn natural gas, methanol, ethanol or other clean fuel as their primary fuel or use advanced technology to control NO_x emissions. In extreme nonattainment areas, a major source is defined as one which emits, or has the potential to emit, 10 tpy or more of VOCs or NO_x.

(c) **Carbon Monoxide (CO).** Section 186a of the CAA describes the state requirements for compliance with the CO NAAQS. Currently, areas are not permitted to exceed more than once per year an average of 9 ppm of CO over an eight-hour period or 35 ppm over a one-hour period. As of September 27, 2010, all carbon monoxide nonattainment areas have been reclassified as maintenance areas.

(d) **PM.** Section 189 of the CAA describes the state requirements for compliance with the PM NAAQS.

(i) **PM-10.** The primary daily standard for PM-10 is 150 micrograms of particles per cubic meter of air. Areas designated as nonattainment for PM-10 are initially classified as moderate nonattainment areas pursuant to section 188 of the CAA; any area that fails to attain compliance with the NAAQS by the specified attainment date is reclassified as serious nonattainment areas. Alternatively, if EPA makes a determination that moderate nonattainment areas are unable to practicably achieve the NAAQS by the specified attainment date, they will be reclassified as serious nonattainment areas.

- **Moderate PM-10 Nonattainment Areas.** States with areas designated as moderate nonattainment must achieve attainment as quickly as possible but no later than 6 years after being classified as nonattainment. Extensions of attainment dates are possible if implementation requirements have been met and performance standards have been achieved. Provisions to achieve attainment include:
  - A construction and operating permit program for new and modified stationary PM-10 sources;
  - The use of reasonably available control measures (RACM), including RACT, within 4 years of an area being classified as moderate PM-10 nonattainment.
- **Serious PM-10 Nonattainment Areas.** In serious nonattainment areas, a major source of PM-10 is defined as one which emits, or has the potential to emit, 70 tons per year of PM-10. All of the requirements that apply to moderate PM-10 nonattainment areas also apply to serious nonattainment areas. In addition to the provisions required for moderate areas, the state shall submit to EPA the following provisions to achieve attainment:
  - Provisions to assure that BACM will be implemented no later than 4 years after the date the area is classified (or reclassified) as a serious area.

(ii) **PM2.5.** The primary daily fine particle standard is 35 micrograms of particles per cubic meter of air, and the primary annual standard is 15 micrograms of particles per cubic meter of air. The secondary PM2.5

standards are the same as the primary standards. State implementation plans for meeting these standards are due in April 2013, and states must meet the standards by April 2015.

9-4.6 Greenhouse Gases.

(a) In accordance with 40 CFR Part 98, facilities that emit 25,000 metric tons or more per year of greenhouse gases are required to annually report their greenhouse gas emissions to EPA. For more information on EPA's greenhouse gas reporting program visit http://www.epa.gov/climatechange/emissions/ghgrulemaking.html.

(b) Reportable and regulated greenhouse gases are carbon dioxide (CO_2), methane (CH_4), nitrous oxide (N_2O), hydrofluorocarbons (HFCs), perfluorocarbons (PFCs), and sulfur hexafluoride (SF_6). Thresholds are based on carbon dioxide equivalents (CO_{2e}).

(c) As of January 2, 2011, the largest greenhouse gas emitters, including the largest fossil-fuel based power plants, oil refineries, and cement manufacturers, are regulated under Title V operating permits, and new large sources or major modifications to existing sources must undergo new source review under the Prevention of Significant Deterioration (PSD) permit program for GHGs if they are already subject to PSD permitting for another pollutant.

(d) From July 1, 2011 to June 30, 2013, new sources and major existing sources will be subject to PSD and operating permits, respectively, for emissions of over 100,000 tpy CO_{2e} regardless of other CAA requirements. Major modifications will trigger a PSD permit if they are predicted to emit 75,000 tpy or more of CO_{2e}.

Note: The CFR and EPA permitting guidance should be reviewed for full details of PSD applicability.

(e) As of the date of publication of this chapter, EPA planned to issue additional rulemakings by 2012 to regulate smaller quantity greenhouse gas emitters under both PSD and operating permits.

9-4.7 Provisions for Mobile Sources.

(a) **Procurement of Vehicles, Equipment, and Vessels.** Departmental facilities in charge of procuring commercial vehicles, equipment, and vessels shall ensure that these will comply with applicable Federal and state standards and regulations in effect at the location where the equipment will be placed into service.

(b) **Tampering with Emission Controls.** Departmental personnel shall not remove or render inoperative any device, or element of design, which is installed in a government motor vehicle or engine to comply with air quality regulations.

(c) **Fuel Standards.** Departmental facilities shall comply with regulatory requirements for composition of fuels used in all motor vehicles, equipment, and vessels.

(d) **Vehicle Inspection and Maintenance.** Vehicle emissions testing is required in certain nonattainment areas. Federal facilities in these areas must demonstrate compliance with state I/M programs for all motor vehicles operated on the site even if the vehicle is not registered in that state, so long as the state's program is not discriminatory toward Federal agencies or Federally-owned or Federal employee-owned vehicles. This requirement applies to all employee, contractor and Federally owned/leased vehicles operated more than 60 days per year on the site. Check your state's SIP or relevant FIP to determine whether your facility is located in a nonattainment area that requires vehicle emissions testing.

Departmental facilities shall comply with state and local area vehicle emission I/M program requirements for fleet vehicles and all other vehicles operated at a facility, so long as the state's program is not discriminatory toward Federal agencies or Federally-owned or Federal employee-owned vehicles. Facilities shall furnish proof of compliance to the appropriate regulatory authority when required. Facilities are authorized to develop I/M procedures for their fleet vehicles as a part of normal preventive maintenance programs.

(e) **Introduction of AFVs.** Per the requirements of section 303 of EPAct, 75% of new domestic Federal vehicle acquisitions shall be AFVs.

(f) **Fuels**

(i) **Leaded Gasoline.** The CAA prohibits the use of gasoline containing lead or lead additives in motor vehicles.

(ii) **Gasoline.** Depending on local conditions, a number of oxygen content, formulation, and sulfur content regulatory requirements exist for gasoline. Additionally, there may be gasoline vapor recovery requirements (Stage I and Stage II) to prevent venting of gasoline vapors during transportation, storage, transfer, and dispensing. Facilities shall not supply, offer for supply, dispense, transport, or introduce into commerce gasoline represented to be unleaded gasoline unless such gasoline meets the local requirements for unleaded gasoline. Each gasoline pump from which unleaded gasoline is dispensed into motor vehicles shall be equipped with a nozzle required under 40 CFR § 80.22.

(iii) **Diesel Fuel Sulfur Content.** EPA has established a minimum cetane index of 40 and minimum diesel fuel sulfur content of 15 ppm for highway vehicles and nonroad equipment. Marine vessels will be required to transition to ultra low sulfur diesel by 2012.

(g) **Clean Fuel Fleet/Vehicles.** The CAA's clean-fuel vehicle requirements, apply to owners/operators of a "covered fleet" (a Department-owned or operated centrally fueled fleet of 10 or more vehicles) located in a "covered area." A covered area is one designated as serious, severe or extreme for O_3 or serious for CO with a 1980 Census population of 250,000 or more. The CAA requires that at least 70 percent of new light-duty fleet vehicles acquired by a covered fleet operator be clean fuel vehicles. When the fleet vehicles exceed 8,500 gross weight rating, that percentage of new light-duty fleet vehicles acquired shall be at least 50 percent of all new fleet vehicles acquired above this weight.

The CAA mandates that any Federal facility that dispenses clean alternative fuels (as defined in the CAA) to Federal fleet vehicles must offer the fuel for sale to the public during reasonable business hours, subject to the commercial availability of such fuels in the vicinity of the facility.

9-4.8 Stationary Sources.

(a) **Title V Permits.** Departmental facilities shall comply in all respects with either Federal or state Title V operating permit requirements, whichever is required for their geographic location.

(b) **Fuel Standards.** Departmental facilities shall comply with applicable Federal, state, and local regulatory fuel composition requirements applicable to solid, liquid, and gaseous fuels for stationary fuel-burning equipment.

9-4.9 Miscellaneous Provisions.

(a) **FIPs.** Section 110(c) of the CAA requires EPA to issue a FIP where a state has failed to make a required SIP submission, where the SIP submission does not satisfy the minimum criteria, or where a SIP submission has been disapproved in whole or in part and the state has not corrected the deficiency in a timely manner. Typically EPA disapproves a SIP because it does not contain sufficiently strict requirements to demonstrate attainment. A FIP will generally contain requirements that apply to more types of sources and control emissions in a more stringent manner than did the SIP.

(b) **Emission Reduction Credits (ERCs).** Sections 110(a)(2)(A) and 172(c)(6) of the CAA authorize States, or their local air quality districts (AQDs), to establish, by regulation, a trading system for ERCs. ERCs are created when equipment that emits pollutants is removed from service or emissions from equipment remaining in service are reduced, provided that the emission reductions would not otherwise be required by the CAA or a current SIP, and the owner applies under the AQD regulations for credit for the reduction. Each ERC constitutes permission from the AQD to emit a stated amount of a specific air pollutant. Following validation by the AQD, ERCs may be transferred by sale, lease or other disposal method, for use by other emission sources within the same air quality district.

(c) **Federal Contractor Restrictions.** No Federal agency may enter into a contract with any person convicted of a criminal offense under the CAA. This restriction applies to the procurement of goods, materials, and services to perform such contract at any facility which gave rise to such conviction if such facility is owned, leased, or supervised by such person.

9-4.10 Air Pollution Emergency Episodes. Where required, Departmental facilities shall have an air pollution emergency episode contingency plan identifying all actions that can reasonably be taken without compromising essential services and mission responsibilities.

9-4.11 General Conformity. Determinations of conformity with the applicable SIP or FIP are required for any new action that has the potential to affect air quality. Any OU considering such an action should contact the Department's Office of Sustainable Energy and Environmental Programs for guidance on determining conformity in conjunction with the National Environmental Policy Act review process. Consult Appendix E for detailed guidance on general conformity determinations.

9-4.12 Penalty Assessments. Departmental facilities shall report all notices of violation and penalty assessments to their OUs and **consult with the Office of General Counsel as appropriate before paying any penalties.**

9-4.13 ERCs. ERCs shall be acquired and disposed of under references (a), (c) as if they were personal property. ERCs will be utilized and disposed of in the following manner:

(a) ERCs generated from a change in operations, removal from service of equipment, or any other action that results in emissions reductions may be banked for:

(i) Future use by that same facility;

(ii) Transfer to another Departmental facility within the same AQD or another AQD that will accept transfer of the credits; or

(iii) Transfer to any other Federal agency within the same AQD or another AQD that will accept transfer of the credits.

(b) ERCs determined to be surplus to the Federal government shall be reported for screening and disposal using the existing General Services Administration personal property disposal mechanisms.

(c) Facilities requiring ERCs shall either:

(i) Purchase ERCs from other sources; or

(ii) Obtain offsets from on-site sources.

No ERCs may be disposed of or traded to non-Department facilities unless such action has been coordinated with the Office of Administrative Services.

9-4.14 Airborne Radionuclide Emissions. 40 CFR Part 61 subpart I regulates airborne radio nuclide emissions into the environment through NESHAPs. OUs are responsible for compliance with airborne radio nuclide emissions regulations.

9-5 Responsibilities

9-5.1 Office of the Secretary. OSEEP shall issue policy and guidance as needed.

9-5.2 OUs shall:

(a) Ensure that their activities comply with current Federal, state, interstate, and local air pollution control requirements;

(b) Ensure CAA general conformity rule requirements are satisfied for all Department actions;

(c) Designate a Responsible Official for each Title V operating permit they manage;

(d) Develop specific host/tenant agreements to ensure tenants will comply with all CAA requirements;

(e) Report all notices of violation and penalty assessments in accordance with Chapter 4 (Environmental Compliance) and **consult with the Office of General Counsel before paying any penalties.**

(f) Ensure facilities maintain current records of physical, operational, and emission characteristics of air sources, including the potential to emit and actual emissions of sources as required by applicable Federal, state and local regulations;

(g) Ensure the development of air episode plans as required;

(h) Ensure that facilities cooperate with the EPA, and state and local air pollution control authorities in the execution of air episode plans while in episode areas;

(i) Ensure that facilities develop transportation control measures as required by their SIP;

(j) Ensure that facilities implement and maintain proper adjustments in stationary heating and power plant operations, including those owned/operated by public work centers (PWCs), to reduce total emissions. Substantial fuel savings can also result from proper combustion operations and combustion air monitoring;

(k) Ensure that all personnel who prepare or supervise the preparation of air emissions inventories, air emissions permit requests, and air emissions reports receive adequate training as detailed in section 9-6 below;

(l) Include requests for resources to meet air pollution control requirements in budget submissions;

(m) Provide technical assistance to facilities, as requested, to:

- Determine permit and variance requirements, obtain data, and complete applications; and
- Determine and implement requirements for mobile source controls.

(n) Maintain OU-wide information on location and physical characteristics of OU stationary sources, including key features of variances and delay compliance orders;

(o) Identify compliance requirements for new construction by coordination of all new projects or modifications with appropriate state/local and/or EPA regional offices and the affected facility;

(p) Identify appropriate emission offsets, where required for new construction, and prepare and coordinate projects to implement offset requirements;

(q) Provide OU-wide coordination and technical support for compliance with the CAA Title II requirements applicable to the OU's vehicle fleets; and

(r) Assist OU vehicle fleets in I/M testing.

9-6 Training

9-6.1 OUs are responsible for providing staff training to meet CAA requirements. The CAA requires every person who prepares or supervises the preparation of air emissions inventories, air emissions permit requests, and air emissions reports to receive explicit training in many areas, including:

(a) **Chemical Process Safety Management.** The CAA requires the issuance of a chemical process safety standard to protect employees from the dangers associated with accidental releases of highly hazardous chemicals in the workplace. The safety standard requires employers to: train employees in operating procedures; emphasize hazards and safe practices; ensure contractors and contract employees are provided with appropriate information and training; and train and educate employees and contractors in emergency response in a manner as comprehensive and effective as that required by the Superfund Amendments and Reauthorization Act (SARA). The standard can be found in 29 CFR § 1910.119.

(b) **Solid Waste Incineration.** Section 129(d) of the CAA requires the training and certification of operators of solid waste incineration units and high-capacity fossil fuel fired plants. It is unlawful to operate any such unit unless each person with control over processes affecting emissions from the unit has satisfactorily completed a training program which meets EPA requirements.

9-7 Reporting Requirements

9-7.1 Reporting to the Office of the Secretary.

- None

9-7.2 Reporting to Federal, State, and Local Agencies.

Most CAA programs are administered by the States, and reporting requirements therefore vary by state. Facilities should check with their state for specific reporting requirements. In general:

(a) **New Sources.** As per 9-4.4 above, facilities located in attainment areas must obtain a permit before any new construction or modification of a major source begins. The PSD permit application must include BACT review and selection; a growth-related impact analysis; ambient air quality analysis; and other information relative to preserving air quality.

As per 9-4.5 above, facilities located in nonattainment and maintenance areas must obtain a permit before any new construction or modification of a major source begins and must comply with applicable emission offset requirements. Permit application must include the review and selection of the appropriate RACT.

(b) **Existing Sources.** Each existing major source and certain area sources of air pollution should have a Title V operating permit issued by the state or the Environmental Protection Agency. Responsible Officials must certify ongoing compliance with all permit provisions at existing sources as per 9-4.3 above.

As per 9-4.3(b) above, owners and operators of stationary sources that manufacture, process, use, handle or store EPA-regulated substances which exceed specified thresholds are required by CAA Section 112(r) to submit RMPs to EPA and update these plans at least once every five years.

CHAPTER 10:
MANAGEMENT OF OZONE-DEPLETING SUBSTANCES

10-1 Scope

10-1.1 This chapter sets forth Department of Commerce policy concerning the management of ODSs. The provisions of this Chapter apply to all Department OUs with facilities that use, handle, or store ozone-depleting substances except as follows:

(a) **Small Appliances.** Policies for conversion and/or replacement of existing equipment do not apply to small appliances, defined as appliances that do not normally require routine maintenance of the sealed refrigerant system and contain a refrigerant charge of five pounds or less. Examples include refrigerators and freezers designed for home use, dehumidifiers, room air conditioners (including window air conditioners), ice makers, vending machines and water coolers.

(b) **Laboratory and Analytical Uses.** This policy does not apply to essential uses of ODSs in very small quantities for laboratory and analytical purposes. Laboratory and analytical uses include: equipment calibration; use as extraction solvents, diluents, or carriers for chemical analysis; biochemical research; inert solvents for chemical reactions, as a carrier or laboratory chemical and other critical analytical and laboratory purposes.

10-1.2 **Related Chapters.** Chapter 7, Pollution Prevention; Chapter 9, Air Quality; Chapter 26, Greenhouse Gas Emissions; and Chapter 31, Green Acquisition.

10-1.3 **References.**

(a) 40 CFR Part 82, EPA Regulations on the Protection of Stratospheric Ozone;

(b) The Council on Environmental Quality's "Instructions for Implementing Executive Order 13423 Strengthening Federal Environmental, Energy, and Transportation Management," dated March 29, 2007;

(c) E.O. 13514, Federal Leadership in Environmental, Energy, and Transportation Management, dated October 5, 2009*;*

(d) E.O. 13423, Strengthening Federal Environmental, Energy, and Transportation Management, dated January 24, 2007*;* and

(e) Part 1323.70 of the Commerce Acquisition Manual.

10-2 Legislation

10-2.1 Clean Air Act, as amended**.** In November of 1990, the United States Congress passed national legislation for stratospheric ozone protection in order to implement the Montreal Protocol. This became Title VI of the 1990 Clean Air Act Amendments.

10-2.2 Montreal Protocol on Substances that Deplete the Ozone Layer. The presence of chlorofluorocarbons (CFCs), halons, other chlorinated hydrocarbons (carbon tetrachloride, methyl chloroform), hydrochlorofluorocarbons (HCFCs), etc., in the stratosphere is linked to the depletion of the earth's ozone layer that protects life and vegetation from damaging ultraviolet light. These materials are collectively referred to as ODSs. In response to the threat ODSs present to the environment, more than 185 nations, including the United States, have ratified an international agreement, known as the Montreal Protocol, limiting ODS production. In 1990, due to increasing evidence of continued harm to the ozone layer, the Protocol was amended to provide for the eventual elimination of most ODSs. In November 1992, in a meeting in Copenhagen, parties to the Montreal Protocol agreed to accelerate the production phase-out schedules of CFCs to 31 December 1995 and halons to 31 December 1993.

10-3 Terms and Definitions

10-3.1 Global Warming Potential. A measure of how much a given mass of a gas is estimated to contribute to global warming. It is a relative scale which compares the gas in question to that of the same mass of carbon dioxide (whose global warming potential is by convention equal to 1) over a given time interval.

10-3.2 Ozone-Depleting Potential. The ozone-depleting potential of a chemical compound is the relative amount of degradation to the ozone layer it can cause on a mass per kilogram basis, with trichlorofluoromethane (R-11 or CFC-11) being fixed at an ozone depletion potential of 1.0.

10-3.3 Ozone-Depleting Substance. Any chemical listed as a Class I or Class II substance as defined by the CAA and 40 CFR Part 82. A listing of Class I and II ODSs can be found at www.epa.gov/ozone/science/ods/index.html.

10-3.4 Reclaiming. The process of returning a used or contaminated ODS to near original specifications, by means which may include distillation. A reclaimer must perform chemical analysis of the ODS to determine that the appropriate product specifications are met.

10-3.5 Recovery. The removal and containment (or capture) of any ODS in any condition from a system without testing or processing.

10-3.6 Recycling. The reduction of contaminants in a used ODS by oil separation and single or multiple passes through devices that reduce moisture, acidity, and particulate matter.

10-4 Requirements

10-4.1 General.

(a) Production of CFCs, carbon tetrachloride, and methyl chloroform was prohibited as of 31 December 1995; production of halons was prohibited as of 31 December 1993.

(b) Only technicians trained and certified per the requirements of reference (a) who use approved recovery and recycling equipment may repair or service motor vehicle air conditioners.

(c) Only technicians trained and certified per the requirements of reference (a) who use approved recovery and recycling equipment may repair, service, maintain or dispose of appliances and industrial process refrigeration and air conditioning.

(d) Only technicians trained regarding halon emissions reduction as specified by reference (a) may test, maintain, service, repair or dispose of halon-containing equipment.

(e) It is unlawful to knowingly release any Class I or Class II ODS refrigerant or halon into the atmosphere during the service, repair, or disposal of appliances, industrial process refrigeration and air conditioning equipment and halon-containing equipment.

(f) References (b), (c), and (d) require Federal agencies to reduce the quantity of toxic and hazardous chemicals and materials, including ozone-depleting substances, acquired, used, and disposed of.

(g) Activities must meet labeling requirements for ODSs.

(h) Owners or operators of appliances normally containing more than 50 pounds of refrigerant must monitor leakage rates and repair leaks as specified by reference (a).

(i) Owners/operators of air conditioning and refrigeration equipment, owners of recovery and recycling equipment, disposers, technician certification programs, equipment certification programs, wholesalers, and reclaimers must meet recordkeeping requirements as specified in reference (a).

(j) References (b), (c), and (d) require Federal agencies to replace ozone-depleting substances with procurement of non-ozone-depleting substances identified in the Significant New Alternatives Program (SNAP). Reference (e) provides details on the purchasing requirements of safe alternatives to ODSs within the Department.

10-4.2 Procurement of Non-Ozone Depleting Substances. Preference shall be provided to the purchase of non-ozone-depleting substances identified by the EPA's SNAP. The Department shall specify and procure alternative products that reduce overall risks to human health and the environment. Reference (e) provides details.

10-4.3 Ozone-Depleting Substances and Global Warming. In general, refrigerants with low ozone-depleting potential tend to have higher global warming potential. HFCs are a common replacement for CFCs and HCFCs because of their lower ozone-depleting potential. However HFCs and some HCFCs have a high global warming potential caused by both direct effects of the heat-trapping properties of the molecules and indirect effects of reduced cooling efficiency (i.e., more energy is required to maintain a low temperature, ultimately increasing greenhouse gas emissions). Natural refrigerants such as CO_2, H_2O, NH_3, and hydrocarbons have both low ozone-depleting potential and low direct global warming potential. Natural refrigerants should be considered preferred substitutes for ozone-depleting substances where practicable. Consult EPA's SNAP website for a list of approved alternatives to specific CFCs.

10-4.4 Conservation Practices. Facilities shall implement conservation practices to the extent practical for all ODS applications, including performing regular system leak checks, improving supply management, and recycling and reclaiming Class I and Class II ODSs.

10-4.5 Review of Department Practices. OUs and facilities shall review and modify all operational, training and testing practices to reduce and eliminate emissions of ODSs to the maximum extent possible.

10-5 Responsibilities

10-5.1 The Office of the Secretary. OSEEP shall:

(a) Develop guidance for and oversee the implementation of the Department's ODS program;

(b) Notify Departmental Offices and OUs of any amendments or changes to current legislation impacting ODSs; and

(c) Compile ODS release information from the OUs and submit it to the Department of Energy (DOE) as part of the annual Greenhouse Gas Inventory.

10-5.2 Departmental Offices and OUs shall:

(a) Ensure compliance with CAA, the Montreal Protocol, EPA implementing regulations, and the policies prescribed in this Chapter;

(b) Complete and retain a record of any reportable releases for not less than five years;

(c) Develop, maintain and implement a plan to phase out, eliminate, reduce and/or replace all ODS. Use ODSs only after full consideration of various alternatives, analyses of environmental effects, safety concerns, long-term implications, and costs. Train and certify technicians as needed per reference (a); and

(d) Report to the Office of the Secretary as per 10-6 below.

10-6 Reporting Requirements.

OUs shall report ODS releases to the Office of the Secretary via the annual Greenhouse Gas and Sustainability data call. Refer to Chapter 26, Greenhouse Gas Emissions for further details.

CHAPTER 11:
CLEAN WATER

11-1 Scope

11-1.1 This chapter identifies requirements and responsibilities for the control and prevention of surface and ground water pollution at Departmental facilities within the United States, Commonwealth of Puerto Rico, the Northern Mariana Islands, Guam, American Samoa, and the Trust Territory of the Pacific Islands.

11-1.2 **Related Chapters.** Chapter 13, Stormwater Management.

11-1.3 **References.**

(a) 16 U.S.C. §1451 et seq., Coastal Zone Management Act (CZMA) of 1972;

(b) 33 U.S.C. § 1251 et seq., Federal Water Pollution Control Act (known as the Clean Water Act);

(c) E.O. 12088, Federal Compliance with Pollution Control Standards, Dated October 13, 1978;

(d) 40 CFR Part 130, Water Quality Planning and Management (Total Maximum Daily Loads (TMDLs));

(e) 40 CFR Part 122-123 (33 U.S.C. §402), National Pollutants Discharge Elimination System (NPDES) Program, including Stormwater Discharge regulations;

(f) 40 CFR Part 403 & 405-471 (33 U.S.C. §301-303, and §307-309), General Pretreatment Standards and Effluent Limits for Point Source Categories;

(g) 40 CFR Part 230-231 (33 U.S.C. §403-404), Dredged or Fill Permits;

(h) 42 U.S.C. § 6901 et seq., Resource Conservation and Recovery Act;

(i) 42 U.S.C. § 6939e, Federal Facilities Compliance Act of 1992; and

(j) 40 CFR Part 503, Standards For The Use Or Disposal Of Sewage Sludge.

11-2 Legislation

11-2.1 Coastal Zone Management Act, 16 U.S.C. § 1451 et seq. Jointly administered by NOAA and the EPA, the Coastal Zone Management Act (CZMA) (reference (a)) encourages states/tribes to preserve, protect, develop, and where possible, restore or enhance valuable natural coastal resources such as wetlands, floodplains, estuaries, beaches, dunes, barrier islands, and coral reefs, as well as the fish and wildlife using those habitats. It includes areas bordering the Atlantic, Pacific, and Arctic Oceans, Gulf of Mexico, Long Island Sound, and Great Lakes. A unique feature of this law is that participation by states/tribes is voluntary. To encourage states/tribes to participate, the act makes Federal financial assistance available to any coastal state, tribe, or territory, including those on the Great Lakes, that is willing to develop and implement a comprehensive coastal management program. Most eligible states/tribes are, or will be, participating in the program. In its reauthorization of CZMA in 1990, Congress identified nonpoint source pollution as a major factor in the continuing degradation of coastal waters. Congress also recognized that effective solutions to nonpoint source pollution could be implemented at the state/tribe and local levels. Therefore, in the Coastal Zone Act Reauthorization Amendments of 1990 (CZARA), Congress added Section 6217,which calls upon states/tribes with Federally approved coastal zone management programs to develop and implement coastal nonpoint pollution control programs. Refer to Chapter 23 for information on requirements related to Coastal Zone Management.

11-2.2 Federal Water Pollution Control Act, also known as the Clean Water Act (CWA), 33 U.S.C. § 1251 et seq. The purpose of the CWA (reference (b)) is to restore and maintain the chemical, physical, and biological integrity of the Nation's waters. To accomplish these goals, each state is required to establish Water Quality Standards (WQS) for its surface waters based on designated uses. Under CWA Section 303(d), each state is to submit to EPA a list of surface waters that are not meeting their WQS. For these “impaired” water bodies, each state shall develop Total Maximum Daily Loads (TMDL), which are the amount of pollutants that can be assimilated by a body of water without exceeding the WQS. Based on the developed TMDLs, the States or EPA limit discharge of pollutants to a level sufficient to ensure compliance with state water quality standards. Direct discharges of pollutants, also known as point source pollution, to the waters of the United States are regulated by National Pollutant Discharge Elimination System (NPDES) permits issued by EPA or under state NPDES programs approved by EPA. This includes discharges of storm water from municipal separate storm sewer systems, industrial areas, and construction sites greater than or equal to one acre. Non-point sources of pollution are to be managed through state or local controls. Indirect industrial discharges of effluent to publicly owned treatment works (POTWs) are subject to pre-treatment standards promulgated by the EPA, state or local regulatory agencies. The CWA prohibits spills, leaks or other discharges of pollutants into waters of the United States in quantities that may be harmful, which includes discharges of pollutants that:

- Violate applicable water quality standards; or
- Cause a film or sheen upon or discoloration of the surface of the water or adjoining shorelines or cause sludge or emulsion to be deposited beneath the surface of the water or upon adjoining shorelines.

The Oil Pollution Act of 1990 amended the CWA to expand oil spill prevention activities, improve preparedness and response capabilities, and ensure that companies are responsible for damages from spills. The CWA also requires a permit for the discharge of dredged or fill materials into waters of the United States. Refer to Chapters 14, 16, and 17 for information on oil and hazardous substances spill

preparedness and response, storage tanks, and hazardous waste handling requirements. The Estuaries and Clean Waters Act of 2000 include Beaches Environmental Assessment and Coastal Health Act; Wet Weather Quality Act; and Estuaries Restoration Act of 2000.

11-2.3 Marine Protection, Research and Sanctuaries Act (MPRSA) (Ocean Dumping Act), 33 U.S.C. § 1401 et seq**.** MPRSA requires the protection of contiguous zone waters from sewage sludge discharges and direct dumping, and through an ocean dumping permit program, provides procedures for the intentional disposal and/or abandonment of material into ocean waters.

11-2.4 Rivers and Harbors Act of 1899, 33 U.S.C. § 401 et seq**.** The act regulates the disposal of refuse and debris into the rivers and harbors of the U.S. and makes it illegal to create any obstruction to navigable waters without the approval of the U.S. Army Corps of Engineers (USACE). EPA, USACE, and States regulate dredge and fill operations and dredge/fill material disposal. Under the Rivers and Harbors Act and section 4040 of the CWA, EPA establishes criteria and guidelines to protect the nation's waters from contamination by dredged or fill material. The USACE and some States administer permit programs for dredge and fill operations in waterways and wetlands, and for construction activities in navigable waters.

11-2.5 Safe Drinking Water Act (SDWA), 42 U.S.C. § 300f et seq**.** The SDWA requires EPA to set national primary drinking water standards and provides for the direct control of underground injection of fluids that could potentially affect groundwater supplies. States usually assume the predominant role in executing groundwater protection programs. EPA has direct responsibility only if a state chooses not to participate in the underground injection control program. As amended in 1996, SDWA Section 1447(a) provides that Federal agencies "1) owning or operating any facility in a wellhead protection area; 2) engaged in any activity at such facility resulting, or which may result, in the contamination of water supplies in any such area; 3) owning or operating any public water system; or 4) engaged in any activity resulting, or which may result in, underground injection which endangers drinking water" shall be subject to and comply with all substantive and procedural Federal, state, interstate, and local requirements to the same extent as any person. On-site wastewater treatments systems commonly referred to as septic systems are considered Class V underground injection wells and are regulated under SDWA.

11-2.6 Section 108 of the Federal Facilities Compliance Act (FFCA) of 1992, 42 U.S.C. § 6939e**.** Section 108 of the FFCA amended Subtitle C of the Solid Waste Disposal Act (42 U.S.C. § 6901 et seq.) to establish when solid or dissolved material introduced by a source into a Federally Owned Treatment Works (FOTW) is not considered a solid waste. An FOTW is not required to satisfy the requirements of Section 108 if it decides to manage its influent as a solid waste. However, an FOTW that has decided to take advantage of a domestic sewage exclusion similar to that enjoyed by Publicly Owned Treatment Works (POTWs) must meet the statutory requirements of Section 108.

11-3 Terms and Definitions

11-3.1 Department-Owned Treatment Works (DOTW). A treatment works owned by a Department facility. This definition includes any devices and systems used in the storage, treatment, recycling and reclamation of sewage or industrial wastes of a liquid nature. It also includes sewers, pipes and other conveyances only if they convey wastewater to the DOTW. DOTWs that discharge treated effluent directly to waters of the U.S. are "treatment works."

11-3.2 Designated Responsible Official. The Designated Responsible Official (DRO) is the senior individual who assumes responsibility for the accuracy and completeness of permit

applications, permits and statutorily required environmental compliance. A DRO could be subject to criminal sanctions under some environmental laws and regulations. The DRO will also at times have to certify ongoing compliance with all permit provisions once the permit is issued. The DRO is typically a facility or program manager with direct responsibility for a facility or program that is subject to environmental requirements.

11-3.3 Discharge. Includes, but is not limited to, any spilling, leaking, pumping, pouring, emitting, emptying or dumping of any pollutant, but excludes certain cases under CWA Section 402.

11-3.4 Discharge of a Pollutant.

(a) Any addition of any "pollutant" or combination of pollutants to "waters of the United States" from any "point source," or

(b) Any addition of any pollutant or combination of pollutants to the waters of the "contiguous zone" or the ocean from any point source other than a vessel or other floating craft, which is being used as a means of transportation.

This definition includes additions of pollutants into waters of the United States from: surface runoff which is collected or channeled by man; discharges through pipes, sewers, or other conveyances owned by a state, municipality, or other person, which do not lead to a treatment works; and discharges through pipes, sewers, or other conveyances leading into privately owned treatment works. This term does not include an addition of pollutants by any "indirect discharger."

11-3.5 Direct Discharge. A discharge of a pollutant directly into the waters of the United States.

11-3.6 Discharge of Dredged Material. Any addition of dredged material into, including redeposit of dredged material other than incidental fallback within, the waters of the United States. The term includes, but is not limited to, the following:

- The addition of dredged material to a specified discharge site located in waters of the United States;
- The runoff or overflow, associated with a dredging operation, from a contained land or water disposal area; and
- Any addition, including redeposit other than incidental fallback, of dredged material, into waters of the United States which is incidental to any activity, including mechanized land clearing, ditching, channelization, or other excavation.

11-3.7 Domestic Discharge. Any wastewater discharge produced by ordinary living uses, including liquid waste containing animal or vegetable matter in suspension or solution, or the water-carried waste from the discharge of water closets, laundry tubs, washing machines, sinks, dishwashers, or other source of water carried wastes of human origin.

11-3.8 Dredge and Fill Operations. Dredge and fill operations encompass construction or other work involving excavation or discharge of dredged or fill material in waters of the U.S.

11-3.9 Federally Owned Treatment Works. A domestic sewage treatment works owned and operated by the Federal government. This definition includes any devices and systems used in the storage, treatment, recycling and reclamation of sewage or industrial wastes of a liquid nature. It also includes sewers, pipes and other conveyances only if they convey wastewater to the FOTW. FOTWs that discharge treated effluent directly to waters of the U.S. are "treatment works." FOTWs that discharge pretreated effluent to another treatment works for final treatment and ultimate discharge to waters of the U.S. are "pretreatment works" (FOPTWs).

11-3.10 Indirect Discharge. A nondomestic discharge introducing pollutants to a publicly owned treatment works or a Federally owned treatment works.

11-3.11 Industrial Wastewater Treatment Plant. A facility that treats exclusively nondomestic wastewater. Treatment may be chemical, or physical. An oily waste treatment facility is a type of Industrial Waste Treatment Plant.

11-3.12 Injection Well. An injection well is any excavation that is cored, bored, drilled, jetted, dug or otherwise constructed, the depth of which is greater than its largest surface dimension used to inject fluids into the subsurface. An injection well may also be any dug hole with a depth that is greater than the largest surface dimension. Also included are improved sinkholes or subsurface fluid distribution systems. A septic system leach field may also be a class V injection well under the SWDA.

11-3.13 Land Application. Use and/or disposal of treated wastewater, sewage sludge, industrial sludge, or septage by application upon or incorporated into the soil with no resulting discharge to surface waters.

11-3.14 National Pollutant Discharge Elimination System (NPDES). A national program for issuing, modifying, revoking and reissuing, terminating, monitoring and enforcing permits and imposing and enforcing pretreatment requirements. NPDES programs are either EPA or state programs. State programs must be approved and authorized by EPA.

11-3.15 Navigable Waters. As defined in 40 CFR § 110.1, "*Navigable Waters*" means the waters of the United States, including the territorial seas. The term includes:

(a) All waters that are currently used, were used in the past, or may be susceptible to use in interstate or foreign commerce, including all waters that are subject to the ebb and flow of the tide.

(b) Interstate waters, including interstate wetlands.

(c) All other waters such as intrastate lakes, rivers, streams (including intermittent streams), mudflats, sandflats, and wetlands, the use, degradation, or destruction of which would affect or could affect interstate or foreign commerce including any such waters:

(i) That are or could be used by interstate or foreign travelers for recreational or other purposes;

(ii) From which fish or shellfish are or could be taken and sold in interstate or foreign commerce; or

(iii) That are used or could be used for industrial purposes by industries in

interstate commerce.

(d) All impoundments of waters otherwise defined as navigable waters under this section.

(e) Tributaries of waters identified in paragraphs a-d of this section, including adjacent wetlands.

(f) Wetlands adjacent to waters identified in paragraphs a-e of this section: Provided, That waste treatment systems (other than cooling ponds meeting the criteria of this paragraph) are not waters of the United States.

11-3.16 Non-point Source Pollution. Non-point source water pollution is water pollution originating from diffuse, non-discrete sources. Non-point source water pollution generally results from land runoff, percolation, atmospheric deposition, hydrologic modification, or precipitation.

11-3.17 Point Source. Any discernible, confined, and discrete conveyance, including but not limited to, any pipe, ditch, channel, tunnel, conduit, well, discrete fissure, container, rolling stock, concentrated animal feeding operation, landfill leachate collection system, vessel, or other floating craft from which pollutants are or may be discharged. This term does not include return flows from irrigated agriculture or agricultural stormwater runoff.

11-3.18 Pollutant. Includes dredged spoil, solid waste, incinerator residue, filter backwash, sewage, garbage, sewage sludge, munitions, chemical wastes, biological material, radioactive materials (other than those regulated as source, by-product, or special nuclear material under the Atomic Energy Act of 1954, as amended), heat, wrecked or discarded equipment, rock, sand, cellar dirt, and industrial, municipal, and agricultural waste discharged into water.

11-3.19 Pretreatment. The reduction of the amount of pollutants, the elimination of pollutants, or the alteration of the nature of pollutant properties in wastewater prior to or in lieu of discharging or otherwise introducing such pollutants into a publicly owned treatment works.

11-3.20 Privately Owned Treatment Works (PROTW). Any device or system used in the treatment (including recycling and reclamation) of municipal sewage or industrial wastes of a liquid nature, which is owned by a private entity or corporation. This definition includes sewers, pipes, and other conveyances only if they convey wastewater to a PROTW providing treatment.

11-3.21 Publicly Owned Treatment Works (POTW). Any device or system used in the treatment (including recycling and reclamation) of municipal sewage or industrial wastes of a liquid nature, which is owned by a state or a municipality. This definition includes sewers, pipes, and other conveyances only if they convey wastewater to a POTW providing treatment.

11-3.22 Territorial Seas.

(a) With respect to the U.S., “territorial seas” means the waters within the belt, 3 nautical miles wide, which are adjacent to its coast and seaward of the territorial sea baseline.

(b) With respect to any foreign country, “territorial seas” means the waters within the belt that are adjacent to its coast and whose breadth and baseline are recognized by the United States.

11-3.23 Territorial Sea Baseline. The delimitation of the shoreward extent of the territorial seas of the United States drawn according to the Convention on the Territorial Sea and the Contiguous Zone, 15 U.S.T. 1606, as recognized by the United States.

11-3.24 Total Maximum Daily Load (TMDL). Amount of a specific pollutant that a water body can receive, assimilate, and still meet water quality standards. TMDLs consists of the sum of Waste Load Allocations from point sources; Load Allocations from non-point sources; and a Margin of Safety.

11-3.25 Toxic Pollutant. Any pollutant listed as toxic under Section 307(a)(1) of the CWA or, in the case of "sludge use or disposal practices," any pollutant identified in regulations implementing Section 405(d) of the CWA.

11-3.26 Treatment Works (TW). Any domestic or industrial wastewater treatment devices or systems, regardless of ownership (including Federal facilities, such as FOTWs), used in the storage, treatment, recycling, and reclamation of domestic and industrial wastewater (including land dedicated for the disposal of associated sludge).

11-3.27 Treatment Works Treating Domestic Sewage. A POTW or any other sewage sludge or wastewater treatment device or system, regardless of ownership (including Federal facilities), used in the storage, treatment, recycling, and reclamation of municipal or domestic sewage, including land dedicated for the disposal of sewage sludge. This definition does not include septic tanks or similar devices. For purposes of this definition, "domestic sewage" includes waste and wastewater from humans or household operations that are discharged to or otherwise enter a treatment works. In States where there is no approved state sludge management program under Section 405(f) of the CWA, an EPA Regional Administrator may designate any person subject to the standards for sewage sludge use and disposal as a "treatment works treating domestic sewage," where he or she finds that there is a potential for adverse effects on public health and environment from poor sludge quality or poor sludge handling, use or disposal practices, or where he or she finds that such designation is necessary to ensure that such person is in compliance.

11-3.28 Waters of the United States. See also Navigable Waters. Waste treatment systems, including treatment ponds or lagoons designed to meet the requirements of CWA (other than cooling ponds as defined in 40 CFR 423.11(m) which also meet the criteria of this definition) are not waters of the United States.

Waters of the United States do not include prior converted cropland. Notwithstanding the determination of an area's status as prior converted cropland by any other Federal agency, for the purposes of the CWA, the final authority regarding CWA jurisdiction remains with EPA.

11-3.29 Water Quality Standards (WQS). The water quality goals of a water body (or a portion of the water body) designating the use or uses to be made of the water and establishing criteria necessary to protect those uses, including anti-degradation policies. Standards can be either state regulations or laws, or Federal regulations applied to a specific state.

11-3.30 Watershed. A watershed is a drainage area or basin in which all precipitation and other waters drain or flow to a marsh, stream, river, lake or groundwater.

11-3.31 Wetlands. area that is saturated by surface or ground water at a frequency and duration sufficient to support, and that under normal circumstances do support, vegetation adapted for life

under those soil conditions, such as swamps, bogs, fens, marshes, and estuaries.

11-4 Requirements

11-4.1 General.

(a) **Designated Responsible Official.** The general duty of the DRO is to ensure day-to-day compliance with all environmental laws, regulations, and requirements imposed on their facility and their facility staff's activities. Each OU shall establish a policy regarding DROs. The policy shall define who are considered DROs and what their duties are. There are several environmental laws and regulations that assign specific responsibilities to responsible officials (e.g. Clean Air Act), therefore care should be taken and coordination should be done with the Department in establishing DROs. OUs shall be responsible for designating the Responsible Official for each facility and permit under their administration. It is generally better to appoint the DRO at the lowest level that still has the authority to submit permit applications and sign reports required by regulatory permits, as he/she will be closer to the operations being certified. The Department recommends that the DRO for a given facility or permit be the facility manager or equivalent. In no case shall the responsibility for permits be any lower than the Federal facility manager, operations director, or the manager responsible for facility operations. If an OU can assure itself that its facilities are not owned and they cannot be classified as the operator of a facility then the paragraph does not apply. Some indications that an OU could be classified as an operator of a facility:

- Does the facility have EPA ID number in the OU's name?
- Does the facility ship hazardous waste under their EPA ID number?
- Does the facility hold registration certificates for USTs in the OU's name?
- Does the facility contract for fuel deliveries under its OU name?
- Does the facility operate and/or accept fuel deliveries under their OU name and address?
- Does the facility hold Clean Water Act, Clean Air Act, or Safe Drinking Water Act operating permits?
- Does the facility report under EPCRA under their OU name and address?

(b) As required by E.O. 12088 (reference (c)) and the CWA (reference (b)), Department facilities shall comply with all substantive and procedural requirements applicable to point and non-point sources of pollution. These requirements include Federal, state, interstate, and local laws and regulations respecting the control and abatement of water pollution such as load reduction requirements resulting from the development of TMDLs for impaired water bodies (reference). Facilities must comply in the same manner and to the same extent as any nongovernmental entity, including the payment of reasonable

service charges (but not payment of civil penalties or fines).

(c) The discharge of any pollutant that does not comply with effluent standards or other procedural requirements is unlawful. The discharge of low level radioactive waste is prohibited.

(d) **Watershed Management.** Facilities should apply a watershed approach when evaluating the impact of their overall activities on the quality of area water resources and address water impacts by reducing pollutant discharges. A watershed approach is an integrated holistic management strategy that addresses the condition of land areas within the entire watershed. It ensures that non-point sources as well as point sources of pollution are addressed. Facility managers should consult other media experts (e.g. natural resources, RCRA/CERCLA, and air) to fully implement the watershed approach.

Facilities that discharge pollutants to or near impaired waters should get involved as early as possible in the state or local process that leads to the identification of impaired waters and the development of TMDLs. Even those facilities with only a potential to discharge pollutants to an impaired water body should participate as stakeholders in the process. Participation should occur early in the TMDL process, including, when practicable, before the state or other authority approves or creates a schedule for establishing the applicable TMDL.

(e) **Pretreatment Program.** Departmental FOTWs shall develop, implement, and maintain pretreatment programs for all known industrial dischargers to the FOTW that could affect treatment processes or impact compliance with permit limits. Facilities shall periodically develop a list of all industrial waste discharges on the facility. This is to be accomplished no less than once every 5 years as part of an industrial wastewater management plan.

(f) **Spills.** Spills of sewage or other substances that might be considered pollutants which endanger critical water areas, have the potential to generate public concern, become the focus of enforcement action, or pose a threat to public health or welfare shall be reported to both the OU and Department Environmental Managers. Spills of oil and hazardous substances shall be reported in accordance with the requirements in Chapter 14.

(g) **Fines and Penalties.** There is no waiver of sovereign immunity for fines and penalties in the CWA. This includes EPA-imposed penalties, state-imposed penalties, local penalties, or any penalties sought by citizens in a citizen's suit. Because the Department cannot pay penalties, it also cannot undertake Supplemental Environmental Projects in lieu of environmental penalties.

Refer to Chapter 4, Environmental Compliance, for more detailed Department policy on what actions should be taken upon receipt of any notice of deficiency of Federal, state, interstate, or local environmental control laws or regulations.

11-4.2 Surface Water Discharges.

(a) **Direct Discharges.** Permits are required for all point source discharges to waters of the U.S. (reference). For all discharge points in States that have an EPA-approved NPDES program for Federal facilities, permits must be requested from the applicable state environmental agency. For all discharge points in States or territories that do not have authority to issue NPDES permits for Federal facilities, permits may need to be requested from both the EPA and the state. All monitoring records must be retained as required by Federal, state and local regulations. Reference (f) sets standards and effluent limits for point source categories.

(i) **Wastewater Discharges.** Domestic and industrial wastewater treatment plant discharges as well as other process wastewater and cooling water discharges from facilities directly to waters of the U.S. must comply with all terms or conditions of EPA, state, or locally issued permits.

(ii) **Stormwater Discharges.** Stormwater is considered direct discharge. See Chapter 13 for detailed stormwater requirements.

(b) **Indirect Discharges.** Indirect discharges to FOTWs, POTWs and PROTWS must meet all applicable Federal effluent guidelines and any state, county, and local permit requirements.

Industrial wastewater discharges from Department facilities may be subject to Federal categorical treatment or pretreatment standards, or other applicable standards as established by state, county and local regulations.

(c) **Non-point Source Control.** Non-point source discharges must conform to best practicable management procedures defined by Federal, state or local requirements (reference (g)).

11-4.3 Sub-Surface Discharges. Discharges to groundwater must meet applicable requirements of the SDWA, state, and local implementing requirements, and applicable permit conditions. Additional information on SDWA's Underground Injection and Wellhead Protection Program can be found in Section 12-4.3(c) and (d) of Chapter 12, Safe Drinking Water Act Compliance.

(a) **Underground Injection Control.** All owners or operators of Class I and V wells and all applicants for UIC permits shall comply with applicable provisions of 40 CFR Parts 144, 146, 147 and 148. Septic systems may be considered Class V underground injection wells. New large capacity cesspools were banned nationwide as of April 5, 2000. Large capacity cesspools may no longer be constructed. (New large-capacity cesspools are those for which construction was started on or after April 5, 2000 (40 CFR § 144.88(a)(2)). Existing large-capacity cesspools should have been closed by April 5, 2005 (40 CFR § 144.88(a)(1)(i)).

(b) **Land Application.** This includes the use and disposal of treated wastewater, sewage sludge, industrial sludge, or septage. These systems may include spray fields, tile fields, rapid infiltration basins, percolation ponds, and evaporation basins. A permit may be required from the state for land application.

11-4.4 Hazardous Pollutant Discharges. Hazardous waste may be introduced into a

treatment facility only if the facility is specifically permitted to treat the type of waste introduced under a RCRA TSD permit, or a "permit by rule." The FFCA (reference (h)) provides FOTWs with the same domestic sewage exclusion provided to POTWs, provided no hazardous waste is introduced to the FOTW.

11-4.5 Sludge Disposal. The sewage sludge use and disposal regulation sets national standards for management and disposal of sewage sludge. The rule is designed to protect human health and the environment when sewage sludge is beneficially applied to the land, placed in a surface disposal site, or incinerated. Generally FOTW sewage sludge disposal requirements are incorporated into NPDES permits. If, however, they are not, is self-implementing in most cases. This means that the rule will generally be fully enforceable, even in the absence of a permit. In addition, all facilities shall comply with applicable Federal, state and local sewage sludge disposal requirements. Departmental facilities shall take all reasonable measures to beneficially dispose of sludge. Beneficial disposal includes a number of land application methods and composting.

11-4.6 Waste Disposal Sites. Surface water runoff and leachate from waste disposal sites will conform to applicable requirements specified for disposal of solid waste (Chapter 19) or hazardous waste (Chapter 17).

11-4.7 Dredge and Fill Operations.

(a) **Permits.** Applications must be made to USACE for:

(i) A permit to construct a structure in, or to otherwise alter or modify, navigable waters or wetlands;

(ii) Dredge operations, including maintenance dredging; and

(iii) Dredge disposal unless the disposal is permitted under a nationwide permit.

In addition, applicants are required to obtain state certification that such actions comply with applicable state effluent limitations, water quality implementation plans, toxic effluent limitations, fish and wildlife protection plans, etc. State certifications may be done either as a part of the USACE permit process or independently if no USACE permit is required because of a nationwide permit. Projects covered by a nationwide permit require USACE notification even though no permit application is required. Field sampling may be required to select proposed dredge disposal sites. Other surveys, including site monitoring, may be required at disposal sites before, during, and after disposal (See reference).

(b) **Permit Exemptions.** Projects for which National Environmental Policy Act Environmental Impact Statements (EISs) have been written and submitted to Congress and that have specific congressional authorization do not require USACE or state permits. Projects covered by a nationwide general permit require USACE notification, but do not require individual permits. However, on a case-by-case basis, some additional individual requirements may be applied by USACE or States.

(c) **Discharges of Dredged or Fill Material.** Discharges of dredged or fill material into waters under USACE jurisdiction shall comply with Federal regulations.

Disposal by ocean dumping requires a USACE permit and compliance with EPA requirements.

(d) **Discharges to waters under the jurisdiction of States** shall comply with applicable permits and discharge regulations, including state fee schedules.

(e) Disposal site selection may entail field sampling and analyses. Elutriate and/or bioassay testing may be required to determine if the proposed dredged materials should be classed as polluted or unpolluted. Other surveys, including site monitoring, may be required at disposal sites before, during, and after disposal.

11-4.8 In-water Construction. The USACE and some States require a permit for any in-water construction. Facilities proposing in-water construction shall obtain applicable permits prior to award of construction contracts, and comply with all permit conditions.

11-5 Responsibilities

11-5.1 OUs shall:

(a) Prepare permit applications for construction and initial operation of projects and pay related fees from the funds appropriated and budgeted for the projects;

(b) Provide permit applications for submittal to the applicable regulatory agency;

(c) Assist facilities, as requested, in identifying applicable effluent standards and appropriate control technologies and best management practices, and in developing industrial wastewater management plans;

(d) Ensure that facilities comply with the applicable substantive and procedural Federal, state, local and regional clean water laws and regulations;

(e) Ensure that facilities prepare or review and sign, or designate in writing the appropriate person to sign, all applications for permits to construct wastewater treatment plants, for in-water construction, or for all new dredging, maintenance dredging, and dredge disposal operations; and obtain, renew, and pay for all new and recurring permits;

(f) Ensure that every person involved in operations which could result in pollution of surface or ground water receives specific comprehensive training in water pollution prevention required by the CWA and implementing regulations and is familiar with the provisions of this chapter;

(g) Plan, program, budget and provide funding for current and future requirements under the CWA and revisions to the applicable regulations; and

(h) Coordinate the review of all projects for the construction of new treatment works with the appropriate Federal, state, and local regulatory agencies.

11-6 Training

(a) Every person involved in operations at facilities which could result in pollution of surface or ground water shall receive specific comprehensive training in water pollution prevention required by the CWA and implementing regulations; and will be familiar with the provisions of this chapter.

(b) Wastewater treatment plant operators shall have received training and certification required by the applicable state and local water quality regulations.

11-7 Reporting Requirements

11-7.1 Reporting to the Office of the Secretary.

– None.

11-7.2 Reporting to Federal, State, and Local Agencies. OUs shall ensure that facilities report to Federal, state, and local agencies in accordance with their Clean Water Act permit requirements

CHAPTER 12:
SAFE DRINKING WATER ACT COMPLIANCE

12-1 Scope

12-1.1 This chapter identifies requirements, establishes policy, and assigns responsibilities for the production, use, protection and conservation of drinking water at Department of Commerce facilities in the United States, commonwealth of Puerto Rico, Virgin Islands, Commonwealth of the Northern Marianas Islands, Guam, American Samoa, and the Trust Territory of the Pacific Islands. The requirements of this chapter apply to any facility that operates a public drinking water system that is not a consecutive public water systems. Guidance is also provided on the purchase of bottled water and the withdrawal of groundwater.

12-1.2 Related Chapters. Chapter 4, Environmental Compliance; Chapter 7, Pollution Prevention; Chapter 11, Clean Water; Chapter 13, Stormwater Management; Chapter 14, Oil and Hazardous Substances Spill Preparedness and Response; Chapter 16, Storage Tanks; Chapter 17, Hazardous Waste Management; Chapter 20, Pesticide Compliance; and Chapter 30, Water Conservation.

12-1.3 References.

(a) 42 U.S.C. § 300f et seq., Safe Drinking Water Act (SDWA);

(b) 40 CFR Part 141, National Primary Drinking Water Regulations;

(c) 40 CFR Parts 144-147, Underground Injection Control Program;

(d) EPA: Preparing Your Drinking Water Consumer Confidence Report, Guidance for Water Suppliers, EPA/816-R-09-011, dated April 2010;

(e) EPA: Lead in Drinking Water in Schools and Non-Residential Buildings, EPA/812-B-94-002, dated April 1994;

(f) EPA: Cross Connection Control Manual, EPA 816-R-03-002, dated February 2003;

(g) EPA/State Joint Guidance on Sanitary Surveys, dated December 1995;

(h) States, S. (Ed.). (2010). Security and Emergency Planning for Water and Wastewater Utilities. Denver, CO: American Water Works Association;

(i) Stearns, C. (Ed.). (2004). Manual M14: Recommended Practice for Backflow Prevention. Denver, CO: American Water Works Association; and

(j) U.S. Comptroller General Decision B-247871: Purchase of Bottled Drinking Water, dated April 10, 1992.

12-2 Legislation

Safe Drinking Water Act (SDWA), 42 U.S.C. § 300f et seq**.** An amendment to the Public Health Service Act, the SDWA Federalized the regulation of drinking water systems.

Among other things, SDWA requires the EPA to set national standards for levels of contaminants in drinking water that may have an adverse effect on human health. The 1996 Amendments strengthened consumer right-to-know provisions and the multiple barrier approach to protecting water quality.

The SDWA provides for state implementation. Upon application to EPA, if a state has drinking water standards "no less stringent" than the Federal standards, "adequate" enforcement procedures, and variance and exemption conditions "not less stringent" than the Federal conditions, then the Federal Government grants the state primary enforcement authority. Today most of the States have such authority. Under the 1996 SDWA Amendments sovereign immunity has been waived and Federal facilities are subject to applicable state and local laws and regulations

In 2002, the Public Health Security and Bioterrorism Preparedness and Response Act amended the SDWA to require each community water system serving more than 3,300 people to prepare a Water System Vulnerability Assessment (WSVA) and Emergency Response Plan (ERP).

12-3 Terms and Definitions

12-3.1 Action Level (AL). The concentration of lead or copper in water that is used to determine compliance with the Lead and Copper Rule (40 CFR Part 141, Subpart I). Under the Lead and Copper Rule, action levels have replaced lead and copper maximum contaminant levels.

12-3.2 Backflow Preventer. An approved device or assembly or piping arrangement (i.e., air gap) used to prevent backflow into a potable water system.

12-3.3 Community Water System (CWS). A public water system (PWS) that serves at least 15 service connections used by year-round residents, or regularly serves at least 25 year-round residents.

12-3.4 Consecutive Water System. A water system which obtains some or all of its water from another water system. Often a consecutive water system has no water production or source facility of its own. A consecutive water system may be further classified as any of the water system types shown in Figure 12-1. As an example, see the definition of a Consecutive Public Water System in section 12-3.5.

12-3.5 Consecutive Public Water System (Consecutive PWS). A water system which has no water production or source facility of its own and which obtains all of its water from another water system and also meets the definition of a public water system.

12-3.6 Consumer Confidence Report (CCR). This report provides water quality information concerning a CWS and is delivered to customers by July 1 of every year. The report must contain certain mandatory information.

12-3.7 Consumer. Any person served by a PWS. Human consumption includes drinking, bathing, showering, cooking, dishwashing, and maintaining oral hygiene.

12-3.8 Customer. A billing unit or service connection to which water is delivered.

12-3.9 Consumptive Use Permit. A permit that regulates the withdrawal of groundwater, surface water, or any mixture of the two.

12-3.10 Cross-Connection. Any actual or potential physical arrangement whereby a water supply system is connected, directly or indirectly, with any unapproved water supply or source of contamination, including sewers, drains, plumbing fixtures or other devices which contain or may contain contaminated water.

12-3.11 Designated Responsible Official. The Designated Responsible Official (DRO) is the senior individual who assumes responsibility for the accuracy and completeness of permit applications, permits and statutorily required environmental compliance. A DRO could be subject to criminal sanctions under some environmental laws and regulations. The DRO will also at times have to certify ongoing compliance with all permit provisions once the permit is issued. The DRO is typically a facility or program manager with direct responsibility for a facility or program that is subject to environmental requirements.

12-3.12 Disinfectant. Any oxidant including, but not limited to, chlorine, chlorine dioxide, chloramines, and ozone added to water in any part of the treatment or distribution process for the purpose of killing or inactivating pathogenic microorganisms.

12-3.13 Disinfection Byproducts. Disinfection byproducts are compounds formed from the reaction of a disinfectant with organic and inorganic compounds in the source water during the disinfection process.

12-3.14 Groundwater. The supply of fresh water found beneath the Earth's surface, usually in aquifers, which supply wells and springs

12-3.15 Injection Well. A well (a shaft whose depth is greater than the largest surface dimension) into which fluids are being injected. Fluids include any material or substance which flows or moves whether in a semisolid, liquid, sludge, gas, or any other form or state.

12-3.16 Lead Free. Solders and flux are considered lead free if they contain no more than 0.2 percent lead; pipes and fittings are considered lead free if the lead content is not more than 8.0 percent

12-3.17 Lead Service Line. A service line made of lead that connects the water main to the building inlet and any lead pigtail, gooseneck, or other fitting that is connected to such lead line.

12-3.18 Maximum Contaminant Level (MCL). The maximum permissible level of a contaminant in water that is delivered to any user of a PWS.

12-3.19 Maximum Contaminant Level Goal (MCLG). The maximum level of a contaminant in drinking water at which no known or anticipated adverse effect on the health of persons would occur and that allows an adequate margin of safety. Maximum contaminant level goals are non-enforceable health goals.

12-3.20 Non-Community Water System. A non-community water system is a PWS that is not a community water system. There are two kinds of non-community water systems: transient and non-transient.

12-3.21 Non-Transient, Non-Community Water System (NTNCWS). A PWS that is not a community water system and that regularly serves at least 25 of the same persons over 6 months per year.

12-3.22 Permitted PWS. A PWS that has been issued a permit or other formal authorization to operate (i.e., it has been issued a public water system identification number).

12-3.23 Point-Of-Entry Treatment Device. A treatment device applied to the drinking water entering a building for the purpose of reducing contaminants in the drinking water distributed throughout the building.

12-3.24 Point-Of-Use Treatment Device. A treatment device applied to a single tap for the purpose of reducing contaminants in drinking water at that one tap.

12-3.25 Potable Water Emergency Response Plan. The ERP shall include, but not be limited to, plans, procedures and identification of equipment that can be implemented and utilized in the event of a terrorist or other intentional attack on the PWS.

12-3.26 Public Water System. A system for the provision to the public of water for human consumption through pipes or other constructed conveyances, if such system has at least 15 service connections or regularly serves an average of at least 25 individuals at least 60 days out of the year. Such term includes:

- Any collection, treatment, storage and distribution facilities under control of the operator of such system and used primarily in connection with such system, and
- Any collection or pretreatment storage facilities not under such control, used primarily in connection with such system.

A PWS is either a community water system or a non-community water system. Figure 12-1 is provided to help facilities determine what type of system they operate.

12-3.27 Sanitary Survey. An on-site review of the water sources, facilities, equipment, operation and maintenance of a PWS for the purpose of evaluating the adequacy of such sources, facilities, equipment, operation and maintenance for producing and distributing safe drinking water.

12-3.28 Service Connection. The opening, including all fittings and appurtenances, at the water main through which water is supplied to the user.

12-3.29 Source Water Assessment Program (SWAP). SWAPs delineate source water protection areas, inventory significant contaminants in these areas, and determine the susceptibility of each public water supply to contamination. The SWAP evaluates all source waters whether the source is groundwater or surface water or both.

12-3.30 Source Water Protection Program. State efforts to manage identified sources of contamination in a manner that will protect drinking water supplies, based on the SWAP.

12-3.31 Source Water Vulnerability Assessment. A study used to determine the likelihood that potential contaminant sources in a watershed or drinking water protection area will degrade the PWS's source water quality.

12-3.32 Supplier of Water. Any person who owns or operates a PWS. Under the SDWA a person is defined as an individual; corporation; company; association; partnership; municipality; or state, Federal or tribal agency.

12-3.33 Surface Water. All water naturally open to the atmosphere (rivers, lakes, reservoirs, ponds, streams, impoundments, seas, estuaries, etc.).

12-3.34 Transient, Non-Community Water System (TNCWS). A non-community water system that does not regularly serve at least 25 of the same persons over 6 months per year.

12-3.35 Turbidity. The measurement of the amount of light scattered by colloidal, suspended matter in liquid. Elevated turbidity in drinking water may be indicative of water quality problems.

12-3.36 Underground Injection. Underground injection, or well injection, means the subsurface emplacement of fluids through a bored, drilled, or driven well or through a dug well where the depth of the dug well is greater than the largest surface dimension. Septic system leachate fields maybe considered underground injection.

12-3.37 Water System Vulnerability Assessment (WSVA). An assessment of the vulnerability of a system to a terrorist attack or other intentional acts intended to substantially disrupt the ability of a system to provide safe and reliable supply of drinking water. EPA requires a WSVA for systems serving over 3,300 persons.

12-3.38 Wellhead Protection Program. A program to protect groundwater supply wells and well fields that contribute drinking water to public water supply systems.

12-4 Requirements

12-4.1 Designated Responsible Official. The general duty of the DRO is to ensure day-to-day compliance with all environmental laws, regulations, and requirements imposed on their facility and their facility staff's activities. Each OU shall establish a policy regarding DROs. The policy shall define who are considered DROs and what their duties are. There are several environmental laws and regulations that assign specific responsibilities to responsible officials (e.g. Clean Air Act), therefore care should be taken and coordination should be done with the Department in establishing DROs. OUs shall be responsible for designating the Responsible Official for each facility and permit under their administration. It is generally better to appoint the DRO at the lowest level that still has the authority to submit permit applications and sign reports required by regulatory permits, as he/she will be closer to the operations being certified. The Department recommends that the DRO for a given facility or permit be the facility manager or equivalent. In no case shall the responsibility for permits be any lower than the Federal facility manager, operations director, or the manager responsible for facility operations. If an OU can assure itself that its facilities are not owned and they cannot be classified as the operator of a facility then the paragraph does not apply. Some indications that an OU could be classified as an operator of a facility:

- Does the facility have EPA ID number in the OU’s name?
- Does the facility ship hazardous waste under their EPA ID number?
- Does the facility hold registration certificates for USTs in the OU’s name?
- Does the facility contract for fuel deliveries under its OU name?
- Does the facility operate and/or accept fuel deliveries under their OU name and address?
- Does the facility hold Clean Water Act, Clean Air Act, or Safe Drinking Water Act operating permits?
- Does the facility report under EPCRA under their OU name and address?

12-4.2 General. Regulatory requirements for water systems vary depending on the type of water system under consideration. Departmental water systems must comply with all applicable Federal, state, and local regulations, and Executive Orders. Water systems are initially classified as public water systems (PWS) or non-public water systems (Non-PWS). Federal, state, and local regulations for determining compliance with the SDWA generally apply to PWSs but are not applicable to Non-PWSs. Regulatory requirements for each PWS depend on the classification of the system (i.e., primary or consecutive, CWS or non-community water system, TNCWS or NTNCWS and the type of source water used (i.e. groundwater, surface water or groundwater under the direct influence of surface water). To determine the type of water system you are operating, refer to Terms and Definitions in Section 12-3 and Figure 12-1.

In general, states are responsible for implementation of SDWA programs.

Facilities shall use laboratories certified by EPA or the cognizant state to perform all PWS SDWA compliance sample analyses. Facilities must collect water samples at points that represent the quality of water in the distribution system.

Consecutive Public Water Systems. Consecutive PWSs generally are not subject to the requirements of the SDWA if they satisfy all four of the following criteria specified in 40 CFR § 141.3:

(a) Are not carriers that convey passengers in interstate commerce.

(b) Consist only of distribution and storage facilities and do not have any collection and treatment facilities;

(c) Obtain all their water from but are not owned or operated by a PWS to which the regulations apply;

(d) Do not sell water to any persons.

There is no definition of "selling water" in the SDWA. However, an EPA Office of Groundwater and Drinking Water memo dated March 13, 1998 defines selling water as follows: "A distributor of water for human consumption 'sells' water within the meaning of the Act if it charges consumers for the water as a separate item or bills separately for the water it provides (House Report No. 93-1185). Conversely, if the entity includes charges for water in the rental fee, then it is not selling water within the context of the Act." The Department does not consider reimbursement for the following as selling water: (1) distribution system maintenance costs, and (2) water from one Federal entity to another, as this is merely an internal allocation of funds within the executive branch. The EPA definition set out above would apply to non-Federal consumers including banks, credit unions, private companies and restaurants to which the Department distributes water.

If a consecutive PWS does not satisfy all of the above four exemption criteria specified under 40 CFR. § 141.3, it may still be exempted from some regulatory requirements based on the fact that it obtains all of its water from another regulated PWS. This exemption criteria is addressed in 40 CFR. § 141.29. In general, the consecutive PWS would, at a minimum be required by the state to comply with requirements, including monitoring, pertaining to those contaminants which could be contributed by the consecutive PWS's distribution system downstream of the point of connection to the regulated PWS.

Figure 12-1: Water System Classification Flowchart[1,2]

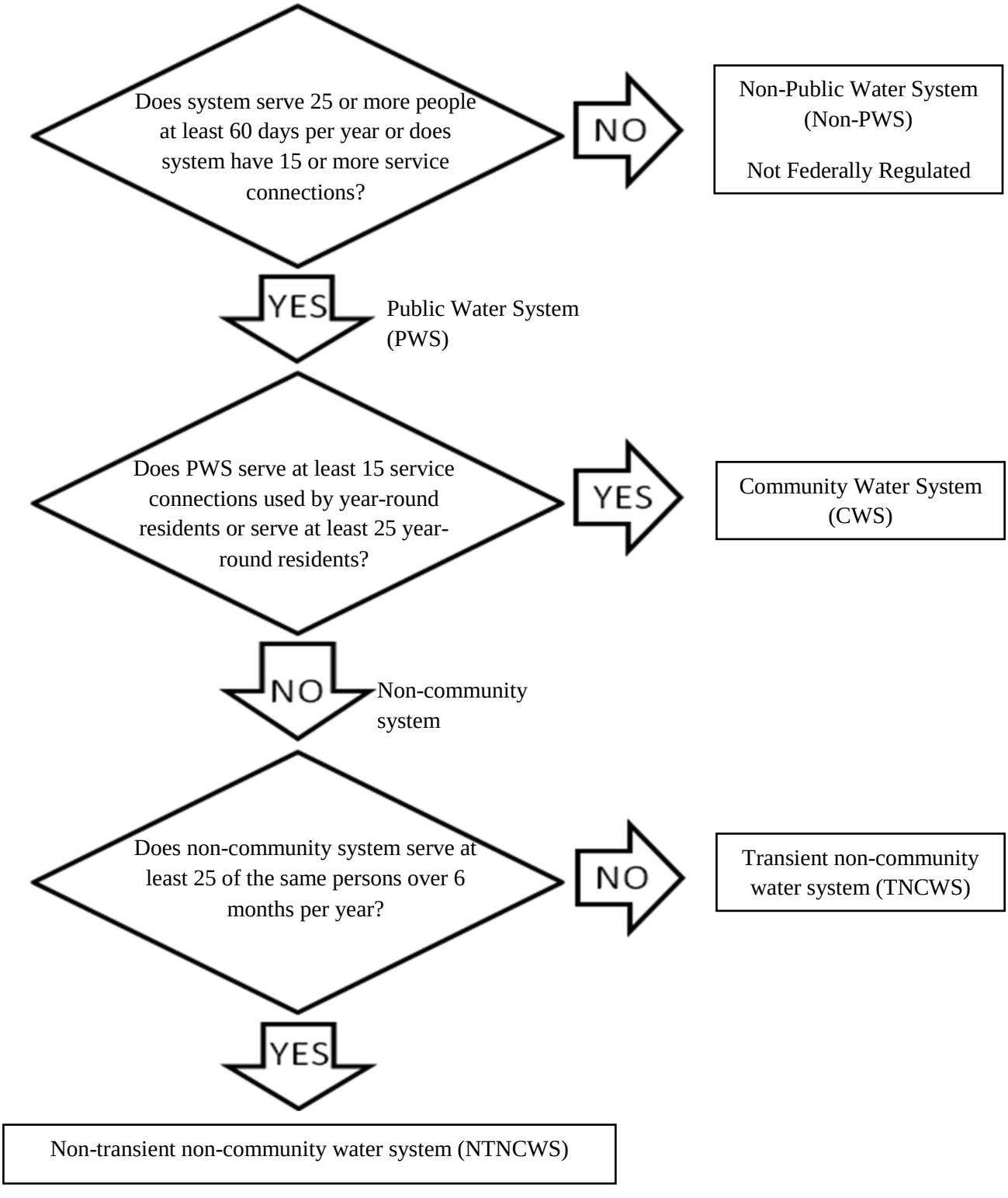

Figure 12-1 Notes:

(1) In accordance with Federal laws, state and local laws may be more stringent.

(2) Does not address regulatory requirements of consecutive water systems. These are determined independently by each state.

12-4.3 Regulations. This section highlights existing and future SDWA regulations that are most relevant to Department of Commerce facilities. More information on regulations and a compliance calendar can be found on the EPA Web Page: http://www.epa.gov/safewater/.

(a) **National Primary Drinking Water Regulations (reference (b)).** National Primary Drinking Water Regulations (NPDWR) or primary standards are legally enforceable standards that apply to PWSs. Primary standards protect drinking water quality by limiting the levels of specific contaminants that can adversely affect public health and are known or anticipated to occur in water. There are set standards for the following groups of contaminants: inorganics, organics, microorganisms, disinfectants, disinfection byproducts, and radionuclides. A table listing all contaminants and standards can be found on the EPA Web Page: http://water.epa.gov/drink/contaminants/index.cfm.

For each contaminant so identified, EPA establishes a MCL, a treatment technique, or an action level. Where feasible, this MCL, treatment technique, or action level has been used to establish the NPDWR for the contaminant. Once issued, NPDWR are mandatory for all PWSs. The Act also requires EPA to identify MCLGs, which are non-enforceable goals for contaminants that may have an adverse effect on human health and are known or anticipated to occur in PWSs. The goal of the SDWA is to move towards implementing these MCLGs when possible.

(i) **Arsenic Rule.** The maximum allowable amount of arsenic in drinking water is 10 parts per billion (ppb) or 0.010 milligrams per liter (mg/L).

(ii) **Radionuclides Rule.** Most drinking water sources have very low levels of radioactive contaminants ("radionuclides"), most of which are naturally occurring, although contamination of drinking water sources from human-made nuclear materials can also occur. To protect human health, EPA has established MCLs for several radionuclides, including: combined radium 226/228 (5 pCi/L); beta photon emitters (4 mrems per year); gross alpha standard (15 pCi/L); and uranium (30 µg/L).

(iii) **Total Coliform Rule.** This rule sets requirements for coliform levels in drinking water. Coliform bacteria in drinking water indicate that the treatment system is not working or that there are problems in the distribution system and other potentially harmful bacteria may be present. EPA standards require that systems detect coliforms in no more than 5 percent of samples taken each month. The minimum number of samples a system must take depends on system size and is outlined in 40 CFR §141.21.

(iv) **Surface Water Treatment Rule.** The objective of this rule is to prevent waterborne diseases caused by viruses and bacteria, including *Legionella*, *Cryptosporidium*, and *Giardia Lamblia*. The rule requires that water systems using surface water and groundwater under the direct influence (GWUDI) of surface water provide filtration and disinfection in order to remove viruses and bacteria to levels specified in 40 CFR Part 141 subpart H. Under certain circumstances the filtration requirement can be waived; however there are no exceptions to the disinfection requirement. The Surface Water Treatment Rule has been amended numerous times, including by the Interim Enhanced Surface Water Treatment Rule (v), the Filter Backwash Recycle Rule (vi), Long-Term 1 Enhanced Surface Water Treatment Rule (vii), and Long-Term 2 Enhanced Surface Water Treatment Rule (viii).

(v) **Interim Enhanced Surface Water Treatment Rule.** This rule strengthens filter turbidity performance and monitoring requirements in order to optimize treatment reliability. An overall goal of this rule is to minimize levels of *Cryptosporidium* in finished water (see 40 CFR Part 141 Subpart P). The rule applies to PWSs serving at least 10,000 people that use surface water or GWUDI of surface water. The rule also requires States to conduct sanitary surveys for all surface water and GWUDI systems, regardless of size.

(vi) **Filter Backwash Recycle Rule.** This rule applies to all PWSs that use surface water or GWUDI of surface water; utilize direct or conventional filtration processes; and recycle spent filter backwash water, sludge thickener supernatant, or liquids from dewatering processes. The rule requires spent filter backwash water, thickener supernatant, and liquids from dewatering process to be returned through all the processes of a system's existing conventional or direct filtration system prior to the point of primary coagulant addition unless the state specifies an alternative location.

(vii) **Long-Term 1 Enhanced Surface Water Treatment Rule.** The rule applies to PWSs using surface water or GWUDI of surface water. This rule extends protections against *Cryptosporidium* and other disease-causing microbes to water systems that serve fewer than 10,000 people annually. See 40 CFR Part 141 Subpart T.

(viii) **Long-Term 2 Enhanced Surface Water Treatment Rule.** This rule increases monitoring and treatment requirements for water systems that are prone to outbreaks of *Cryptosporidium*. The rule requires that PWSs that are supplied by surface water sources monitor for *Cryptosporidium*. Those water systems that measure higher levels of *Cryptosporidium* or do not filter their water must provide additional protection by using options from a "microbial toolbox" of treatment and management processes. The rule requires open reservoirs to either be covered or receive added treatment. See 40 CFR Part 141 Subpart Q.

(ix) **Groundwater Rule.** The purpose of the rule is to provide for increased protection against microbial contamination of drinking water systems that use groundwater sources. The rule also requires sanitary surveys to be conducted by the state every 3 years for CWSs and every 5 years for NCWSs. The rule contains additional requirements such as hydrogeologic sensitivity assessment and enhanced source water monitoring for certain systems. See 40 Part 141 CFR Subpart S.

(x) Disinfectant/Disinfection By-Products.

- **Stage 1 Disinfectant/ Disinfection By-Product Rule.** This Rule applies to all CWSs and NTNCWSs that use a chemical disinfectant in any part of their system. Maximum Residual Disinfectant Levels (MRDLs) are established for disinfection using chlorine, chloramine and chlorine dioxide. Maximum contaminant levels are established for the disinfection by-products total trihalomethanes (0.080 mg/L), haloacetic acids (0.060 mg/L), chlorite (1.0 mg/L) and bromate (0.010 mg/L).

- **Stage 2 Disinfectant/ Disinfection By-Product Rule.** This rule builds upon earlier rules and strengthens public health protection for customers by tightening compliance monitoring requirements for two groups of disposition byproducts, TTHMs and HAA5s. In addition, this rule imposes requirements on consecutive systems.

(xi) **Consumer Confidence Reporting Rule.** CWSs shall prepare and provide to their consumers annual reports on the quality of the water delivered by the system. The reports must be delivered by 1 July on an annual basis. Each report must contain data collected during, or prior to, the previous calendar year. Requirements are outlined in 40 CFR § 141.151 through 141.155 and reference (d). Each CWS shall deliver one copy of the CCR to each of its customers. States may waive the mailing requirement for community water systems serving fewer than 10,000 persons. In such cases, systems would be required to inform their customers that the report will not be mailed, make the report available to the public upon request, and publish the report annually in one or more local newspapers serving the areas in which the systems' customers are located. Alternative delivery methods should be used to make a "good faith" effort to reach consumers who do not receive water bills. A good faith effort would include a mix of methods appropriate to the particular system. In states with primary enforcement authority, utilities must mail a copy of the completed CCR to the state, followed, within 3 months, by a certification that the report has been distributed to customers and that the information in the CCR is correct.

(xii) **Unregulated Contaminant Monitoring Rule.** EPA uses the Unregulated Contaminant Monitoring program to collect data for contaminants suspected to be present in drinking water, but that do not have health-based standards set under the SDWA. Every five years EPA reviews the list of contaminants, largely based on the Contaminant Candidate List, and selects no more than 30 contaminants for every 5-year monitoring and reporting cycle. Large PWSs and some small PWSs are required to collect data on a selection of unregulated contaminants. Data from this monitoring will be used in future rule making.

(xiii) **Public Notification.** The owner or operator of a PWS that fails to comply with an applicable MCL, AL, or treatment technique, or that fails to comply with the requirements of any schedule prescribed under a variance or exemption, shall notify persons served by the system. The notices shall include specific language about the health effects of each contaminant related to the compliance failure. The PWS shall publish notices by newspaper, mail delivery, hand delivery, radio, and television announcements depending upon the type of violation or risk involved. The amount of time the PWS has to issue the notification also depends on the degree of danger presented to consumers. See the public notification tiers located at: http://water.epa.gov/lawsregs/rulesregs/sdwa/publicnotification/basicinformation.cfm

(xiv) **Lead and Copper Rule.** PWSs at Departmental facilities shall comply with all applicable requirements for the control of lead and copper, as stated in the Federal Lead and Copper Rule. See 40 CFR Subpart I. This is to ensure that the levels of lead and copper remain below the action levels associated with health risks in treated (finished) water and at the consumer's free flowing tap.

The lead action level is exceeded if the concentration of lead in more than 10 percent of tap water samples collected during any monitoring period conducted per reference (c) is greater than 0.015 mg/L (i.e., if the 90th percentile lead level is greater than 0.015 mg/L). The copper action level is exceeded if concentrations of copper in more than 10 percent of tap water samples collected during any monitoring period conducted is greater than 1.3 mg/L (i.e., if the 90th percentile copper level is greater than 1.3 mg/L).

If an action level is exceeded, PWSs must collect additional water quality parameter samples. Optimal corrosion control treatment may also be required. Should prescribed treatment options fail to bring lead levels below the action level, lead service lines may have to be replaced.

Water systems that meet the lead and copper action levels during specified monitoring periods may reduce the number and frequency of sampling in accordance with reference (c).

(xv) **Lead-Containing Pipe, Solder, Fixtures, Fittings and Flux.** In order to limit the leaching of lead into drinking water, EPA adopted a health effects-based performance standard for plumbing fittings or fixtures dispensing water for human ingestion (industry standard NSF 61), including kitchen and bar faucets, lavatory faucets, water dispensers, drinking fountains, water coolers, glass fillers, residential refrigerator ice makers, supply stops and endpoint control valves. See 42 U.S.C. § 300g-6. The SDWA also requires testing and corrective action for lead contamination in drinking water in schools and day care centers. See 42 U.S.C. § 300j-21 through 300j-26.

(xvi) **Cross-Connection and Backflow Prevention.** Cross-connection control programs apply to building interior domestic plumbing systems, fire protection plumbing systems, and exterior water distribution systems. These programs, overseen by States with SDWA primacy, help ensure compliance with primary and secondary drinking water standards by establishing policies, procedures, and instructions for installing, repairing, maintaining, inspecting, and testing backflow preventers. Reference (i) provides guidance to Departmental facilities for complying with this requirement.

(xvii) **Operator Certification.** The SDWA requires States to develop operator certification programs. These programs must specify minimum standards for operators of community and non-transient, non-community PWSs. Details include provisions for certification, re-certification and grandfathering.

(b) **National Secondary Drinking Water Regulations.** For contaminants that may cause the drinking water to become aesthetically unpleasing, the Act requires EPA to specify the maximum contaminant level requisite to protect the public welfare. These contaminants are regulated under the National Secondary Drinking Water Regulations . Although they are not Federally enforceable, several state SDWA programs provide for enforcement of National Secondary Drinking Water Regulations. If the state enforces these regulations then Departmental facilities shall comply.

(c) **Underground Injection Program.** The SDWA requires each state to have an Underground Injection Control Program to ensure that underground injection does not endanger underground sources of drinking water. All underground injection systems must be permitted or authorized by rule. Under these requirements, facilities must implement a program that includes:

– Establishing and maintaining an underground injection well inventory; and

– Procedures for proper well closure.

There are five classes of UIC wells. The broadest category is Class V, which includes things such as stormwater drainage wells, aquifer remediation wells, and some septic

systems. Reference (c) contains the regulations related to underground injection.

(d) **Wellhead Protection Program.** Facilities that receive drinking water from wells must take measures to minimize contamination. These facilities shall establish a wellhead protection program that meets applicable state or local wellhead protection requirements.

(e) **Water System Vulnerability Assessments and Emergency Response Plans.** The Public Health Security and Bioterrorism Preparedness and Response Act of 2002 (Pub. L. No. 107-188) Section 401 amended the SDWA to require that each community water system serving a population of greater than 3,300 persons to conduct a Vulnerability Assessment and prepare an ERP. The purpose of this assessment is to determine the vulnerability of the water system to a terrorist attack or other intentional acts intended to disrupt the drinking water supply.

12-4.4 Water System Monitoring. Facilities that own and operate a consecutive PWS subject to full or partial exemption from regulatory monitoring requirements under 40 CFR §141.3 or 141.29, respectively, shall submit a letter to the state regulatory agency explaining the degree to which exemption criteria are applicable and request the state specify the exact requirements to be imposed on the consecutive PWS. The state's response letter is to be permanently retained in the facility's files.

Departmental water systems will, at a minimum, accomplish the monitoring described in the following subsections. This monitoring is required regardless of variance or exemptions from regulatory monitoring requirements.

(a) **Bacteriological Monitoring.** Departmental PWSs shall perform bacteriological monitoring as specified in the Total Coliform Rule at 40 CFR § 141.21. Consecutive NCWSs may request waivers from this requirement. Waivers shall be submitted by facilities to OUs for approval. The use of EPA-approved kits by trained personnel is acceptable for total coliform analyses. However, if a sample tests positive, follow up analysis must be accomplished using a certified laboratory.

(b) **Asbestos.** All Departmental water systems with asbestos cement pipes shall monitor for asbestos. At a minimum one sample shall be taken every three years.

(c) **Lead in Priority Areas.** All facilities shall sample, test, and maintain resultant records for lead in all drinking water coolers and outlets in day care centers. Reference (e) provides program information, including rationale and sampling protocols. If initial screening results exceed 20 ppb in 250-mL samples, facilities shall use full protocol sampling on affected outlets. If full protocol sampling exceeds 20 ppb, they shall secure the affected water outlets from service and institute permanent corrective measures.

A copy of all test results shall be made available for day care centers where testing has been conducted. A notice of availability of the testing results shall be sent to the parents or legal guardians of children attending the affected day care center.

(d) **Review of Primary PWS Records.** Facilities using consecutive PWSs shall, at least once a year, review the monitoring reports of the primary PWS. Facilities shall use these reports and other sources of information to determine the risk of water quality deterioration within the distribution system. Facilities shall ensure that contaminant levels remain below their respective MCLs within the distribution system.

12-4.5 Water System Vulnerability Assessments and Emergency Response Plans. All Departmental drinking water systems serving more than 25 consumers must complete a WSVA and ERP as required by the SDWA. Systems covered under this requirement include consecutive and unregulated systems, as well as small community and non-community public water systems in the US and its possessions and territories.

Specific criteria to be addressed by the WSVA include, but are not limited to:

- Pipes and constructed conveyances;
- Physical barriers;
- Water collection, pretreatment, treatment, storage, and distribution facilities;
- Electronic, computer or other automated systems which are utilized by the PWS;
- The use, storage, or handling of various chemicals; and
- The operation and maintenance of the system.

Departmental drinking water systems serving between 25 and 3,300 consumers shall conduct a WSVA and ERP and retain a copy for official use only, unless otherwise required to be forwarded to a Federal, state, or local agency.

All facilities shall establish a team consisting of water system operators, environmental, security, and medical personnel to periodically review and update their WSVAs and ERPs.

12-4.6 Cross-Connection Control and Backflow Prevention Program Implementation. All facilities that own or operate a water system shall develop and implement a Cross-Connection Control and Backflow Prevention Program. At a minimum, the cross-connection control and backflow prevention program shall include procedures and mechanisms to:

- Find and eliminate existing cross-connections and prevent new cross-connections;
- When cross-connections cannot be eliminated, install, inspect, and test backflow preventers; and
- Keep an inventory of all existing backflow preventers.

All facilities shall certify all backflow preventers as required by the Federal, state or local regulatory agency. If there is no regulatory requirement, then all backflow preventers should be certified at least once every 6 months for high hazards and once every 12 months for low hazards by a certified inspector.

Facilities shall also promptly repair or replace defective backflow preventers. The facility should retain cross connection and backflow preventer inspection and maintenance records for at least 5 years.

Reference (i) provides guidance to Departmental facilities for complying with this requirement.

Reference (f) provides EPA guidance on the Cross Connection Control Program.

12-4.7 Sanitary Surveys. In many instances, a state may require treatment plants or PWSs that are experiencing compliance problems, particularly with microbial pathogens, to perform a sanitary survey. The state regulatory agency will usually perform the survey. If the state allows, the facility can use a service provider of choice to complete the survey. In the absence of a state requirement, all Departmental PWSs shall perform a sanitary survey every 5 years.

(a) **Survey Requirements.** For treatment plants, the survey should include the following:

(i) Verification and reevaluation of vulnerability assessments, watershed protection programs, and wellhead protection programs, as applicable;

(ii) Examination of the source water physical components and condition;

(iii) Schematic diagrams of the treatment process and examination and evaluation of the adequacy and appropriateness of all elements of the current treatment process, including an assessment of operational flows versus treatment process rated capacity and, where appropriate, concentration contact time assessment (defined in 40 CFR §141.2);

(iv) Examination and evaluation of the operation and maintenance of the treatment facility including the condition and reliability of equipment, operator qualifications, use of approved chemicals, record keeping, process control, and safety programs;

(v) Evaluation of the ability of the treatment plant to respond to fluctuations in raw water volumes or flows; and

(vi) Evaluation of the treatment plant's emergency power supply and security measures.

(b) **Distribution System Sanitary Survey Review.** Concerning the distribution system, the sanitary survey should include a review of the operations and maintenance program to ensure attention to the following areas of concern:

(i) Elimination of unneeded or excess storage;

(ii) Adequate turnover of storage tanks;

(iii) Storage tank cleaning and maintenance;

(iv) Adequate disinfection practices during all main repairs and replacement;

(v) If applicable, an effective corrosion control program;

(vi) A comprehensive cross connection control program;

(vii) An aggressive valve and hydrant exercise program;

(viii) An adequate water quality monitoring program that achieves compliance with the appropriate regulations and provides for effective water quality control; and

(ix) An adequate flushing program, preferably a Unidirectional Flushing program that is implemented on a yearly basis.

For more information on sanitary surveys, see reference (g).

12-4.8 Record Keeping. In the absence of more stringent Federal, state, or local record keeping requirements, facilities shall maintain records as follows:

(a) Bacteriological Results - 5 years;

(b) Chemical Results - 10 years;

(c) Lead/Copper testing results - 12 years;

(d) Actions Taken to Correct Violations - 3 years after acting on the particular violation involved;

(e) Sanitary Survey Reports - 10 years;

(f) Variance or Exemption Records - 5 years following the expiration of such variance or exemption;

(g) Water Treatment plant and/or Distribution System Operating Records - 5 years;

(h) Cross Connection Inspection Records - 5 years; and

(i) Consumer Confidence Reports - 5 years.

12-4.9 Exemption from Permitting. Facilities that qualify for exemption from PWS permitting shall apply, in writing, to the regulatory agency with SDWA primacy for an exemption. In some cases regulators issue a permit when it is not required.

12-4.10 Operation and Maintenance. Facilities that own and/or operate water systems (public and non-public, permitted and non-permitted) shall develop and implement an operation and maintenance program applicable to the system. Minimum requirements of the program are to meet the requirements of reference (b), in particular 40 CFR § 141.63(d)(3) related to coliforms and include the proper implementation and documentation of:

(a) Emergency and preventive maintenance;

(b) System disinfection after maintenance work is performed;

(c) Scheduled flushing of the system;

(d) Reduction of water quality problems (as needed);

(e) Implementation and documentation of a valve exercise and maintenance program;

(f) Proper operation and maintenance of storage tanks;

(g) Maintenance of current water distribution maps;

(h) Documentation of location and dates of water line breakage; and

(i) Documentation of emergency operations procedures required as a result of events such as earthquakes, hurricanes, chemical releases and terrorist activities. Determine response roles and responsibilities as well as contingency plans for providing potable water to the facility. Reference (h) provides information on emergency planning.

12-4.11 Consumer Confidence Reports. Departmental consecutive CWSs shall obtain a copy of their water suppliers CCR, amend this report with information on any additional testing or exceedences, and distribute the final report to consumers. For exceedences, only report data based on certified laboratory results. A good faith effort shall be made to ensure that all consumers are aware of the CCR and additional information. Recommended methods of report delivery include posting on a website, and posting in conspicuous locations in each building on the site.

12-4.12 Consumptive Use Permits. In coordination with legal and technical staff at the OU, facilities that withdraw groundwater shall:

(a) Document historical water use;

(b) Determine reasonably foreseeable future water uses;

(c) Evaluate water rights laws;

(d) Determine on a case-by-case basis whether the facility should obtain a consumptive use permit; and

(e) Ensure, if applying for a consumptive use permit, that restrictions will not impact mission requirements.

12-4.13 Perchlorate. All Department-owned drinking water systems (including consecutive systems) that currently sample for inorganic analytes pursuant to regulatory requirements were required to sample for perchlorate using either EPA method 331.0 or 332.0 at a minimum for two consecutive quarters.

Where confirmed analytic results indicate the presence of perchlorate in finished drinking water at any level above the method reporting limit for the analytic method used, facilities should notify their OU for further action.

12-4.14 Fines and Penalties. The 1996 amendments to the SDWA waive sovereign immunity for the payment of fines and penalties imposed by Federal, state or local agencies for violations (42 U.S.C. § 300j-6). In addition, EPA may assess administrative penalties of up to $25,000 per day per violation.

12-4.15 Bottled Water. The U.S. Food and Drug Administration (FDA), under the Federal Food, Drug, and Cosmetic Act, regulates bottled water as a packaged food product. State governments generally use one of two approaches to regulating bottled water. States may regulate bottled water as a packaged food product similar to FDA regulations or through the state's environmental agency similar to EPA drinking water regulations.

Since bottled drinking water for employees is ordinarily considered a personal expense, appropriated funds may be used to purchase bottled drinking water for employees only upon a showing of necessity (reference (j)). It is the Department's policy that necessity shall be established prior to any purchase of bottled water using appropriated funds, in consultation with the Office of General Counsel, General Law Division. This will prevent improper purchases. Necessity is established, for example, where the available drinking water has been analyzed by appropriate authorities and found to pose a health risk. Practically this translates to any exceedence of a primary drinking water standard. Exceedences of secondary standards such as taste, color, or odor do not establish necessity, unless the state or local government regulates the secondary standard as a regulated MCLG.

12-5 Responsibilities

12-5.1 Office of the Secretary.

(a) **OSEEP shall:**

(i) Coordinate the overall implementation of SDWA requirements; and

(ii) Issue policy and guidance as needed.

(b) **OSBM** is responsible for ensuring compliance within the Herbert C. Hoover Building.

12-5.2 OUs shall:

(a) Act as the assessment sponsor for SDWA projects;

(b) Approve or disapprove monitoring waivers for bacteriological sampling by consecutive NCWSs;

(c) Assist OSEEP in providing Department-wide guidance regarding matters relating to drinking water;

(d) Provide engineering, contracting, and legal assistance, upon request, to facilities;

(e) Implement the SDWA program requirements at their facilities;

(f) Ensure that facilities remain in compliance with all Federal, state and local regulations, Executive Orders and Department policy pertaining to drinking water. This includes planning, programming and budgeting resources to meet requirements;

(g) Ensure that facilities with a consecutive PWS review the monitoring reports of the primary PWS at least once a year and use these reports and other sources of information to determine the risk of water quality deterioration within the distribution system. OUs should ensure that contaminant levels have not risen above the MCL within the distribution system;

(h) Ensure contracts between the Department and water suppliers require the supplier to supply the results of all permit-required NPDWR monitoring that was performed on raw and treated water that serves the applicable facility at least once a year;

(i) Ensure that all personnel involved in the drinking water program are properly trained.

12-6 Training

12-6.1 General. All Department personnel involved in the drinking water program shall receive appropriate environmental training.

12-6.2 Water Treatment and Distribution System Operators. Facilities shall ensure their water treatment and distribution system operators are trained and certified per applicable Federal, state, and local regulations. Training should include the following elements:

(a) Basic water plant and/or distribution system design;

(b) Basic water plant and/or distribution system operation;

(c) Basic maintenance and calibration of plant controls and equipment;

(d) Water plant and/or distribution systems treatment principles, including chemical storage and handling;

(e) Water sampling and analysis;

(f) Water plant and/or distribution system documentation and reporting requirements; and

(g) Cross-connection control and backflow prevention.

12-7 Reporting Requirements

12-7.1 Reporting to the Office of the Secretary.

- None.

12-7.2 Reporting to External Federal, State, and Local Agencies.

(a) CWSs shall report water quality testing results to their customers annually through consumer confidence reports prepared in accordance with 12-4.3(a)(xi) above.

(b) The owner or operator of a PWS that fails to comply with an applicable MCL, AL, treatment technique, or that fails to comply with the requirements of any schedule prescribed under a variance or exemption, shall notify persons served by the system in accordance with 12-4.3(a)(xiii) above.

(c) OUs shall maintain water quality monitoring records as per 12-4.8 and make them available to Federal, state, and local regulatory agencies upon request.

CHAPTER 13:
STORMWATER MANAGEMENT

13-1 Scope

13-1.1 This Chapter provides policy and compliance requirements relative to stormwater at Departmental facilities within the United States, Commonwealth of Puerto Rico, the Northern Mariana Islands, Guam, American Samoa, and the Trust Territory of the Pacific Islands, including those undergoing construction and major renovation.

13-1.2 Related Chapters. Chapter 5, EMS; Chapter 11, Clean Water; and Chapter 14, Oil and Hazardous Substances Spill Preparedness and Response.

13-1.3 References.

(a) E.O. 13514, Federal Leadership in Environmental, Energy, and Economic Performance, dated October 5, 2009;

(b) EPA Technical Guidance on Implementing the Stormwater Runoff Requirements for Federal Projects under Section 438 of the Energy Independence and Security Act; EPA 841-B-09-001, dated December 9, 2010;

(c) E.O. 13508, Chesapeake Bay Protection and Restoration, dated May 12, 2009;

(d) EPA Guidance for Federal Land Management in the Chesapeake Bay Watershed, EPA841-R-10-002, dated May 12, 2010;

(e) 40 CFR Part 450, Construction and Development Point Source Category;

(f) EPA Stormwater Pollution Prevention Plans for Construction Activities website;

(g) 40 CFR Parts 122-123, National Pollutant Discharge Elimination System (NPDES); and

(h) Department of Commerce Technical Guide for the Development of Construction Stormwater Pollution Prevention Plans (To Be Published in FY 2013).

13-2 Legislation

13-2.1 Clean Water Act**.** The Clean Water Act (33 U.S.C. § 1251 et seq.)and associated Federal regulations (40 CFR §§ 123.25(a)(9), 122.26(a), 122.26(b)(14)(x) and 122.26(b)(15)) require nearly all construction site owners and/or operators engaged in clearing, grading, and excavating activities that disturb one acre or more, including smaller sites in a larger common plan of development or sale, to obtain coverage under a NPDES permit or in States authorized to administer their own permitting program, a state issued permit for their stormwater discharges.

13-2.2 Energy Independence and Security Act of 2007**.** Section 438 of EISA 2007 requires "the sponsor of any development or redevelopment project involving a Federal facility with a footprint that exceeds 5,000 square feet to use site planning, design, construction, and maintenance

strategies for the property to maintain or restore, to the maximum extent technically feasible, the predevelopment hydrology of the property with regard to the temperature, rate, volume, and duration of flow."

13-3 Terms and Definitions

13-3.1 Construction General Permit. Each state (or EPA, in the case of states that are not authorized) issues one or more National Pollutant Discharge and Elimination System (NPDES) construction general permits as per reference (g). These permits, generally, can be thought of as umbrella permits that cover all stormwater discharges associated with construction activity in a given state for a designated time period, usually 5 years. Operators of individual constructions sites then apply for coverage under this permit. General permits are written such that coverage is obtained by notifying the permitting authority of the need for coverage, and then complying with the substantive and procedural requirements of the general permit.

13-3.2 Designated Responsible Official. The DRO is the senior individual who assumes responsibility for the accuracy and completeness of permit applications, permits and statutorily required environmental compliance. A DRO could be subject to criminal sanctions under some environmental laws and regulations. The DRO will also at times have to certify ongoing compliance with all permit provisions once the permit is issued. The DRO is typically a facility or program manager with direct responsibility for a facility or program that is subject to environmental requirements.

13-3.3 Individual Construction Permit. Each state (or EPA, in the case of states that are not authorized) may also issue individual NPDES construction permits. These permits, are specifically written for a single construction project.

13-3.4 National Pollutant Discharge Elimination System. National program for issuing, modifying, revoking and reissuing, terminating, monitoring and enforcing permits and imposing and enforcing pretreatment requirements. NPDES programs are either EPA or state programs. State programs must be approved and authorized by EPA.

13-3.5 Qualifying Local Program. Local construction stormwater control program designated by a state's NPDES permitting agency. Qualifying local programs have requirements that are equivalent to or more protective than the state's requirements. If the local stormwater program with jurisdiction over a facility has been designated by the permitting agency as a *qualifying local program*, a construction site operator may simply read and follow the local requirements. The permitting agency (state or EPA) might choose to waive the requirement to file a Notice of Intent or similar application form for small construction sites operating within the jurisdiction of a qualifying local program. If waived, these sites would be covered under the appropriate construction general permit automatically. Check your construction general permit carefully. The NPDES permitting authority must identify any qualifying local programs in the construction general permit. Violations of the local requirements are also considered violations of the NPDES requirements and may be enforced accordingly.

13-3.6 Pre-Development Hydrology. The combination of runoff, infiltration, and evapotranspiration rates and volumes that typically existed on a site before human-induced land disturbance occurred (e.g., construction of infrastructure on undeveloped land such as meadows or forests). Defined in reference (b) as equivalent to

(a) Retaining the 95th percentile rain event, defined as the measured precipitation depth accumulated over a 24-hour period for the period of record that ranks as the 95th percentile rainfall depth based on the range of all daily event occurrences during this period; or

(b) Demonstrating retention of pre-development hydrology through site-specific hydrologic analysis.

13-3.7 Stormwater. The portion of precipitation that does not naturally percolate into the ground or evaporate but flows via overland flows, channels or pipes into a defined surface water channel or stormwater system during and immediately following a storm event. Examples include stormwater runoff, surface water runoff, and drainage related to storm events or snowmelt.

13-3.8 Stormwater Pollution Prevention Plan (SWPPP). An SWPPP is a fundamental requirement of stormwater permits that:

(a) identifies all potential sources of pollution which may reasonably be expected to affect the quality of stormwater discharges from a construction site;

(b) describes practices to be used to reduce pollutants in stormwater discharges from the construction site; and

(c) helps assure compliance with the terms and conditions of the permit.

SWPPP requirements vary from state to state.

13-4 Requirements

13-4.1 Designated Responsible Official. The general duty of the DRO is to ensure day-to-day compliance with all environmental laws, regulations, and requirements imposed on their facility and their facility staff's activities. Each OU shall establish a policy regarding DROs. The policy shall define who are considered DROs and what their duties are. There are several environmental laws and regulations that assign specific responsibilities to responsible officials (e.g. Clean Air Act), therefore care should be taken and coordination should be done with the Department in establishing DROs. OUs shall be responsible for designating the Responsible Official for each facility and permit under their administration. It is generally better to appoint the DRO at the lowest level that still has the authority to submit permit applications and sign reports required by regulatory permits, as he/she will be closer to the operations being certified. The Department recommends that the DRO for a given facility or permit be the facility manager or equivalent. In no case shall the responsibility for permits be any lower than the Federal facility manager, operations director, or the manager responsible for facility operations. If an OU can assure itself that its facilities are not owned and they cannot be classified as the operator of a facility then the paragraph does not apply. Some indications that an OU could be classified as an operator of a facility:

- Does the facility have EPA ID number in the OU's name?
- Does the facility ship hazardous waste under their EPA ID number?
- Does the facility hold registration certificates for USTs in the OU's name?
- Does the facility contract for fuel deliveries under its OU name?
- Does the facility operate and/or accept fuel deliveries under their OU name and address?
- Does the facility hold Clean Water Act, Clean Air Act, or Safe Drinking Water Act operating permits?
- Does the facility report under EPCRA under their OU name and address?

13-4.2 General. Stormwater discharges are a major contributor to surface water quality impairment. There are three major regulated sources of stormwater pollution applicable to Department facilities: a) stormwater runoff from construction sites, b) industrial activities, and c) runoff from impervious surfaces at all facilities. Department of Commerce facilities shall comply with all EPA, state, and local stormwater permitting requirements.

13-4.3 SWPPPs.

(a) **Construction.**

(i) Facilities undergoing construction or major renovation should check with their state and local governments whether, based on the size and other characteristics of the project, they will be required to obtain any stormwater permits prior to construction. At a minimum, permits are required for construction activities with a footprint greater than one acre, but state or local requirements may be more stringent. Facilities required to develop a construction SWPPP should consult references (e), (f), and (h) for guidance.

(ii) Any Departmental activity subject to stormwater regulations must determine whether it may be eligible for coverage under a construction general permit or whether an individual permit must be obtained. Facilities shall obtain the appropriate stormwater permits and develop a SWPPP prior to beginning construction. Construction is defined as any activities that alter the pre- construction hydrology (i.e., brush clearing).

(iii) Before applying for coverage under a construction general permit, the responsible facility staff shall read and understand all of its provisions and develop a SWPPP. Because authorized states develop their own NPDES requirements, state construction general permits must be read carefully and their specific instructions must be followed.

(iv) Local governments often have their own requirements for construction sites (e.g., local permits for grading, sediment and erosion, utilities). Compliance with local requirements does not equate to compliance with Federal NPDES requirements or vice versa, unless the authorized state

agency or EPA has specifically designated the local program a qualifying local program.

(b) Certain industrial activities may also require a stormwater permit. These include:

(i) Transportation facilities that have vehicle maintenance, equipment cleaning, or airport deicing operations;

(ii) Treatment works treating domestic sewage with a design flow of 1 million gallons a day or more;

(iii) Light manufacturing (for example, printing and publishing, public warehousing and storage); and

(iv) Scrap metal or scrap materials storage yards.

These activities may also be covered under general permits. Further information on industrial activities requiring permits can be found on the EPA's NPDES website at http://cfpub.epa.gov/npdes/stormwater/swcats.cfm.

If a facility has a mixture of industrial activities (i.e., scrap material storage yards and vehicle maintenance) state or local regulations should be read carefully since states and local governing bodies treat mixed use facilities differently (i.e., apply the predominant use regulations, apply the most stringent requirements from each use, or apply all requirements from all uses).

(c) Generally, permit coverage is not required for activities that are considered routine maintenance, such as landscaping, road maintenance, and maintaining stormwater best management practices (BMPs). Some states and EPA offer the option of a waiver for small sites (disturbing less than 5 acres) in areas and times of the year with low predicted rainfall. To be eligible for the waiver, you would have to meet the requirements specified in the regulations. Refer to 40 CFR § 122.34(b)(3)(iii), for information on allowable non-stormwater discharges such as water line flushing, lawn watering, and fire fighting activities. Facilities should also refer to their state and local regulations, since some state and local regulations may be more restrictive.

13-4.4 Restoring Pre-Development Hydrology. Stormwater runoff in urban areas is one of the leading sources of water pollution in the United States. Impervious surfaces such as roads, sidewalks, and buildings prevent rainwater from infiltrating into the ground, and as a result, stormwater runs off these urban areas at higher rates and volumes than would occur in a natural setting. These higher stormwater rates and volumes can cause increased flooding and stream channel erosion, more pollution to surface waters, and other impacts.

Under EISA Section 438 and reference (a), Federal agencies are required to reduce stormwater runoff from Federal development and redevelopment projects to protect water resources. As per reference (c), this is a priority for facilities in the Chesapeake Bay watershed. Federal agencies can comply using a variety of stormwater management practices often referred to as "green infrastructure" or "low impact development" practices, including for example, reducing impervious surfaces, using vegetative practices, porous pavements, cisterns and green roofs. These practices retain rainfall on site through infiltration, evaporation/transpiration, and re-use.

(a) Departmental facilities undergoing new construction or major renovation with a footprint exceeding 5,000 square feet shall incorporate the requirements of EISA Section 438.

(b) All other Departmental facilities shall incorporate stormwater management where practical and cost-effective.

See references (b) and (d) for detailed guidance.

13-5 Responsibilities

13-5.1 The Office of the Secretary.

(a) **OSEEP shall** promulgate guidance on meeting EISA Section 438 and stormwater permitting requirements in new construction and major renovation projects.

(b) **OSBM shall** ensure compliance within the HCHB.

13-5.2 OUs shall:

(a) Ensure that facilities develop, implement, and maintain current stormwater management plans and comply with Federal, state, and local regulations and permit conditions, as applicable; and

(b) Ensure that facilities implement reasonable, cost-effective BMPs to control stormwater at all sites;

(c) Ensure that facilities budget for continued maintenance and effective operations of BMPs.

(d) Support facilities in developing stormwater management plans; and

(e) As per Chapter 3, report to the Department's Office of Sustainable Energy and Environmental Programs on attainment/projected attainment of EISA Section 438 stormwater goals.

13-6 Reporting Requirements

13-6.1 Reporting to the Office of the Secretary. OUs shall report to the Department's Office of Sustainable Energy and Environmental Programs on attainment of EISA Section 438 stormwater goals as described in Chapter 3.

13-6.2 Reporting to Federal, State, and Local Regulatory Agencies. OUs undertaking construction or renovation should check with their local regulatory agency for applicable permitting and reporting requirements.

OUs undertaking any industrial operations should check with their local regulatory agencies for

permitting and reporting requirements.

CHAPTER 14:
OIL AND HAZARDOUS SUBSTANCE SPILL PREPAREDNESS AND RESPONSE

14-1 Scope

14-1.1 This chapter identifies requirements to prepare for and respond to oil and hazardous substance spills from Department vessels and facilities worldwide. This chapter summarizes Department planning and response requirements for both Department and non-Department oil and hazardous substance spills.

14-1.2 **Related Chapters.** Chapter 11, Clean Water; Chapter 16, Storage Tanks; and Chapter 17, Hazardous Waste Management.

14-1.3 **References.**

(a) 40 CFR Part 300, The National Oil and Hazardous Substances Pollution Contingency Plan;

(b) 40 CFR Part 112, Oil Pollution Prevention and Response; Non-transportation related Onshore and Offshore Facilities;

(c) 33 CFR Part 154, U.S. Coast Guard (U.S.C.G), Facilities Transferring Oil or Hazardous Materials in Bulk;

(d) 30 CFR Part 254, Bureau of Ocean Energy Management, Regulations and Enforcement (BOEMRE) Facility Response Plan regulations;

(e) 49 CFR Part 194, Pipeline and Hazardous Materials Safety Administration (PHMSA) regulations, Response Plans for Onshore Oil Pipelines;

(f) 40 CFR Parts 260-282, Resource Conservation and Recovery Act Regulations;

(g) 29 CFR § 1910.119, Process Safety Management of Highly Hazardous Chemicals;

(h) 40 CFR Parts 117, 302, 355, Reportable Quantities (RQ) of Hazardous Substances;

(i) Homeland Security Presidential Directive-5 (HSPD-5);

(j) The National Response Plan, dated December 2004;

(k) 29 CFR § 1910.120, Hazardous Waste Operations and Emergency Response (HAZWOPER) Safety Regulations; and

(l) National Response Team (NRT) Integrated Contingency Plan (ICP) guidance ("One Plan" guidance), dated August 22, 2003.

14-2 Legislation

14-2.1 The Clean Water Act**,** originally called the Federal Water Pollution Control Act of 1972, 33 U.S.C. § 1251, as amended by the Oil Pollution Act of 1990, 33 U.S.C. §2701 et seq.

(a) The CWA prohibits oil and hazardous substance discharges in such quantities that may be harmful into or upon the navigable waters of the United States, including the contiguous zone, exclusive economic zone and adjoining shorelines.

(b) The CWA provides the authority for the establishment of the NRT, the National Response Center (NRC) and the National Contingency Plan (NCP) (reference (a)).

(c) NCP regulations establish the responsibilities of various Federal agencies to provide for efficient, coordinated and effective action to minimize damage from oil discharges and hazardous substance (HS) releases.

(d) Under the CWA, the NCP regulations and E.O. 11777, the Federal On-Scene Commander (FOSC) is predesignated as the EPA or the USCG to coordinate and direct response to oil and hazardous substance spills. The FOSC has authority to enforce the administrative and criminal provisions of the law. The CWA also requires vessels and facilities to report oil and hazardous substance spills.

(e) The CWA, as amended by OPA 90, provides for the preparation and submission of response plans for tank vessels, offshore facilities, and onshore facilities that could reasonably be expected to cause substantial harm to the environment by discharging into or upon the navigable waters, adjoining shorelines, or the exclusive economic zone. The CWA must be read carefully, as it contains different requirements for commercial and public vessels. The CWA requires the periodic inspection of response equipment and implementation of an exercise program. These amendments also establish new administrative and civil penalties for violations of the CWA and expand administrative provisions under the CWA.

(f) OPA 90 revises the CWA and other statutes to expand Federal and state involvement in the nation's oil spill prevention, preparedness, and response activities. Public vessels are exempt from the provisions of OPA 90. Department facilities are required to comply with OPA 90 and applicable regulations (references (b) through (e)). Facilities that meet or exceed the thresholds or criteria detailed in Table 14-1 and references (b) through (e) are subject to the additional planning, training and exercise requirements promulgated in these regulations.

(g) OPA 90 provides for natural resource trustees to act on behalf of the public to assess damages and to develop and implement a plan for restoration, rehabilitation, replacement, or acquisition of the equivalent of the natural resources injured, lost or destroyed as a result of a discharge of oil.

14-2.2 Comprehensive Environmental Response, Compensation, and Liability Act, 42 U.S.C. § 9601 et seq**.**

(a) CERCLA provides the government with authority to compel persons to clean up HS releases. It also contains provisions which make responsible parties liable for the costs of clean-up, and the creation of the HS Superfund that enables FOSCs to conduct clean-up.

(b) CERCLA also requires facilities to report the release of any of the more than 700 listed HS to the NRC. CERCLA exempts oil from the HS list created by the CWA and the Toxic Substances Control Act (TSCA), among others.

CERCLA gives the EPA (for inland zones) and the USCG (for coastal zones) the authority to designate a FOSC to direct emergency response and HS removal activities. The FOSC has the administrative and enforcement authority to implement the provisions of CERCLA.

(c) 40 CFR § 300.175(7) gives the Department, through NOAA, the responsibility to provide scientific support for response and contingency planning in coastal and marine areas, including assessments of the hazards that may be involved, predictions of movement and dispersion of oil and hazardous substances through trajectory modeling, and information on the sensitivity of coastal environments to oil and hazardous substances and associated clean-up and mitigation methods; providing expertise on living marine resources and their habitats, including endangered species, marine mammals and National Marine Sanctuary ecosystems; providing information on actual and predicted meteorological, hydrological, ice, and oceanographic conditions for marine, coastal, and inland waters, and tide and circulation data for coastal and territorial waters and for the Great Lakes.

14-2.3 The Emergency Planning and Community Right-to-Know Act of 1986, 42 U.S.C. § 11001, et seq**.** EPCRA requires industry and Federal, state and local governments to report hazardous and toxic chemical releases to the public. EPCRA requires these entities to identify potential risks to a surrounding community from a facility or operation that handles hazardous substances and sets forth community notification procedures (see Chapter 8, Procedures for Implementing EPCRA, for more information).

14-2.4 Resource Conservation and Recovery Act, 42 U.S.C. § 6901, et seq**.**

(a) RCRA establishes requirements for facilities, which generate, transport, treat, store, or dispose of solid and HW. Regulations pursuant to RCRA (reference (f)) define HW. RCRA has several programs that provide very detailed and specific requirements for facilities that deal with HW, nonhazardous solid waste, underground storage tanks and used oil. In general, reference (f) addresses the day-to-day management of HW.

(b) RCRA requires contingency plans designed to minimize hazards to human health and the environment. These plans shall provide information on facility emergency equipment, evacuation, and coordination (reference (f)). Facilities must submit a copy of these plans to all local police and fire departments, hospitals and state and local emergency response teams that may be called upon to provide emergency services (see Chapter 8, Procedures for Implementing EPCRA for more information).

14-2.5 Clean Air Act Amendments of 1990, 42 U.S.C. § 7401, et seq.

(a) One of the goals of the CAA Amendments was to prevent the accidental release of regulated substances and other extremely hazardous substances into the air and to minimize the consequences of those releases. The amendments focus on preventive measures for those chemicals that pose the greatest risk.

(b) Section 112(r) establishes a general duty for stationary facilities to identify hazards that may result from the release of regulated substances, to design and maintain a safe facility, and to minimize the consequences of releases when they occur.

(c) In 1992, OSHA issued a Process Safety Management of Highly Hazardous Chemicals Rule, reference (g), under the CAA Amendments. Reference (g) directs employers to establish a process safety management program to prevent or mitigate catastrophic chemical workplace emergencies and requires employers to have an emergency action plan (see Chapter 9, Air Quality, for more information).

14-2.6 Occupational Safety and Health (OSH) Act, 29 U.S.C. § 651, et seq.

(a) The Occupational Safety and Health Administration (OSHA) is primarily responsible for protection of worker health and safety under the OSH Act. OSHA has several standards that cover emergency response planning for facilities that handle, store, or transport hazardous substances. These requirements serve to protect facility employees and emergency responders.

(b) Reference (g) also includes provisions to clean up uncontrolled HW sites, implement corrective action and establish routine and emergency HW operations.

(c) The OSH Act is applicable to Federal employees through E.O. 11196. Federal employers must implement a program that includes a written safety and health program, site evaluation and control, training, personal protective equipment, monitoring, medical surveillance, decontamination procedures and an emergency response program. Reference (h) lists reportable quantities of HS.

14-2.7 State and Local Programs.

(a) State programs requiring oil and hazardous substance spill prevention, preparedness, and response vary widely. All States require notification of state and local authorities of oil and hazardous substance oil and hazardous substance

spills. Certain States, and coastal States in particular, have stringent requirements for vessel and facility spill response plans and prevention measures that exceed Federal standards. Facilities are subject to state and local facility prevention and response planning requirements. However, public vessels are exempt from most of these requirements.

(b) NOAA Shipboard Oil Spill Contingency Plans (SOSCPs) are not subject to state regulations. Facilities may, however, provide courtesy copies of SOSCPs to state regulators to promote strong, cooperative relationships with the local community.

14-3 Terms and Definitions

14-3.1 Area Committees. The Federal, state and local agencies that cooperate to prepare an Area Contingency Plan (ACP) and work with Federal, state and local officials to pre-plan joint response efforts.

14-3.2 Area Contingency Plan. A plan prepared by the Area Committee to respond to worst case oil and hazardous substance spill scenarios, which identifies equipment and personnel available for such response activities. The ACP also identifies and prioritizes sensitive areas and natural resources, identifies strategies for their protection, and pre-approves specific countermeasures and removal actions within the planning area.

14-3.3 Complex Facilities. A facility that possesses a combination of transportation-related and non-transportation-related components that is subject to the jurisdiction of more than one Federal agency under section 311(j) of the CWA.

14-3.4 Contiguous zone. For purposes of this chapter, the contiguous zone is an area contiguous to the territorial sea that extends 12 nautical miles (nm) from the baseline from which the territorial sea is measured. (In a September 2, 1999 Presidential Proclamation, the United States declared a 24 nm contiguous zone for international law purposes.)

14-3.5 Designated Responsible Official. The DRO is the senior individual who assumes responsibility for the accuracy and completeness of permit applications, permits and statutorily required environmental compliance. A DRO could be subject to criminal sanctions under some environmental laws and regulations. The DRO will also at times have to certify ongoing compliance with all permit provisions once the permit is issued. The DRO is typically a facility or program manager with direct responsibility for a facility or program that is subject to environmental requirements.

14-3.6 Discharge. Includes any spilling, leaking, pumping, pouring, emitting, emptying, or dumping of oil or an actual or substantial threat of any spilling, leaking, pumping, pouring, emitting, emptying, or dumping of oil. It excludes:

- Discharges permitted under the CWA.
- Discharges resulting from circumstances identified, reviewed and made a part of the public record regarding a permit issued or modified under the CWA, and subject to a condition in such permit.

– Continuous or anticipated intermittent discharges from a point source, identified in a permit or permit application under the CWA and caused by events occurring within the scope of relevant operating or treatment system.

Reference (a) defines discharge to include a substantial threat of discharge.

14-3.7 Dispersant. Any of several chemical agents that emulsify, disperse, or make soluble, oil into the water column or promote the surface spreading of oil slicks to facilitate dispersal of the oil into the water column.

14-3.8 Exclusive Economic Zone (EEZ). A zone contiguous to the territorial sea that extends to a distance not to exceed 200 nm from the baseline from which the territorial sea is measured. The United States by Presidential Proclamation dated March 10, 1983 has declared a 200 nm EEZ. Coastal countries enjoy sovereign rights within the EEZ for the purpose of exploring, exploiting, conserving and managing natural resources, both living and non-living, of the seabed and subsoil and the waters and with regard to other activities for economic exploitation and exploration of the zone, such as the production of energy from the currents and winds.

14-3.9 Facility. Any structure, group of structures, equipment or device (other than a vessel) used for one or more of the following purposes: exploring for, drilling for, producing, storing, handling, transferring, processing or transporting oil and hazardous substances. This term includes any motor vehicle, rolling stock or pipeline used for one or more of these purposes.

14-3.10 Facility Incident Commander. The Facility Incident Commander (FIC) designations are based on oil and hazardous substance spill risk and response capability of the facility to ensure rapid, effective response to oil and hazardous substance spills within the assigned area. The FIC may designate a qualified individual (QI) who meets the qualifications of 14-3.25 to develop and implement the Facility Response Plan (FRP) and manage an oil spill incident. The FIC also has authority to appoint appropriate staff to serve as Incident Commander (IC) during a response. The title of FIC is retained for the facility manager and may not be delegated.

14-3.11 Facility Response Plan. A plan of action for facility spill scenarios required for facilities that meet the threshold requirements of OPA 90 regulations. These plans, which should be coordinated with the local ACP and the FOSC oil and hazardous substance response plans, identify notification procedures, response and cleanup capabilities, response management organization, environmentally sensitive areas, natural resource protection strategies and measures to protect human health and safety.

14-3.12 Federal On-Scene Coordinator. The Federal official pre-designated by EPA or the USCG to coordinate and direct Federal responses under the NCP (see reference (a)).

14-3.13 Hazardous Substance.

(a) Any substance so designated by the CWA;

(b) Any element, compound, mixture, solution, or substance so designated by CERCLA;

(c) Any solid waste having the characteristics identified under or listed pursuant to

the Solid Waste Disposal Act (but not including any waste suspended by an Act of Congress);

(d) Any hazardous air pollutant listed under the CAA; or

(e) Any imminently hazardous chemical substance or mixture upon which the Administrator of EPA has acted under TSCA.

The term *does not* include petroleum, crude oil or any refined product (such as gasoline, diesel or fuel oil) or synthetic oil, not otherwise specifically listed or designated as a hazardous substance under CERCLA, CWA or the Solid Waste Disposal Act (SWDA).

The term *does not* include natural gas, natural gas liquids, liquefied natural gas, or synthetic gas usable for fuel (or mixtures of natural gas and such synthetic gas).

The term *does not* include sewage or sewage/water mix, AFFF, or other substances not specifically designated by the laws cited above.

14-3.12 Incident Command System (ICS). An emergency response structure that defines roles and responsibilities to be used during crisis response or planning. The ICS consists of an individual in charge of the incident (the IC) and four functional groups (Operations, Logistics, Planning and Finance/Administration) that support the IC. During major incidents, including oil and hazardous substance spills, Federal agencies establish an ICS under the National Response System. State agencies may also establish an ICS. An ICS becomes a "Unified Command System" when the party responsible for the spill works jointly with state and Federal agencies. Where the Department is potentially responsible, the Department's designated Incident Commander, the state On-Scene Coordinators, and the FOSC make up the Unified Command. Reference (i) mandates the use of National Incident Management System (NIMS) for all Federal crisis response. ICS forms a part of the NIMS.

14-3.13 Integrated Contingency Plan. A contingency plan format that combines different facility response planning documents into a single response document. The ICP development may be beneficial for those facilities that need to meet multiple spill contingency regulatory requirements from various Federal agencies. An ICP may also be developed for facilities that are in close proximity and share response resources.

14-3.14 National Incident Management System. NIMS is a standardized approach to all hazards incident management and response, which includes oil and hazardous substance spills. Implemented by the Department of Homeland Security (DHS) in March 2004, it provides a consistent nationwide approach for Federal, state, local, and tribal governments to work effectively and efficiently together to prepare for, prevent, respond to, and recover from domestic incidents, regardless of cause, size, or complexity.

14-3.15 National Oil and Hazardous Substances Pollution Contingency Plan (NCP). The legal framework for Federal government oil and hazardous substance pollution contingency planning and response above the facility level. The NCP (see reference (a)) describes the NRT, the Regional Response Team (RRT) and the National Response Center (NRC) and designates the responsibilities of the Department in national oil and hazardous substance spill response planning.

14-3.16 National Response Plan. A plan mandated by HSPD-5 (reference (j)) that integrates Federal domestic prevention, preparedness, response and recovery plans into one all-discipline,

all-hazards plan. It establishes multi-agency coordinating structures at the field, regional, and headquarters level that provide national resources to support on-scene incident management efforts and to address impacts to the rest of the country, prevention of and preparation for subsequent events, and management of multiple incidents. It incorporates the provisions of reference (a), and provides a coordinating framework that reflects the incident management of both plans.

14-3.17 National Preparedness for Response Exercise Program (PREP). Federal guidance published by the USCG, PHMSA, EPA, and BOEMRE provides responders with a mechanism for compliance with the exercise requirements of OPA 90 and its implementing regulations. The guidance describes the number and type of exercises to be completed as well as documentation requirements (see Section 14-4.3).

14-3.18 National Response Center (800-424-8802). The 24-hour oil and hazardous substance spill notification center, located at USCG headquarters in Washington, DC. The NRC is the single Federal notification point (outside the Department chain of command) for emergency spill response. The NRC is responsible for notifying the predesignated FOSC of reported oil and hazardous substance pollution incidents.

14-3.19 National Response Team. The Federal response organization, consisting of 16 Federal agencies, that coordinates oil and hazardous substance spill response and contingency planning efforts. The EPA chairs the NRT and the USCG sits as vice chair.

14-3.20 Navigable Waters. The surface waters of the United States, including the territorial seas. The term includes:

- All waters currently used, used in the past, or susceptible to future use in interstate or foreign commerce, including all waters subject to the ebb and flow of the tide.
- Interstate waters, including interstate wetlands.
- All other waters such as intrastate lakes, rivers, streams (including intermittent streams), mudflats, sand flats, and wetlands, the use, degradation or destruction of which would affect or could affect interstate or foreign commerce including any such waters:
    - That are or could be used by interstate or foreign travelers for recreational or other purposes.
    - From which fish or shellfish are or could be taken and sold in interstate or foreign commerce.
    - That are used or could be used for industrial purposes by industries in interstate commerce.
- All impoundments of water otherwise defined as navigable waters under this sub-section.
- Tributaries of waters identified in paragraphs a through d of this sub-section, including adjacent wetlands.

– Wetlands adjacent to waters identified in paragraphs a through e of this sub-section: provided that waste treatment systems (other than cooling ponds meeting the criteria of this paragraph) are not navigable waters of the United States.

14-3.21 Oil. Animal, vegetable, synthetic or petroleum-based oil of any kind or in any form, including, but not limited to, fuel oil, sludge, oil refuse, oil mixed with wastes other than dredge spoils and refined products such as gasoline, diesel, jet fuel, cooking oil, and synthetic hydraulic and lube oils.

14-3.22 OU Oil and Hazardous Substance Response Plan. The Department plan to respond to oil and hazardous substance spill incidents within the OU's pre-assigned area of responsibility that are beyond the capability of the spilling facility or vessel or occur outside of facility boundaries.

14-3.23 OU On-Scene Coordinator (OUOSC). The OU official pre-designated to coordinate OU oil and hazardous substance spill contingency planning and to direct non-emergency OU oil and hazardous substance spill response and removal actions in a pre-assigned area (On-Scene Coordinators for emergency situations are pre-designated by the U.S. Environmental Protection Agency and U.S. Coast Guard as per 40 CFR § 300.5 and 14-3.12 above). The OUOSC may designate a QI who meets the qualifications of Section 14-3.25 to manage an oil spill incident.

14-3.24 Public Vessel. A vessel owned (or bareboat chartered) and operated by the U.S., or by a state or political sub-division thereof, or by a foreign nation, except when such vessel is engaged in commerce.

14-3.25 Qualified Individual. The term used in OPA 90 to designate the individual identified in spill response plans (such as FRP) who:

– Is available on a 24-hour basis and able to arrive at the facility in a reasonable time.

– Is familiar with the implementation of the plan.

– Is trained in the responsibilities of the QI under the plan.

– Has authority to activate the oil and hazardous substance spill response organization.

– Has authority to direct the obligation of funds required to carry out response activities.

– Will act as a liaison with the pre-designated FOSC.

Department On-Scene Coordinators (DOSC) and facility managers are assigned these responsibilities but may delegate QI responsibility to trained personnel in their respective plans.

14-3.26 Regional Contingency Plans (RCPs). RCPs are developed by the RRT to assist the FOSC in the event that an incident exceeds the response capabilities identified in the ACP. Among other things, the RCP sets forth criteria for issues such as the use of alternative response techniques (such as dispersants and in-situ burning).

14-3.27 Regional Response Team. The Federal response network under the NRT, consisting of representatives from regional Federal and state agencies. There are 13 RRTs, one for each of the 10 standard Federal Regions, and one each for Alaska, Oceania (Hawaii and the U.S. Pacific islands), and U.S. Caribbean islands. The Department, through NOAA, is a member of each RRT and assigns an executive agent to each RRT.

14-3.28 Release. Any spilling, leaking, pumping, pouring, emitting, emptying, discharging, injecting, escaping, leaching, dumping, or disposing, including an actual or substantial threat of any spilling, leaking, pumping, pouring, emitting, emptying, discharging, injecting, escaping, leaching, dumping, or disposing, into the environment, of any hazardous substance (including the abandonment or discarding of barrels, containers, and other closed receptacles containing any HS or pollutant or contaminant). The term "release" *excludes*:

- Any spilling, leaking, etc. that results in exposure to persons solely within a work place.
- Emissions from the engine exhaust of a motor vehicle, rolling stock, aircraft, vessel, or pipeline pumping station engine.
- Spilling, leaking, etc. of source, byproduct, or special nuclear material from a nuclear incident subject to the jurisdiction of the Nuclear Regulatory Commission, or any spilling, leaking, etc. of source, byproduct, or special nuclear material from any processing site designated under the Uranium Mill Tailings Radiation Control Act of 1978.
- The normal application of fertilizer or insecticides, herbicides, rodenticides, fungicides, biocides and other pesticide products whose registration and use is managed by the Federal Insecticide Fungicide and Rodenticide Act (FIFRA).

Reference (a) defines release to include a threat of release.

14-3.29 Release, Federally Permitted. Any release of HS in compliance with Federal law including the CWA, the CAA, the Solid Waste Disposal Act, the Marine Protection, Research, and Sanctuaries Act, and the Atomic Energy Act.

14-3.30 Reportable Quantity. A release of a CERCLA-listed HS or an EPCRA-listed EHS exceeding the limit for that substance. HS or EHS releases that equal or exceed these limits must be reported to Federal, state, and local authorities immediately upon discovery. See reference (h) for a list of RQs.

14-3.31 Responsible Party. The person or persons who have caused, or could potentially cause an HS release or oil discharge, including the following categories:

- Vessels: Any person owning, operating, or bareboat chartering a vessel, other than a public vessel;
- Onshore Facilities (other than a pipeline): Any person owning or operating the facility, except where possession and right to use the property has been transferred to another person by lease, assignment, or permit;
- Offshore Facilities (other than a pipeline or a deepwater port licensed under the

Deepwater Port Act of 1974 (33 U.S.C. § 1501 et seq.)): The lessee or permit holder of the area in which the facility is located or the holder of a right of use or easement granted under applicable state law.

14-3.32 Shipboard Oil Spill Contingency Plan (SOSCP). A plan of action for Department ships that identifies shipboard procedures for preventing, reporting, and responding to oil spills originating on the ship.

14-3.33 Significant and Substantial Harm. Under OPA 90 regulations (references (b) through (e)), EPA, USCG, BOEMRE, and PHMSA can identify certain facilities as being able to cause "significant and substantial" harm to the environment upon a release of oil. Regulators base their determinations on factors similar to the criteria to determine "substantial harm" (see Section 14-3.37 below), as well as the age of tanks, proximity to navigable waters, and spill frequency. Facilities identified as being able to cause "significant and substantial harm" must have their FRP approved by the applicable regulators.

14-3.34 Spill. Throughout this chapter, the term "spill" is used to include both releases of hazardous substances and discharges of oil.

14-3.35 Spill Contingency Plan (SCP). A plan of action for facility spill scenarios, which identifies, among other items, notification and response procedures. An SCP is used by facilities that are not required to meet the OPA 90 threshold requirements for FRP development. The magnitude and scope of the SCP is commensurate with storage capacity, facility operations and spill risks. It should address both oil and HS issues.

14-3.36 Spill of National Significance. A spill which, due to its severity, size, location, actual or potential impact on the public health and welfare, or the environment, or due to the necessary response effort, is so complex that it requires extraordinary coordination of Federal, state, local, and Responsible Party resources to contain and cleanup the discharge. National response to a spill of this magnitude is inferred and governed by reference (i), (j), and (l).

14-3.37 Substantial Harm. A "substantial harm" facility is one that could reasonably be expected to cause harm to the environment by discharging oil into or on navigable waters. In addition, the applicable regulations, listed in Table 14-1, provide more detailed information to help owners/operators determine whether their facility should be regarded as a "substantial harm" facility.

14-3.38 United States. The several States, District of Columbia, Commonwealth of Puerto Rico, Commonwealth of the Northern Marianas Islands, Guam, American Samoa, U.S. Virgin Islands, and any other territory or possession over which the U.S. has jurisdiction.

14-3.39 Vessel. Every type of watercraft or other artificial conveyance used, or capable of being used as a means of transportation upon the navigable waters of the U.S.

14-3.40 Worst-Case Discharge (WCD). The largest foreseeable discharge in adverse weather conditions. For specific information on calculating WCD, consult the applicable EPA, USCG, BOEMRE and/or PHMSA regulations (see references (b) EPA – 40 CFR Part 112, (c) USCG – 33 CFR Part 154, (d) BOEMRE – 30 CFR Part 254 and (e) PHMSA – 49 CFR Part 194).

14-4 Requirements

Oil and hazardous substance planning, training, exercises, reporting and response is governed by various Federal regulations. Specific regulatory applicability is dependent on a number of factors including facility location, nature of operations, and whether particular criteria and threshold requirements are met. EPA, PHMSA, USCG, BOEMRE, and OSHA all regulate portions of oil and hazardous substance preparedness and response. Most of the Department's facilities fall under USCG or EPA jurisdictions, but facilities should carefully evaluate their needs to meet other regulatory requirements.

14-4.1 Designated Responsible Official. The general duty of the DRO is to ensure day-to-day compliance with all environmental laws, regulations, and requirements imposed on their facility and their facility staff's activities. Each OU shall establish a policy regarding DROs. The policy shall define who are considered DROs and what their duties are. There are several environmental laws and regulations that assign specific responsibilities to responsible officials (e.g. Clean Air Act), therefore care should be taken and coordination should be done with the Department in establishing DROs. OUs shall be responsible for designating the Responsible Official for each facility and permit under their administration. It is generally better to appoint the DRO at the lowest level that still has the authority to submit permit applications and sign reports required by regulatory permits, as he/she will be closer to the operations being certified. The Department recommends that the DRO for a given facility or permit be the facility manager or equivalent. In no case shall the responsibility for permits be any lower than the Federal facility manager, operations director, or the manager responsible for facility operations. If an OU can assure itself that its facilities are not owned and they cannot be classified as the operator of a facility then the paragraph does not apply. Some indications that an OU could be classified as an operator of a facility:

- Does the facility have EPA ID number in the OU's name?
- Does the facility ship hazardous waste under their EPA ID number?
- Does the facility hold registration certificates for USTs in the OU's name?
- Does the facility contract for fuel deliveries under its OU name?
- Does the facility operate and/or accept fuel deliveries under their OU name and address?
- Does the facility hold Clean Water Act, Clean Air Act, or Safe Drinking Water Act operating permits?
- Does the facility report under EPCRA under their OU name and address?

14-4.2 Planning. All Department facilities shall maintain contingency plans to combat releases of hazardous substances or discharges of oil. Depending on a facility's size and the nature of its operations, it may come under the jurisdiction of several Federal, state and local contingency planning laws and regulations. Under some of these laws and regulations, contingency plans require regulatory approval. Facilities shall review the appropriate regulations to determine if they meet the criteria to prepare and submit plans.

(a) **Facility Response Plans.**

(i) Those facilities that store, transport, or handle oil and meet the specific threshold requirements of any of the OPA 90 regulations must submit a FRP to the appropriate regulatory agency (EPA, USCG, BOEMRE, or PHMSA). Each agency has established criteria that define which facilities fit this description. Table 14-1 shows a brief description of these criteria. Facilities should review the actual regulations to determine applicability.

(ii) Facilities meeting the criteria for more than one type of facility are "complex facilities." Some Department facilities may fall under this category. A few Department facilities with pipelines that leave the facility may also fall under the PHMSA's jurisdiction. Additionally, Department facilities with mobile sources may also fall under PHMSA's jurisdiction. No facility requires more than one FRP. However, each facility must submit an FRP to each Federal agency that has jurisdiction over it. The requirements for the FRP vary widely depending on the type of facility. There are certain essential elements common to all. These include:

- An individual who can be reached on a 24-hour basis and has the authority to take necessary response action.
- An emergency section of the plan that provides concise response direction.
- Extensive drills and exercises with specified documentation and record-keeping.
- A provision for regular update and review of FRPs.
- Provisions for responding to spills up to and including WCD.

(iii) "Substantial harm" facilities shall submit FRPs to the cognizant regulatory agency for information, and "significant and substantial harm" facilities shall submit FRPs to the cognizant regulatory agency for review and approval.

Table 14-1 FRP Threshold Requirements

Facility Type	FRP Threshold Requirement	Regulatory Agency	Citation
Non-Transportation-Related Onshore Facilities	(1) The facility, because of its location, could be reasonably expected to cause "substantial harm" to the environment; (2) The facility transfers oil over water to or from vessels and has a total oil storage capacity greater than or equal to 42,000 gallons; or (3) The facility's total oil storage capacity is greater than or equal to 1 million gallons, and one of the following is true: (a) The facility does not have secondary containment for each aboveground storage area sufficiently large to contain the capacity of the largest aboveground oil storage tank within each storage area plus sufficient freeboard; (b) The facility is located at a distance such that a discharge from the facility could cause injury to fish and wildlife and sensitive environments. (c) The facility is located at a distance such that a discharge from the facility would shut down a public drinking water intake; or (d) The facility has had a reportable oil spill in an amount greater than or equal to 10,000 gallons within the last 5 years.	EPA	40 CFR Part 112 (reference (b))
Marine Transportation-Related (MTR) Facilities	(1) The facility, because of its location, could be reasonably expected to cause "substantial harm" to the environment; (2) Fixed MTR onshore facilities capable of transferring oil to or from a vessel with a capacity of 250 barrels or more; (3) Mobile MTR facilities used or intended to be used to transfer oil to or from a vessel with a capacity of 250 barrels or more; and (4) Those MTR facilities specifically designated as substantial harm facilities by the COTP.	USCG	33 CFR Part 154 (reference (c))
Non-Transportation-Related Facilities; Offshore Platforms and Pipelines	Each owner or operator of an oil handling, storage, or transportation facility, located seaward of the coast line, must submit a spill-response plan to BOEMRE for approval.	BOEMRE	30 CFR Part 254 (reference (d))
Onshore Pipelines	Each operator of an onshore pipeline facility shall prepare a response plan and submit the response plan to PHMSA. NOTE: PHMSA allows numerous exceptions to this rule based on factors such as pipe size, operating pressure, age, and construction type. Consult reference (e) for specific criteria.	PHMSA	49 CFR Part 194 (reference (e))

(iv) Department barges are considered public vessels and are not required to have vessel response plans. However, these vessels may represent considerable spill risk and should be addressed in response plans. Facilities owning barges that are used only at that facility and are used to store, transfer, or handle oil for that facility should include these barges in their response plans.

(b) **Spill Contingency Plans.** Any Department facility that stores petroleum or HS and does not meet Federal requirements for preparing an FRP shall maintain an oil and hazardous substance SCP (see Section 14-5.2).

(c) **Oil and Hazardous Substance Response Plans.** OU oil and hazardous substance response plans, in combination with individual facility FRPs, must provide sufficient detail to ensure that the Department can respond to oil spills up to the WCD and to spills beyond facility boundaries in Department-managed areas.

(d) **Other Planning Requirements.** Facilities may be subject to additional HS contingency planning laws and regulations including RCRA, EPCRA and the CAA. These laws are discussed in detail in Chapters 13, 6 and 7, respectively. Additionally, state and local jurisdictions may have planning requirements. Facilities shall review the requirements for the area in which they are located and develop and submit plans accordingly.

14-4.3 Exercises. The CWA, as amended by OPA 90, requires facilities to train and exercise in order to be prepared to respond to oil spills. The law and implementing regulations were not proscriptive about the exact nature of the exercises that needed to be accomplished. The four Federal agencies (USCG, EPA, BOEMRE, and PHSMA) that have issued the implementing regulations under OPA 90 developed exercise guidelines to establish a workable exercise program that meets the intent of OPA 90. Compliance with this program is not mandatory, but facilities must follow a program that meets the intent of the CWA and its implementing regulations.

(a) **National Preparedness for Response Exercise Program.** PREP is a program developed by the four Federal agencies having regulatory responsibilities under OPA 90. It describes various types of exercises and the frequency of performance for each type. Exercises are conducted on a three-year cycle such that all plan components are tested at least once every three years. OPA 90 and its implementing regulations require that employees responsible for conducting spill response receive proper training to accomplish these tasks. The PREP guidelines are not regulations; however, the four regulatory agencies have agreed that participation in PREP will satisfy all exercise requirements imposed by OPA 90. Complex facilities utilizing PREP to meet OPA 90 exercise requirements need only to conduct one exercise to fully meet the requirements of all regulating agencies for that particular type of exercise. PREP outlines the following exercises:

– **Qualified Individual Notification Exercise.** The purpose of this exercise is to ensure the QI can be reached in an emergency to carry out his or her

required duties. Each facility shall conduct one of these exercises each calendar quarter.

- **Emergency Procedures Exercise.** The purpose of this exercise is to ensure personnel are capable of conducting the initial actions necessary to mitigate the effects of a spill. This type of exercise is considered by regulators to be optional for facilities; however, facilities should conduct this type of exercise as necessary to ensure personnel are capable of performing these tasks. If a facility conducts this type of exercise as an unannounced exercise, it would satisfy the requirement for an unannounced exercise (see below).

- **Spill Management Team (SMT) Tabletop Exercise.** The purpose of this exercise is to ensure that the SMT is familiar with the contingency plan and the individual responsibilities assigned by the plan, and is able to use it effectively to conduct a spill response. Facilities shall conduct one tabletop exercise annually. PREP lists several objectives that need to be accomplished at least once in a 3-year exercise cycle.

- **Equipment Deployment Exercise.** The purpose of this exercise is to ensure that personnel who would normally deploy and operate or supervise the operation of response equipment are capable of doing so. It is also to ensure that the equipment is in good working order. Facilities that maintain response equipment shall conduct this type of exercise semi-annually.

- **Unannounced Exercises.** This is not a separate exercise. It is a requirement that one of the emergency procedure exercises, tabletop exercises, or equipment deployment exercises be conducted without providing the participants with prior knowledge of the exercise. Facilities shall make one tabletop exercise, emergency procedure, or equipment deployment exercise unannounced each calendar year.

- **Worst Case Discharge Exercise.** FRPs require that a facility's SMT tabletop exercise schedule include a WCD scenario once in each three-year cycle. This is not an additional exercise, but serves as the SMT tabletop for that year.

- **Area Exercises.** Area exercises are designed to test the entire response community. These exercises may be led by regulators or by plan holders. Department facilities that participate in Area exercises shall document their participation to receive proper credit.

14-4.4 Response.

(a) **Oil and Hazardous Substance Spill Response.** Reference (a) describes the Department's responsibilities in responding to Department oil and hazardous substance spills. They are outlined here:

- In the event of an oil and hazardous substance spill from a Department facility or vessel, the Department will always assume initial responsibility for clean-up.

– In the case of a HS release that is on, or the sole source of the release is from, any facility or vessel under the control of the Department, the Department On Scene Coordinator (DOSC) assumes the role of the FOSC. As the FOSC, the DOSC will direct the Federal response effort, including coordination with the Area Committee and with other Federal, state, and local authorities.

– In the case of oil, the EPA or the USCG assumes the role of the FOSC—depending upon the location of the spill. Typically, the EPA or USCG FOSC will monitor the Department response effort and advise appropriate action, if necessary. If the EPA or USCG FOSC determines, however, that Department response is inadequate or inappropriate, then the FOSC has the authority to assume command of response efforts.

(b) **Non-Department Spill Response.** Department personnel may also respond to non-Department spills. As one of 16 Federal agencies that comprise the NRT, NOAA must provide any response assistance they can upon request of the FOSC, insofar as such assistance would not impair Department mission readiness.

(c) **Natural Resource Trusteeship.** The NCP assigns responsibilities to certain Federal and state agencies for protecting natural resources held in trust for the U.S. public (see reference (a)). In the aftermath of an oil and hazardous substance spill, the Secretary of Commerce is responsible for protecting natural resources within Department management and control.

14-4.5 Planning. The Department shall prepare to respond to Department oil and hazardous substance spill incidents and undertake immediate, direct action to minimize the effect of a Department oil and hazardous substance spill upon the environment. The Department's oil and hazardous substance pollution contingency planning and response organization executes this policy. This organization uses existing chains of command and regional coordination authorities to satisfy the requirements and intent of applicable statutes and regulations.

(a) **Facility Planning.**

(i) All Department facilities shall develop a response plan either an FRP or SCP depending upon regulatory requirements size and location of the facility.

- Facilities meeting the threshold requirements of the OPA 90 regulations (references (b) through (e)), outlined in Table 14-1, shall develop an FRP. Although the OPA 90 regulations cited here only describe requirements for oil FRPs, Department facilities may incorporate HS planning into FRPs or SCPs. Regardless of whether HS planning is included in these plans, or a separate planning document, Department facilities shall ensure HS planning is accomplished.

  OUs shall be responsible for providing technical assistance to facilities for developing response plans. OUs shall provide guidance to facilities on the minimum essential planning elements and stay abreast of planning developments and changing guidance in order to provide

facilities with accurate information.

- Any Department facility that stores petroleum or hazardous substances and does not exceed the oil storage threshold requirements of the OPA 90 regulations shall maintain an oil and hazardous substance SCP. Oil and hazardous substance SCPs should be tailored to the specific size and operations at the facility. At small facilities, the SCP must, at a minimum, be sufficient to protect employee safety and allow the facility to quickly contact external spill responders, the DOSC, and the facility's chain-of-command. At facilities that use their own personnel for emergency spill responders, the SCP must address all of the emergency response plan elements of OSHA's HAZWOPER regulations in paragraph (q) of reference (k). In most cases, SCPs do not need to be submitted for agency approval; however, such plans should be readily available for agency review if requested.

(ii) For spills beyond their capability, facilities may rely on the DOSC for additional resources. Note that, in accordance with PREP guidelines, a facility's FRP must include the DOSC as part of the SMT for WCDs in order for the facility to receive PREP credit when the DOSC responds to a facility incident or conducts WCD exercises.

(iii) In addition to response assets available from local Department activities, commercial oil pollution response assets, available through Basic Ordering Agreements (BOAs) pre-negotiated by the USCG, may be a facility manager or contracting officer's best means of meeting the response requirements of more significant spill scenarios. Planning efforts should consider these assets and where appropriate, include these assets in response plans. BOA activation is addressed in 14-4.7.

(iv) Membership in oil spill cooperatives potentially exposes the Department to the risk of significant liability. Accordingly, Department activities considering membership in an oil spill cooperative shall forward a request to participate to OUs via their chain of command.

(v) Facilities shall maintain plans in accordance with applicable regulations. At a minimum each plan shall be reviewed and updated annually. Depending on personnel turnover rate, responsibility and notification sections shall be updated more frequently, at least quarterly. Each plan shall be updated and resubmitted as required by regulations, or, at a minimum, every five years or after any major spill event.

(vi) Facilities shall report, via the DOSC, the status of FRPs and SCPs to OUs annually.

(b) **OU Response Oil and Hazardous Substance Response Plans.** OUs are required to develop plans to combat oil or hazardous substance spills that exceed

facility capabilities or occur outside of facility boundaries. This shall be a comprehensive response plan, similar to an FRP, but more general in nature. It shall cover notifications, responsibilities, initial actions, resources, sensitive area prioritization, disposal, natural resource damages, etc. It shall be based on WCD scenarios of areas managed by the Department or adjacent to Department-managed areas, as well as scenarios that occur beyond facility boundaries.

These plans shall be consistent and aligned with ACPs and OUOSC plans for adjacent DOC-managed areas (both ashore and in coastal and marine areas). Delineation of responsibility between vessel and on-shore facility response plans shall be clear.

OUOSC plans shall be signed by the OUOSC to ensure management endorsement and awareness. OUOSC plans shall be reviewed and updated annually, with notification sections validated quarterly. Plans shall receive a thorough review and update, including a new signature, every five years.

(c) **Integrated Contingency Plan.** A facility may choose to develop an ICP per NRT guidance published 22 August 2003, reference (l). This is not an additional plan. The guidance was intended for facilities that wanted to integrate response plan requirements found in various EPA, DOT, USCG, and OSHA regulations. An ICP is not a suitable solution for all cases, and the added complexity and potential cost of maintenance should be considered when determining appropriateness of this option.

ICPs may also be used in locations that have facilities that share response resources. Areas with a high concentration of Department facilities may benefit from having a single plan with appendices that cover each facility. Consultation with regulators regarding acceptance of such an arrangement shall be conducted prior to combining plans into a single plan.

(d) **Shipboard Oil Spill Contingency Plan.** All Department vessels are required to prepare and maintain an SOSCP that addresses spills from vessels. This plan shall be reviewed and updated at least annually to ensure that it is consistent with current ship conditions and policies. SOSCPs shall contain up-to-date DOSC contact information in order to ensure notification of spills to the appropriate DOSC.

(e) **Emergency Management (EM).** Facility managers and DOSCs shall coordinate planning activities with emergency management functions as much as possible. Oil and hazardous substance plan information should either be incorporated or referenced in EM plans as part of the national policy outlined in references (a) and (l) and the Department's overall EM approach to ensure efficient use of resources, minimal duplication of effort, and maximum readiness.

(f) **Protective Booming.** Protective booming strategies shall be developed and implemented for petroleum-oil-lubricant (POL) transfer operations when any of the following conditions exist:

– Protective booming is required by law or regulation.

– The nature or volumes of fuels to be transferred is of sufficient magnitude that prudent operational risk management indicates that protective booming is required.

– When environmentally sensitive areas are likely to be negatively impacted in the event of a spill.

– When a potential spill could generate significant negative public perception or so adversely affect political relations with a host nation or local jurisdiction that continued port access may be jeopardized.

14-4.6 Exercises.

(a) **OPA 90 Facilities.** OPA 90 regulated facilities shall follow the PREP guidelines to accomplish exercise requirements. Facilities shall document exercise accomplishments in accordance with PREP guidelines and the appropriate regulating agency(ies) to ensure that exercise credit is received. Where possible, credit should be taken for actual spill responses conducted and for operations conducted during training evolutions. Facilities may take PREP credit for completing a WCD exercise when a DOSC conducts an exercise of this type; however, the facility's FRP must name the DOSC as part of the WCD SMT, and the exercise must be similar in scope as the Facility's FRP WCD requirements. Department facilities should coordinate these exercises with the DOSC and participate when possible to minimize cost. Additionally, Facility Commanders and DOSCs shall coordinate exercises with EM exercises as much as possible. Oil and hazardous substance information should be incorporated into EM exercise scenarios and oil and hazardous substance personnel shall participate in EM exercises where applicable.

Facility managers shall forward an annual report to the cognizant DOSC indicating intended three-year exercise schedule and previous year accomplishments. As much as possible, facility SMT personnel shall participate in DOSC or Area exercises to reduce costs. Department facilities that participate in these exercises shall be sure to document their participation to receive proper credit. DOSCs shall review the annual reports and adjust training plans as appropriate.

(b) **Non-OPA 90 Facilities.** Non-OPA 90 regulated facilities shall develop an exercise program commensurate with facility complexity and risk that ensures that planning documents are adequate for response and personnel assigned have the necessary skills to respond. These programs shall follow the principles of the PREP guidelines, in terms of exercise type and frequency, however exercise scope shall be appropriate to the complexity and risk at the facility. Exercise accomplishments shall be documented. Actual spill responses and training evolutions may serve to meet the intent of exercises, and the exercise schedule should be adjusted to reflect these evolutions. Facilities should coordinate these exercises with communities when possible to minimize cost.

Facility managers shall forward an annual report to the cognizant DOSC indicating intended three-year exercise schedule and previous year

accomplishments. As much as possible, facility SMT personnel shall participate in DOSC or Area exercises to reduce costs. Department facilities that participate in these exercises shall be sure to document their participation to receive proper credit. DOSCs shall review the annual reports and adjust training plans as appropriate.

(c) Facilities may utilize the SMTs for response to WCDs. OUOSCs in themselves are not regulated under OPA 90, however, some FRPs must rely on the OUOSC for WCD support, and, as such, OUOSCs shall conduct an SMT tabletop exercise annually. Once in each 3-year period, the tabletop exercise shall include a WCD scenario. OUOSCs shall ensure that they are familiar with the spill scenarios of Department vessels, all FRPs, SCPs and SPCRs within their area of responsibility. OUOSCs shall ensure that the WCD scenario involves core components of fleet units, FRPs, SCPs, and SPCRs and includes interaction between the OUOSC and FIC SMTs.

(d) **Equipment.** Department spill response equipment shall be drilled/exercised in accordance with the designated exercise program (PREP or otherwise) to allow activities listing Department spill response equipment in their plans to take credit accordingly.

14-4.7 Oil and Hazardous Substance Spill Response. The Department will respond immediately and effectively to all Department oil and hazardous substance spills. Department policy is to conduct all Department oil and hazardous substance pollution responses in such a manner as to retain control of the response. The FIC or DOSC shall take all appropriate measures to ensure they maintain control of the oil and hazardous substance incident. If the EPA or USCG FOSC determines, however, that Department response is inadequate or inappropriate, then the FOSC has the authority to assume command of response efforts. In all cases, COs and masters of public vessels remain in command of their vessels and personnel.

(a) **Basic Ordering Agreements (BOAs).** Resources can be accessed from contractors who have pre-negotiated BOAs. These assets can be used to augment a facility's equipment and personnel resources in the event of a significant emergency. Access to BOAs is managed by OUs. If a spill exceeds a facility's response capabilities and BOA resources are needed, the facility manager or Commanding Officer should request assistance from their OU to request BOA activation.

When engaging commercial spill response assets, Department commands shall carefully assess and monitor legal, financial and technical factors.

(b) **Collision with Department Vessels.** Where a collision between a Department vessel and non-Department vessel results in an oil and hazardous substance spill from the non-Department vessel, the Department will provide immediate spill response assistance, regardless of fault. In such situations, the cognizant Department Vessel Commander Officer shall report the spill, monitor the situation and offer appropriate support to the stricken vessel.

(c) **Non-Department Spills (other Federal or private).** The FOSC may request Department response assistance for non-Department spills. The Department will respond to such requests under the terms and conditions of reference (j) and

reference (a).

(d) **Natural Resources Damages.** In the case of a Department oil and hazardous substance spill or a non-Department spill which threatens natural resources within Department management or control, follow the guidelines in Chapter 18 of this manual.

(e) **Health and Safety.** The health and safety of Department personnel and the public shall be the highest priority of all Department oil and hazardous substance spill response operations. Responders shall comply with all requirements of references (g) and (k).

14-5 Responsibilities

14-5.1 The Office of the Secretary. OSEEP shall:

(a) Provide technical assistance to OUs in the development and update of oil and hazardous substance spill contingency planning and response instructions;

(b) Prepare and maintain guidance that includes a template with minimum content requirements and essential elements for compliance with current regulations;

(c) Assist OUs in the development and updating of facility DOSC plans to include vessel spills and worst case spill scenario planning; and

(d) Establish a mechanism for coordinating the collection and sharing of lessons learned from major drills, exercises and spill events across all 12 OUs

14-5.2 OUs shall:

(a) Develop and periodically update an oil and hazardous substance spill contingency planning instructions specifying DOSC and facility responsibilities for oil and hazardous substance spill contingency planning and response;

(b) Ensure that facilities pre-designate DOSCs to plan for and direct response efforts to oil and hazardous substance spills from Department vessels and ensure fleet and facility DOSC responsibilities are clearly delineated;

(c) Ensure that facilities develop, annually review, and periodically update FRPs, SCPs or SPCR plans in accordance with this Chapter. Review FRPs or SCPs for consistency with appropriate state and local environmental and emergency planning authorities;

(d) Ensure that facilities provide them with WCD scenarios from completed FRPs or SCPs;

(e) Identify and fund oil spill preparedness and response preparedness requirements;

(f) Determine requirements, budget for, and obtain equipment for spill response;

(g) Provide oversight of facility oil and hazardous substance contingency planning and response requirements to ensure that all required training, drill, equipment readiness, and exercise requirements are met and appropriately documented, and that planning efforts for WCD exercises are coordinated between facilities and ships;

(h) Ensure sufficient expertise exists to operate the Department's equipment inventory for spill events. Ensure such resources are available for immediate response;

(i) Ensure that facilities maintain the readiness of the Department spill response personnel and equipment assigned to them;

(j) Ensure facilities fully comply with Federal, state and international/foreign laws and regulations for spill prevention, preparedness, and response;

(k) Ensure that facilities promptly make all required Federal, state, and local notifications for Department oil and hazardous substance spills and make Department chain of command notifications, and use the Incident Notification form located in Appendix F to notify OSEEP;

(l) Ensure that facilities oversee response efforts for Department oil and hazardous substance spills as the FIC within pre-assigned areas until response is completed or relieved;

(m) Ensure that facilities mitigate and clean up oil and hazardous substance spills from vessels and facilities and reimburse, as appropriate, other facilities that provide assistance;

(n) Ensure that facilities integrate oil and hazardous substance spill preparedness and response program requirements into their Emergency Management Programs;

(o) Maintain an OU-wide oil and hazardous substance spill report database and provide periodic and annual reports to OSEEP;

(p) Assist facility managers with the development of oil and hazardous substance spill contingency and response plans. Prepare and maintain guidance that includes minimum content requirements and essential elements for compliance with current regulations;

(q) Collect the status of facility exercise accomplishments, requirements, and equipment readiness to ensure that facilities accomplish all required exercises;

(r) Conduct spill response exercises to test the validity and effectiveness of the SRD teams;

(s) Accomplish all required exercises and conduct combined exercises, whenever appropriate to reduce costs;

(t) Ensure that facilities incorporate drill and exercise requirements into routine business or other emergency drills wherever practicable;

(u) Ensure the Department's equipment inventory for major and offshore spill events is drilled/exercised in accordance with this document;

(v) Assist facilities in meeting exercise requirements;

(w) Establish a spill response training program consistent with this chapter and regulatory requirements;

(x) As requested, assist facility managers in the determination of emergency response training needs;

(y) Ensure that all staff with oil and hazardous substance response responsibilities (including but not limited to safety, public affairs, logistics, legal, comptroller, security, communications and transportation personnel) are properly trained in accordance with section 14-6 below, maintain their competencies, and become familiar with the provisions of this chapter;

(z) Ensure that facilities maintain training records and documentation as required by Federal, state, and local regulations;

(aa) Ensure that facilities tailor training curricula to include state and local emergency response laws and regulations;

(bb) Ensure that Operation Orders and instructions containing guidance or policy for OU oil and hazardous substance pollution response are consistent with this guidance;

(cc) Ensure facilities can control, contain and clean up oil and hazardous substance spills, and evaluate impacts to natural resources;

(dd) Direct all major non-emergency and removal efforts for Department oil and hazardous substance spills within Department-managed areas to include coastal areas out to the 12 nm zone, unless otherwise instructed;

(ee) Ensure the health and safety of response personnel at any point during on-scene response; and

(ff) Coordinate OU access to USCG BOAs for response to spills beyond the capability of the facility.

(gg) Specifically, **NOAA shall** be responsible for:

(i) Developing, issuing and maintaining a SOSCP guide;

(ii) Coordinating with vessel Commanding Officers to include spill response exercises in appropriate vessel exercises where risk of spills warrants; and

(iii) Providing coordination and direction for the cleanup of oil and hazardous substance spills from Department ships outside 12 nm unless otherwise directed.

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14-6 Training

14-6.1 All Department facilities that store oil or HS in regulated quantities shall ensure personnel are trained to combat releases of HS or discharges of oil. A variety of training is required to ensure that personnel are adequately enabled to carry out the response defined in each of a facility's plans. (See Chapter 2 for additional information on training.)

(a) **OSHA Training.** OSHA, through paragraph (q) (6) of reference (k), requires training for all emergency response personnel before they are permitted to engage in emergency response operations. Required training, commonly referred to as HAZWOPER training, includes training on identification of hazards, personal protective equipment, and other safety related measures. Depending on the nature of the position or expected responsibilities of the individual, incident management procedures may also be required.

(b) **Facility Response Plan Training.** EPA, USCG, BOEMRE, and PHMSA (references (b) through (e)), require applicable facilities to conduct training as part of their FRP requirements. The training requirements are very general in nature and do not include specific performance targets, frequency or other measurable criteria, however, personnel must be trained to perform assigned duties.

(c) **National Incident Management System Training.** NIMS sets forth the requirement for preparedness activities that includes an ICS for managing incident response. This training incorporates training on NIMS operations and ICS roles and responsibilities. There are various levels of training required, depending on assigned responsibilities. (See references (a) and (l)).

14-6.2 OUs shall train all Department personnel involved in oil and hazardous substance spill contingency planning and response in accordance with Chapter 2 of this instruction and applicable regulations. Facility managers and vessel Commanding Officers shall ensure that assigned personnel have the requisite training to perform response duties while maintaining safety as the number one priority.

Facility managers and DOSCs shall coordinate training activities with emergency management functions as much as possible. Oil and hazardous substance training elements should be incorporated into EM training and oil and hazardous substance personnel shall, where possible, take advantage of applicable courses under the EM program.

(a) **Occupation Safety and Health Administration Training.** Department personnel assigned response duties shall receive HAZWOPER training commensurate with responsibilities. This training must be completed prior to a spill event to avoid any delays in response. Reference (k) section (q) (6) lists required training, but is written for uncontrolled HW sites in general. Additional guidance is available from OSHA that addresses the applicability of these regulations to oil spill response training in more detail. OSHA requires that this training be updated annually.

(b) **Facility Response Training.** Department facilities owning and maintaining spill response equipment will act as the first responder to a Department oil spill. As such, Department personnel must train on the safe use of this equipment and in effective response techniques. This training should typically be received annually, but dependent on the level of expertise of the Facility Response Team (FRT), the amount of personnel turnover, the number of actual deployments, and other factors, may be received at an interval not to exceed once every two years.

(c) **National Incident Management System Training.** It is Department policy to comply with reference (l) regarding NIMS and ICS training. ICS is an effective crisis management system and has been proven for oil spill response. All personnel assigned to an SMT shall receive an appropriate level of ICS training. Facility managers and DOSCs shall determine the expected level of participation of SMT members and provide an appropriate level of ICS training.

(d) **General Training.** It is imperative that management have an understanding of environmental issues beyond oil and hazardous substance response and OSHA concerns. Awareness training, such as general environmental and spill management, not noted above may be necessary to ensure that managers are fully capable of understanding the issues and problems that may arise surrounding oil and hazardous substance spill, response, mitigation and management.

14-7 Reporting Requirements

14-7.1 Reporting to the Office of the Secretary.

(a) **Internal Department Reporting Requirements.** OUs shall immediately report the fact and nature of an oil and hazardous substance spill from Department vessels or facilities in any location worldwide that meets the following criteria:

- Any oil and hazardous substance spill reported to the NRC (as described in section 14-7.2(b)), state or local authorities;
- Any discharge of oil that causes a film or sheen upon, or discoloration of, the surface of the water or adjoining shorelines, or causes a sludge or emulsion to be deposited beneath the surface of the water or upon adjoining shorelines; or
- Any oil and hazardous substance spills that may endanger critical water areas, have the potential to generate public concern, become the focus of an enforcement action, or pose a threat to public health or welfare.

(b) **Reporting Procedures.** OUs shall report to OSEEP as follows:

- By voice immediately upon receiving notification of the spill;
- By e-mail according to the guidelines below as soon as practicable;
- By updated e-mail as soon as the reporting activity becomes aware of new

information concerning the origin, quantity, type, operation under way, root cause, or lessons learned of the spill. Similarly, ***if the final estimate of the amount released differs substantially from the amount initially reported,*** the reporting activity must send an updated message to all action and info addresses on the original spill message.

NOTE: If the NRC, state, or local authorities is called, e-mail OSEEP. If you are in doubt, e-mail OSEEP.

(c) **Message Contents for Oil Spill and HS Release Reports.**

(i) Reports of oil discharges shall contain the following information. If any of these are unknown, report "unknown" until such time as they are definitively established:

– Number of gallons spilled. Estimates of volume spilled using sea level visual observation of oil on water are unreliable. To take the uncertainty out of volume estimation, reporting facilities or vessels should examine loss at the source (i.e., through tank soundings or flow rate calculations);

– Spill location, local time, and date;

– Official activity name and contact name, phone number, and e-mail address;

– Source of spill;

– Type of oil discharged;

– Cause of spill, and then provide a narrative description of specific spill cause:

– Spill environment:

  - Weather: clear, overcast, partly-cloudy, rain, snow, etc;

  - Prevailing wind at scene: direction (degrees true from), speed (mph);

– Areas damaged or threatened:

  - Body of water, area or resources threatened or affected; and

  - Nature and extent of damage to property, wildlife or other natural resources (if any).

– Whether a telephonic report was made to the National Response Center. If a report was made, list date, time, NRC report/case number, name of NRC official taking report and quantity of oil reported. If a report was not made, provide reason why (e.g. beyond 12 nm from US shores, no threat to

navigable water, etc.);

(ii) Reports of HS releases shall contain the following information. If any of these are unknown, report "unknown" until such time as they are definitively established;

– Local time and date of release; and

– Facility or vessel originating release.

– Release location:

  - List city, state, facility name and specific location (building designation); and

  - For release during transportation, give exact location (highway mile marker or street number and city).

– Amount released:

  - Use convenient units of weight or volume (kg, lb., gallons, liters, etc.);

  - For continuous release, estimate rate of release and amount left in container;

  - Estimates should be made by examining loss at source: sounding tank, calculating flow rate of spill;

  - ***Unreliable estimates of volume using visual observation of HS on water may not be reported here; and***

  - If amount unknown at time of this report, ***list only "Unknown"*** until such time as definitively established.

– Hazardous substance released:

  - If Extremely Hazardous Substance, headline this paragraph "EXTREMELY HAZARDOUS SUBSTANCE RELEASED:" See Chapter 13 for additional notification requirements;

  - Consult container labels, user directions, reference books, expert advice;

  - Provide Chemical Abstract Service Number (CAS), chemical/product names, synonym;

  - Type of operation at source, plating shop, painting shop, HW facility, truck, ship, pipeline, ship rebuilding, entomology shop, etc;

- Cause of release:
    - Provide narrative description of specific cause of release;
    - Account for personnel error, equipment failure, etc. directly contributing to release;
    - If cause unknown at time of this report, ***list only "Unknown"*** until such time as definitively established.
- Release environment. Describe scene of release. Include information on physical characteristics, size and complexity of release and weather conditions. For example: "Solvent released formed shallow pool covering area about 30 ft by 45 ft of bare concrete. Solvent slowly running into storm drain. Pool emitting highly toxic, flammable vapors. Dark clouds threatening rain. Light wind drifting vapors northbound to residential area about 30 ft above ground;"
    - Areas damaged or threatened:
        - Describe actual and potential danger or damage to surrounding environment;
        - Identify body of water, area or resources threatened or affected; and
        - Nature and extent of damage to property, wildlife or other natural resources (if any).
- Notifications made and assistance requested:
    - List all organizations informed of release;
    - If telephonic report to National Response Center made, list: record of telephonic report; NRC report/case number; name of NRC official taking report; quantity of hazardous substance released; and name and title of person making telephonic report; and
- Activity contact for additional information, including name, position, telephone number, and e-mail address.

14-7.2 Reporting to Other Federal, State, and Local Agencies.

(a) Facilities that meet threshold requirements of the OPA 90 regulations shall submit a Facility Response Plan to the appropriate regulatory agency as per 14-4.2(a) above.

(b) **Reporting Oil and Hazardous Substance Spills within the U.S.** Federal law requires oil and hazardous substance spills within U.S. jurisdiction (including waters of the U.S. EEZ, territories and possessions) that meet or exceed the quantities listed below be immediately reported to Federal authorities. Federal law provides criminal penalties for failure to report oil and hazardous substance spills. These reports shall be submitted to the NRC at 1-800-424-8802 or 202-267-2675. State and local jurisdictions may impose reporting requirements that differ from Federal requirements. Facilities must be cognizant of the reporting thresholds for the State and local area. This may be particularly true for oil spills that do not reach or threaten to reach navigable waterways.

(i) **Quantities to Report.** Facilities shall report to the NRC:

- Any discharge of oil which causes a film or sheen upon, or discoloration of, the surface of navigable water or adjoining shorelines, or causes a sludge or emulsion to be deposited beneath the surface of navigable water or upon adjoining shorelines;
- Any discharge of oil, which threatens to reach the navigable waters of the United States;
- Any release of a hazardous substance in the United States (its territories, possessions or navigable waters) in excess of quantities proscribed by reference (h);
- When in doubt, call the NRC.

(ii) **Vessels.** While public vessels are generally exempt from State and Federal reporting requirements, commanding officers and masters of Department vessels shall immediately report the fact and nature of an oil and hazardous substance spill from their vessels to the NRC.

(iii) **Hazardous and Extremely Hazardous Substances.** In addition to the reporting requirements set forth above, EPCRA requires all activities to report to their SERC and LEPC any release of a reportable quantity of a HS or an EHS that crosses the facility boundary or escapes to the atmosphere. See Chapter 6 for additional information.

(c) **Reporting Oil and Hazardous Substance Spills outside the U.S.** For host nation reporting requirements, vessel commanders should refer to relevant treaties or agreements with the host nation.

(d) Department vessels and facilities shall make appropriate notifications immediately upon the discovery of a spill in accordance with applicable regulations as described in this section. Facilities shall not delay NRC notification in order to obtain more detailed information about the incident. Immediate voice notification to the NRC fulfills all Federal notification requirements. If reporting activities cannot reach the NRC by voice on the first attempt, they shall immediately notify the nearest EPA office or USCG station. Reporting to EPA or USCG does not relieve the spiller of the responsibility to report to the NRC.

14-7.3 Reports from Vessels. Vessels shall make necessary notifications to the NRC and the Department chain of command and ensure messages are sent in accordance with the above guidelines in 14-7.1 and 14-7.2 above. Facility commanders or DOSCs shall make all other necessary notifications as appropriate.

14-7.4 Excess Department Property. Caretakers shall continue to report oil and hazardous substance spills from excess Department property until the property passes to the management and control of local reuse authorities.

14-7.5 Sheen Sightings. Responsible environmental stewardship and longstanding maritime tradition require that vessel commanding officers report to proper authorities any oil on the water's surface discovered in the course of daily operations— whether at sea or in port—whether attributable to Department sources or not. Accordingly, vessel commanding officers shall submit voice reports to appropriate Federal, state, and local authorities for any oil sheen discovered by Department personnel— even if the cause or source of the spill is unknown. Such reports, however, should ***not speculate as to cause or source*** and ***clearly indicate that a Responsible Party cannot be identified*** from information then currently available.

CHAPTER 15:
OIL MANAGEMENT

15-1 Scope.

http://www.osec.doc.gov/C:Documents and SettingsrrobertsApplication DataMicrosoftLocal SettingsTemporary Internet FilesContent.OutlookOW9BQX1J40 CFR 279

15-1.1 This chapter identifies requirements and responsibilities applicable to the prevention of oil pollution and the collection, reclamation, and disposal of oily wastes and used oils ashore. Requirements apply in all areas within the United States, Commonwealth of Puerto Rico, Virgin Islands, Guam, American Samoa, and the Trust Territory of the Pacific Islands. Section 15-4.13 of this chapter will only apply to NOAA, as NOAA is the only OU with ships.

15-1.2 Related Chapters. Chapter 14, Oil and Hazardous Substance Spill Preparedness and Response; Chapter 16, Storage Tanks; and Chapter 17, Hazardous Waste Management.

15-1.3 References.

(a) 40 CFR Part 260-266, Hazardous Waste Management;

(b) 33 CFR Part 154, Oil Pollution Prevention Regulations for Marine Oil Transfer Facilities;

(c) 33 CFR Part 156, Oil and Hazardous Material Transfer Operations;

(d) 40 CFR Part 112, Oil Pollution Prevention;

(e) 40 CFR Part 280, Technical Standards and Corrective Action Requirements for Owners and Operators of Underground Storage Tanks;

(f) 40 CFR Part 110, Discharge of Oil;

(g) 40 CFR Part 279, Standards for the Management of Used Oil;

(h) 49 CFR Part 130, Oil Discharge Prevention and Response Plan for Oil Transportation; and

(i) 49 CFR Part 194, Response Plan for Onshore Oil Pipelines.

15-2 Legislation

15-2.1 Clean Water Act as amended by the Oil Pollution Act of 1990, 33 U.S.C. 1251**.** The CWA prohibits the discharge of oil and hazardous substances in such quantities as may be harmful into or upon the navigable waters of the United States, including the contiguous zone, exclusive economic zone and adjoining shorelines within 12 nautical miles of the U.S. coast or in any waters which may affect natural resources of the EEZ.

Under the CWA, EPA published oil pollution prevention regulations in 1973 (amended in 1974, 1976, 2002 and 2004). These regulations state that a discharge of oil in a harmful quantity is one that violates applicable water quality standards or causes a sheen on the water. These regulations also include requirements for both oil spill prevention and response. Among other things, OPA 90 preserves State authority to establish laws governing oil spill prevention, response and periodic drills and exercises.

References (b) and (c) are the regulations promulgated by the USCG for transportation-related facilities to regulate the bulk transfer of oil and hazardous materials and ensure compliance with OPA 90. These regulations require facilities to develop operations manuals and spill contingency plans, provide personnel training, and conduct testing of transfer equipment. These regulations apply to facilities that are capable of transferring oil or hazardous materials, in bulk, to or from a ship, where the ship has a total capacity from a combination of all bulk products carried, of 250 barrels or more. Reference (d) is the regulation promulgated by EPA to comply with OPA 90 for non-transportation related facilities. It requires the preparation of Spill Prevention Control and Countermeasure (SPCC) Plans and contains specific guidelines for the design and management of bulk storage containers. The guidelines include preventative measures such as requirements for secondary containment, control of drainage from containment areas, corrosion protection of buried metallic tanks and piping, inspection and integrity testing of aboveground tanks and piping, requirements for spill prevention devices such as high level alarms, security requirements for oil storage areas, and personnel training requirements. It also contains specific requirements for responding to releases of oil once they occur. These regulations apply to facilities that, due to their location, could reasonably be expected to have a discharge of oil (based solely upon geographical and location aspects of the facility) and which has completely buried oil storage capacity above 42,000 gallons (aggregate, excluding the capacity of all UST's subject to all of the requirements of reference (e)), or aboveground oil storage capacity greater than 1,320 gallons (aggregate).

15-2.2 The Act to Prevent Pollution from Ships (APPS) requires heads of Federal departments to prescribe standards for ships under their authority that are consistent with those of the International Convention for the Prevention of Pollution from Ships Protocol "so far as it is reasonable and practicable without impairing the operations or operational capabilities of such ships." APPS applies to U.S. ships worldwide.

15-3 Terms and Definitions

15-3.1 Bulk Oil Storage Container. Any container used to store oil. These containers are used for purposes including, but not limited to, the storage of oil prior to use, while being used, or prior to further distribution in commerce. Oil/Water separators and grease traps are considered bulk storage containers in reference (d), however, they are generally exempted from any requirements per paragraph 112.1(d)(5) of reference (d) unless they are used for the purpose of storing oil (see 67 FR 47068 for more information). Under reference (d), only bulk storage containers of 55 gallons or more in capacity are regulated. Oil Filled Operating Equipment is not considered to be a bulk storage container; however, operating equipment with onboard petroleum storage capacity of greater than 55 gallons is subject to the general secondary containment requirements in paragraph 112.7(c) of reference (d).

(a) **Aboveground Storage Tank (AST).** Bulk storage containers or storage tanks not clearly identified as Underground Storage Tanks (USTs) and that are normally placed on or above the surface of the ground. For purposes of this section containers in vaults, bunkered tanks or partially buried tanks are considered aboveground storage tanks or aboveground storage containers. Note that a tank defined as a UST in reference (e) may also be defined as an AST in reference (d).

(b) **Completely Buried Tank.** Any container completely below grade and covered with earth, sand, gravel, asphalt, or other material. Containers in vaults, bunkered tanks, or partially buried tanks are considered aboveground storage containers in reference (d). Bunkered tanks and partially buried tanks are typically considered as USTs under reference (e).

(c) **Partially buried tanks.** A storage container that is partially inserted or constructed in the ground, but not entirely below grade, and not completely covered with earth, sand, gravel, asphalt, or other material. Note that a partially buried tank is often considered a UST under reference (e) and an AST under reference (d).

(d) **Oil Filled Operating Equipment.** Equipment where oil is used 'operationally' which includes electrical substations, electrical transformers, and certain hydraulic or manufacturing equipment. It does not include motive power containers which are used solely to power the movement of a motor vehicle (i.e., fuel tanks) or ancillary onboard oil-filled operational equipment (i.e., hydraulics and lubrication systems) used solely to facilitate its operation. This exemption does not apply to a bulk storage container mounted on a vehicle for any purpose other than powering the vehicle itself (i.e., a tanker truck or a mobile refueler). Examples of oil-filled operational equipment covered by SPCC regulations may include oil-filled electrical transformers, switches, constant current regulators, hydraulic lifts, etc. Only oil-filled operating equipment containing 55-gallons or more of oil is regulated under reference (d). Oil-filled operating equipment is not considered to be a "bulk storage container."

(e) **Loading/Unloading Rack.** For purposes of the reference (d) SPCC regulations, the loading/unloading rack is defined as a facility where tank trucks are loaded or unloaded at a fill stand type "rack" which is connected to a tank or tanks. Evidence that a facility has a "rack" is the presence of pipes, pumps, and loading arms. Loading/unloading racks are subject to the requirements of paragraph 112.7(h) in reference (d). Other SPCC regulated petroleum storage tank loading and/or unloading areas not having a "rack" as described above are subject to the paragraph 112.7(c) general secondary containment requirements in reference (d).

(f) **Mobile and Portable Facilities.** Facilities designed to transport and deliver petroleum products to various locations are considered mobile facilities, such as tanker trailers or fueling trucks. Portable facilities are containers that are temporary in nature and not fixed, and are not mobile, such as a portable fuel totes or containers. Normal staging or parking areas for such facilities must meet SPCC requirements of reference (d). When mobile and portable facilities are in transport to support mission requirements only general spill prevention and control requirements apply. An example would be Mobile Fuel Tanker Trucks (MFTs). When they are not engaged in operations and are being staged, they must have containment provisions at the staging area.

15-3.2 Designated Responsible Official. The DRO is the senior individual who assumes responsibility for the accuracy and completeness of permit applications, permits and statutorily required environmental compliance. A DRO could be subject to criminal sanctions under some environmental laws and regulations. The DRO will also at times have to certify ongoing compliance with all permit provisions once the permit is issued. The DRO is typically a facility or

program manager with direct responsibility for a facility or program that is subject to environmental requirements.

15-3.3 Lubricating (Lube) Oil. Crankcase oil, cutting oil, gear lubricant, metalworking lubricant, hydraulic oil, and transmission fluid.

15-3.4 Navigable Waters. As defined in reference (f), Section 110.1, "*Navigable Waters*" means the waters of the United States, including the territorial seas. The term includes:

(a) All waters that are currently used, were used in the past, or may be susceptible to use in interstate or foreign commerce, including all waters that are subject to the ebb and flow of the tide.

(b) Interstate waters, including interstate wetlands.

(c) All other waters such as intrastate lakes, rivers, streams (including intermittent streams), mudflats, sandflats, and wetlands, the use, degradation, or destruction of which would affect or could affect interstate or foreign commerce including any such waters:

(i) That are or could be used by interstate or foreign travelers for recreational or other purposes;

(ii) From which fish or shellfish are or could be taken and sold in interstate or foreign commerce; or

(iii) That are used or could be used for industrial purposes by industries in interstate commerce.

(d) All impoundments of waters otherwise defined as navigable waters under this section.

(e) Tributaries of waters identified in paragraphs a-d of this section, including adjacent wetlands.

(f) Wetlands adjacent to waters identified in paragraphs a-e of this section: Provided, That waste treatment systems (other than cooling ponds meeting the criteria of this paragraph) are not waters of the United States.

15-3.5 Off Specification Used Oil. Used oil that is not mixed with HW and that has constituents and properties, as determined by tests, that exceed the specified limits set in Table 1, reference (g), Section 279.11.

15-3.6 Oil. Oil of any kind or in any form, including, but not limited to: fats, oils, or greases of animal, fish, or marine mammal origin; vegetable oils, including oils from seeds, nuts, fruits, or kernels; and, other oils and greases, including petroleum, fuel oil, sludge, synthetic oils, mineral oils, oil refuse, or oil mixed with wastes other than dredged spoil.

15-3.7 On Specification Used Oil. Used oil that is not mixed with HW and that has constituents and properties, as determined by tests, that do not exceed the specified limits set in Table 1, reference (g)., Section 279.11.

15-3.8 Pollution Prevention. Source reduction and other practices that reduce or eliminate the creation of pollutants through increased efficiency in the use of raw materials or energy;

protection of natural resources by conservation; reduction/elimination of use of hazardous materials; and recycling/reuse of materials. Chapter 4 provides Department guidance on P2.

15-3.9 Processing. Any chemical or physical operations designed to produce from used oil, or to make used oil more amenable for production of, fuel oils, lubricants, or other used oil-derived products. Processing includes, but is not limited to: blending used oil with virgin petroleum products, blending used oil to meet the fuel specification, filtration, simple distillation, chemical or physical separation and re-refining.

15-3.10 Reclaimed. A material is reclaimed if it is processed to recover a usable product, or if it is regenerated.

15-3.11 Recycled. A material is recycled if it is used, reused, or reclaimed.

15-3.12 Transportation or Non-Transportation Related Oil Storage Facilities. Facilities with oil storage facilities are classified as either transportation-related or non-transportation-related. Transportation-related facilities are primarily involved with bulk oil transfer. Bulk oil transfer includes transferring oil from stationary storage tanks to tanker ships, highway tankers, and railroad tank cars for transport to off-site locations. Non-transportation-related facilities are primarily involved in fuel storage for onsite use.

15-3.13 Sheen. An iridescent appearance on the surface of the water.

15-3.14 Used Oil. Any oil that has been refined from crude oil, or any synthetic oil, that has been used and because of such use is contaminated by physical or chemical impurities.

15-3.15 Used Oil Generator. Any person, by site, whose act or process produces used oil or whose act first causes used oil to become subject to regulation.

15-3.16 Used Oil Processor. A facility that processes used oil.

15-3.17 Used Oil Transfer Facility. Any transportation-related facility including loading docks, parking areas, storage areas and other areas where shipments of used oil are held for more than 24 hours and not longer than 35 days during the normal course of transportation, or prior to an activity performed under reference (g), Section 279.20(b)(2). Transfer facilities that store used oil for more than 35 days are subject to regulation under Subpart F of reference (g).

15-3.18 Used Oil Transporter. Any person who transports used oil, any person who collects used oil from more than one generator and transports the collected oil, and owners and operators of used oil transfer facilities. Used oil transporters may consolidate or aggregate loads of used oil for purposes of transportation but, with the following exception, may not process used oil. Transporters may conduct incidental processing operations that occur in the normal course of used oil transportation (e.g., settling and water separation), but do not produce (or make more amenable for production) used oil derived products or used oil fuel.

15-4 Requirements

15-4.1 Designated Responsible Official. The general duty of the DRO is to ensure day-to-day compliance with all environmental laws, regulations, and requirements imposed on their facility and their facility staff's activities. Each OU shall establish a policy regarding DROs. The policy shall define who are considered DROs and what their duties are. There are several environmental laws and regulations that assign specific responsibilities to responsible officials (e.g. Clean Air Act), therefore care should be taken and coordination should be done with the Department in establishing DROs. OUs shall be responsible for designating the Responsible Official for each facility and permit under their administration. It is generally better to appoint the DRO at the lowest level that still has the authority to submit permit applications and sign reports required by regulatory permits, as he/she will be closer to the operations being certified. The Department recommends that the DRO for a given facility or permit be the facility manager or equivalent. In no case shall the responsibility for permits be any lower than the Federal facility manager, operations director, or the manager responsible for facility operations. If an OU can assure itself that its facilities are not owned and they cannot be classified as the operator of a facility then the paragraph does not apply. Some indications that an OU could be classified as an operator of a facility:

- Does the facility have EPA ID number in the OU's name?
- Does the facility ship hazardous waste under their EPA ID number?
- Does the facility hold registration certificates for USTs in the OU's name?
- Does the facility contract for fuel deliveries under its OU name?
- Does the facility operate and/or accept fuel deliveries under their OU name and address?
- Does the facility hold Clean Water Act, Clean Air Act, or Safe Drinking Water Act operating permits?
- Does the facility report under EPCRA under their OU name and address?

15-4.2 Oil Storage Facilities. Transportation-related facilities serving vessels are subject to current USCG regulations. Through reference (b), the USCG requires facility operation manuals for applicable marine transportation-related facilities. These regulations address aspects of the design and operation of on-shore and offshore facilities that are engaged in the transfer of bulk oil to and from vessels.

EPA, through reference (d), requires spill prevention plans for applicable onshore non-transportation-related facilities.

PHMSA under reference (h) requires prevention, containment, and response planning requirements, applicable to transport of oil by motor vehicles and rolling stock that leave facilities. Reference (i) contains requirements for oil spill response plans to reduce the environmental impact of oil discharged from onshore oil pipelines. See Chapter 14, Oil and Hazardous Substance Spill Preparedness and Response, for additional information.

15-4.3 Facility Operations Manuals.

(a) Facilities that conduct bulk oil transfers to or from a vessel, and meeting the requirements in reference (c) are required to prepare and implement a Facility

Operations Manual. These operations manuals must be submitted to the USCG for approval and amended whenever a change in operations occurs.

(b) The manual describes how the facility will comply with operating rules and equipment requirements of references (b) and (c). Additionally, specifics of the facility's transfer operations and personnel responsibilities are discussed. Examples are types and hazards of fuel transferred, descriptions of communications systems, descriptions of emergency shutdown systems, personnel training requirements and the maximum allowable working pressure.

(c) The USCG will periodically inspect regulated facilities to ensure that the Facility Operations Manual, as well as equipment and personnel, meet all the oil transfer requirements. Facilities need to ensure that any deficiencies are corrected and documentation provided to the USCG.

(d) The USCG has the ability to suspend operations at any facility that doesn't comply with these requirements. Facilities need to be cognizant of all applicable requirements and ensure they are in compliance.

15-4.4 Spill Prevention Control and Countermeasure Plans.

(a) Facilities that are not transportation-related and that meet the applicability requirements of 40 CFR § 112.1 will prepare an SPCC Plan in accordance with reference (d) that establishes procedures, methods, equipment, and other requirements to prevent the discharge of oil into or upon navigable waters. Plans must have full approval of management and must assess the potential for discharge of oil, as well as containment procedures and equipment to prevent oil spills into or upon a navigable waterway or shoreline of the U.S. A licensed professional engineer (PE) must initially review and certify the SPCC plan. Facilities must amend their SPCC Plans when there is a change in the facility design, construction, operation, or maintenance that materially affects its potential for a discharge. This amendment must be prepared within six months and implemented within six months following preparation of the amendment. Notwithstanding compliance with the above requirement, facilities must review and evaluate their SPCC Plans at least once every five years. Based on the review and evaluation, facilities shall revise their SPCC Plans within six months and implement the amendment within six months following preparation of any amendment to include more effective prevention and control technology if the technology has been field-proven at the time of the review and will significantly reduce the likelihood of a discharge. A licensed PE must certify any technical amendment to the Plan. Facilities must also document their completion of the review and evaluation, and must sign a statement as to whether facilities will amend the Plan. The plan shall preferably, follow regulatory sequence. If you do not follow the sequence specified, you must prepare an equivalent plan and supplement it with a section cross-referencing the location where each element of the SPCC regulation has been addressed and discuss how it is met. If the plan calls for additional details, such as procedures, methods, or equipment not yet fully operational, they must be discussed in separate paragraphs. Facilities that have experienced a spill into navigable waters of 1,000 gallons of oil in a single discharge as described in 112.1(b), or two discharges of more than 42 U.S. gallons of oil within any 12-month period, are required to submit relevant information to the EPA Regional Administrator under reference (d) within 60 days.

(b) SPCC Plans are required for facilities that could reasonably be expected to discharge oil into or upon the navigable waters of the U.S. or adjoining shorelines, or in connection with activities under the Outer Continental Shelf Lands Act or the Deepwater Port Act of 1974, or that may affect natural resources belonging to, appertaining to, or under the exclusive management authority of the U.S. because of facility location. They are not required if the facility has an aggregate aboveground oil storage capacity (ASTs and other aboveground Bulk Storage Containers) of 1,320 gallons or less, or if the total storage capacity of completely buried storage containers is 42,000 gallons or less (excluding the capacity of a UST that is subject to all requirements of reference (e)). Only bulk storage containers and operating equipment with an oil storage capacity of 55 gallons or greater are included in the above aggregate storage calculations.

(c) Facilities that are required to have and submit Facility Response Plans were required to make any necessary amendments to their existing SPCC Plan to bring them in line with the new December 2008 and November 2009 SPCC rules and implement that Plan on or before July 1, 2009. Facilities that are not required to prepare and submit Facility Response Plans have until November 10, 2011 to prepare, amend, and/or implement their new SPCC plans. Facilities will review SPCC plans and implement them within 6 months of a change in facility design operation or maintenance or the construction completion and acceptance of a new facility that materially affects the facility's potential for the discharge of oil to navigable waters or adjoining shoreline.

(d) **Training.** All facility oil handling personnel must be given initial SPCC training as well as annual SPCC Briefings as specified in section 112.7(f) of reference (d).

(e) Facilities will maintain a complete copy of the SPCC plan at the site if the facility is normally attended at least four hours per day, or at the nearest office if the facility is not so attended. Facilities shall have the plan available to the EPA Regional Administrator for on-site review during normal working hours.

15-4.5 Used Oil Recycling. It is Department policy to maximize the segregation, recycling and reuse of used oils, and to comply with RCRA regulations.

If recycling of used lube oil is not feasible for economic reasons, the lube oil may be burned as a fuel or fuel supplement, provided appropriate chemical and economic analyses are made to determine suitability of burning as well as compliance with air pollution control requirements (Chapter 9) and HW regulations (Chapter 13). In addition, prior to burning, used oil shall meet requirements in reference (g).

15-4.6 Used Oil Fuels Burned for Energy Recovery.

(a) Facilities burning used oil for energy recovery must test it. Used oil is subject to regulation under reference (g) unless the constituents and properties of the used oil do not exceed the allowable limits specified in Part 279.11 of reference (g). Used oil that does not have constituents and properties that exceed specification, i.e., the allowable limits set by Table 1 in Part 279.11, is not regulated under Part 279. However, the specification standard does not apply to mixtures of used oil and HW still regulated as HW according to Part 279. Also, used oil containing

more than 1,000 parts per million total halogens is presumed to be a HW under Part 279.10(b)(1) unless it can be shown that the used oil does not contain HW using acceptable analytical methods. Department HW management guidance is provided in Chapter 13.

(b) Included in Part 279 of reference (g) are standards for used oil generators, transporters, transfer facilities, processors, marketers, and burners burning off-specification used oil for energy recovery. Part 279 also contains specific spill prevention and contingency-planning requirements for used oil storage, transfer and processing facilities.

(c) Mixtures of used oil and hazardous waste that is listed in subpart D of part 261 under reference (a) are subject to regulation as hazardous waste under reference (a), rather than as used oil. Mixtures of used oil and hazardous waste that solely exhibits one or more of the hazardous waste characteristic identified in subpart C of part 261 are subject to hazardous waste regulations under reference (a), if the resultant mixture exhibits any of the characteristics identified in subpart C of part 261. Reference (g) prescribes specific provisions as to the applicability of the RCRA regulations to the management and use of used oil. Burning used oil that is a HW solely because it exhibits a characteristic of HW is subject to standards set forth in reference (g). The management and use of used oil, whether or not the used oil exhibits any characteristics of a HW, are regulated under reference (g).

(d) Synthetic oils, fluids, and lubricants must be segregated from the crude-oil-derived used oil.

(e) Persons marketing or burning HW fuel must notify EPA regarding their used oil activity in accordance with reference (g). The sale of regulated fuels by Department facilities considered marketing, while the transfer of regulated fuels between Department facilities and activities is not considered marketing.

15-4.7 Prohibited Uses of Used Oil. Used oils will not be used for environmentally unacceptable purposes such as weed control, insect control, road surfacing, dust control, or open pit burning.

15-4.8 Department Facilities OPA 90 Compliance. Compliance requirements for OPA 90 including Facility Response Plans are found in Chapter 12.

15-4.9 Oil Storage Facilities. Department policy is to meet USCG and EPA oil pollution prevention regulations pertaining to transportation-related and non-transportation-related facilities and to exceed those regulations wherever practicable.

15-4.10 Oil Transfer Operations. Department facilities shall conduct transfer operations and develop an Operations Manual in accordance with USCG regulations of references (c) and (d) and any applicable state regulations for oil transfer operations as described in paragraph 15-4.3.

15-4.11 Spill Plans. Department facilities shall develop and update SPCC plans in accordance with reference (d), and as described in paragraph 15-4.4. The plans shall also comply with appropriate state and local regulations.

15-4.12 Oily Waste/Waste Oil (OW/WO) Management. The cost and potential environmental compliance problems associated with OW/WO management both ashore and afloat necessitate a comprehensive approach that maximizes opportunities for recovery and recycling of usable products. This approach should be cost-effective, providing necessary support to facilities and vessels considering circumstances unique to specific ports, including the state and local regulatory climate**.** Include management of OW/WO in activity P2 Plans or equivalent state mandated plans.

(a) **Use of Oil Water Separators (OWSs) By Ships in Port.** Section 15-4.13 below includes additional oily waste management and operational requirements for ships. Department policy is to maximize segregation, recycling, and reuse of fuel and oil. Shoreside collection of OW/WO, followed by recovery of recyclable product is, therefore, the preferred method of dealing with OW/WO from ships. However, ships equipped with OWSs and oil content monitors (OCMs) may discharge via those systems in port. Discharged effluent may not exceed 15 ppm of oil in water, cause a sheen, or violate any other applicable water quality standard. Before discharging via an OWS, ships should consult with the supporting shore facility for discharge requirements.

(b) **Collection, Treatment, and Disposal of OW/WO.** Under the appropriate circumstances and after consultation among the concerned activities, facilities responsible for writing P2 Plans may modify responsibilities to achieve the most economical method of OW/WO management for the Department. The facility should examine all options to maximize use of current facilities including functional transfer of OW/WO facilities, funding, and operating responsibilities.

(c) **OW/WO as Hazardous Waste.**

(i) Under normal circumstances, bilge water does not exhibit the characteristics of a HW, and does not typically contain listed HW. However, under certain circumstances, such as when an event or a source introduces a HW identified under reference (a), bilge water can become HW. Also, some States define bilge water as HW, even though, it may not be contaminated with listed HW. Therefore, state regulations shall also be consulted prior to determining whether bilge water is HW or not. Ships shall notify shore receiving facilities before offloading bilge water or any other OW/WO if oily waste is contaminated from other than routine sources, such as aqueous film-forming foam (AFFF), solvents, antifreeze, or other HM. Facilities shall handle, store, transport, treat and dispose of such OW/WO per applicable HW regulations. Facilities shall not use oil disposal rafts to receive such waste.

(ii) Wastes onboard Department vessels are not regulated as HW under RCRA until offloaded and received by the shore facility. The shore facility becomes the generator and ultimately has the responsibility of designating the ship's waste as hazardous or not. However this does not relieve the ship of its responsibility to inform the receiving shore facility of any HW or hazardous contaminants within the wastes they are offloading. Designation is based upon information supplied by the sip and sampling and testing of the bilge water and/or other OW/WO. Sampling and testing should be done periodically to see if the waste is a "characteristic" HW under 40 CFR § 261.11 (reference (a)), meets the toxicity criteria of 40 CFR § 261.24 or exceed state HW limits. Facilities shall determine the frequency of testing by considering characteristics of historical samples

and the level of confidence in sampling results.

(d) **Compensating Fuel Ballast Water Systems and OW/WO.** Under normal circumstances, compensating fuel ballast water is neither OW/WO nor HW. Ships should ensure that fuel transfer and ballasting procedures ensure ballast water does not become contaminated with oil or any other waste. Ships using self-compensating fuel tanks are required to ensure adequate margin is preserved to prevent inadvertent discharges of oil with the compensating water. Some state regulations require supporting shore activities to collect and process compensating fuel ballast water before discharge to the environment. Activities in these states shall address collection, treatment, storage, and disposal of such water in the activity P2 Plan or equivalent state plan.

15-4.13 Oil Management on Ships. Vessels will make every effort to minimize oil spill risks through application of aggressive spill prevention measures. All ships should strive to continuously reduce oil spills through proper preparation and rigid adherence to published procedures.

In compliance with the Clean Water Act, no discharge that produces a sheen is permitted within 12 nm of the U.S. The oil content within a discharge that is sufficient to cause a sheen varies with type of oil, sea state, lighting, and viewing angle. In general, in excess of 15 to 20 ppm of oil may be sufficient to cause a sheen.

15-4.14 APPS Compliance. Ships operating in Marine Pollution Annex I special areas (Mediterranean Sea, Black Sea, Baltic Sea, and the Antarctic area) shall refrain from discharging any oil or oily waste to the extent practicable without endangering the ship or impairing its operations or operational effectiveness. Oil and oily waste discharges that are necessary in Annex I special areas or elsewhere on the high seas shall comply with the requirements listed below.

15-4.15 Surface Ships with Oil/Water Separators and Oil Content Monitors (OCM). Ships equipped with OWS and OCM shall attempt to limit oil and oily discharges to 15 ppm oil worldwide. OWSs will generally operate more effectively if the processed oily waste does not contain mechanical emulsions generated by shipboard equipment, chemical emulsions produced by detergents or other emulsifying agents and/or particulates that could clog the OWS.

15-4.16 Ships with OWSs or Bilge Water Processing Tanks but without OCMs shall process all machinery space bilge water through an OWS or bilge waste processing tanks before discharge.

15-4.17 Surface Ships without an Operating OWS But With an Oily Waste Holding Tank (OWHT) shall, when possible, hold tank contents for shore disposal. If operating conditions require the disposal of oily bilge water at sea, it shall be made at least 50 nm from the nearest land and only while the ship is making way. If compliance with this limitation would adversely influence the ship's ability to carry out its mission, the discharge should occur as far from land as mission limits allow. Vessel captains shall ensure minimal discharges occur and duly note the details (nature, quantity, and geographic location) in the ship's Engineering Log. If such a discharge is required within 12 nm of the United States and its territories, and a sheen is created, it shall be treated as an oil and hazardous substance spill and immediately reported to the USCG National Response Center and the OU in accordance with Chapter 14.

15-4.18 Surface Ships with Neither an Operating OWS nor OWHT shall retain all oily bilge water for shore disposal to the maximum extent possible, without endangering the ship or impairing its operations or operational effectiveness. Discharges are permitted beyond 50 nm from the nearest land if operating conditions are such that oily bilge water must be disposed of at sea. Such discharges of oily bilge water shall take place only while the ship is underway.

15-4.19 Foreign Countries. Within foreign territorial seas (12 nm) follow standards observed by the host nation's ships.

15-4.20 Shipboard Equipment. NOAA shall install the following equipment/systems on ships to allow proper segregation, collection, and processing of shipboard oily waste and collection of waste oil:

(a) OWSs, OCMs, OWHTs, and waste oil tanks (WOTs) to allow adequate processing of shipboard oily waste prior to its discharge overboard and to allow proper segregation and collection of shipboard waste oil; including oily waste ultrafiltration polishing systems installed on some new construction ships;

(b) Bilge pumps (oily waste transfer pumps), piping risers, and weather-deck connections to allow safe and convenient ship-to-shore transfer of OW/WO;

(c) Cam-lock discharge connections, 2-1/2-inch (MS 27023-14), for OW/WO discharge to allow quick connect/disconnect with shoreside offloading hoses;

(d) OW/WO adapters to accommodate hoses with standard International Maritime Organization flanges;

(e) Mechanical seals on appropriate shipboard pumps to minimize the quantity of oily wastewater collected in ship bilges;

(f) Improved tank level indicators to reduce the potential for overboard spills during fueling and oil and oily waste handling and transfer operations; and

(g) Contaminated fuel settling tanks (CFSTs) to receive and assist reclamation of fuel tank strippings that might otherwise be discharged overboard.

15-4.21 Operational and Management Requirements. Shipboard operational and management requirements for bilge water, oil, oily waste, and shipboard oil pollution abatement are described in the following paragraphs. Reference (d) provides detailed procedural instructions implementing these requirements.

15-4.22 Bilge Water and Oily Waste.

(a) Bilge water and oily waste minimization. Ships shall minimize oil contamination of bilge water. Mechanical seals in oil and water pumps and proper segregation of oily and non-oily wastewater will greatly reduce the generation of oily waste.

(b) Contaminated bilge water and oily waste. Ships shall use bilge cleaners or chemical agents that are OWS compatible and do not promote stable chemical emulsions (i.e., detergents and surfactants) for machinery space cleaning. This will prevent oil-water separation, cause oil content monitor malfunction, and force recirculation of the OWS effluent until the OWHT is full. COMNAVSEASYSCOM approved short-lived or non-emulsifying detergents for bilge cleaning, are listed in reference (d). A short-lived detergent is a cleaner or degreaser that produces a brief emulsion period to effectively remove oil during the cleaning process and over a short period of settling time breaks to release the

oil for subsequent separation from water. In port, ships shall offload oily waste containing chemical emulsion agents or contaminants from sources of bilge water, which cannot be processed by the OWS, to shore receiving facilities. If oily waste has become contaminated from other than routine sources, such as AFFF, solvents, anti-freeze, or other HM, ships shall advise the receiving shore facility prior to offload. Since some States may consider bilge water to be contaminated or have varying oil discharge requirements, ships in those States shall consult with the shore receiving facility for collection and discharge requirements.

(c) Bilge water and oily waste disposal in port. Department policy is to maximize separation, recycling, and reuse of oil. While in a U.S. port, ships shall comply with shore activity established bilge water and oily waste sampling requirements and shall dispose of bilge water and oily wastes per supporting activity guidance using one or more of the following approaches:

(i) Permanent shore reception facilities. In ports that provide shore oily waste collection, shoreside collection of bilge water and oily wastes followed by recovery of recyclable products is the preferred method of dealing with these shipboard wastes.

(ii) OWS and OCM systems. Ships equipped with OWS and OCM systems may use them, provided the effluent does not exceed 15 ppm, cause a sheen, or violate any other applicable water quality standard. Use of the OWS in conjunction with the OCM is the preferred method of dealing with bilge water.

(iii) Ship waste offload barges (SWOBs). Ships not equipped with an operable OWS shall use OW/WO collection lines ashore, if available, or shall discharge to a SWOB.

(iv) Emergency dewatering. Ships shall not use eductors to dewater bilges containing oily waste, except in emergency situations when OWS systems (including OWHTs) are not available or are not of sufficient capacity to handle the immediate flow requirements. If a ship must use an eductor, it shall make every effort to discharge beyond 12 nm from land and while underway. The ship shall make an engineering log entry (nature, quantity, and geographic location) concerning eductor use to discharge bilge waste overboard.

15-4.23 Waste/Used Oil.

(a) Shipboard personnel shall make maximum use of available port facilities for disposal of all waste/used oil products prior to departing from and upon returning to port. Those facilities include SWOBs, pierside collection tanks, tank trucks, bowsers, and contaminated fuel barges.

Shipboard personnel shall collect, store separately and label used lubricating oils for eventual shore reclamation. They shall not discharge lubricating oils into the bilge, OWHTs or WOTs.

(b) Shipboard personnel shall collect synthetic lube oils and hydraulic oils separately from other used/ waste oils. Ships that do not have a system dedicated to collect

used synthetic oils shall use properly labeled 5- or 55-gallon steel containers for eventual shore recycling. All personnel handling synthetic oil shall wear protective clothing, as specified in MSDSs.

(c) Ships shall retain containers (such as drums, cans, etc.) in which oil products were originally packaged and properly label them for storing and transferring oil ashore.

15-4.24 Fuel Transfer. Ships shall fuel, defuel, transfer fuel internally, and offload oil in restricted waters during normal daylight working hours, when operating schedules permit. They shall conduct these evolutions with well-trained personnel. They shall observe the following precautions to minimize oil spills:

(a) Maintain topside watches at all locations of possible spills and rig direct communication to fuel transfer pump stations.

(b) Establish check-off lists and procedures for valve alignment and transfer operations. Double-check alignment of all transfer system valves.

(c) Use only qualified personnel to perform the detailed transfer procedures.

(d) Continuously monitor each tank level while filling with fuel. Use remote tank-level indicators as the primary method of obtaining tank levels.

(e) Prior to actual fuel transfer, transfer personnel shall inform the responsible ship's officer (commanding officer, command duty officer, or officer of the deck) and the fuel supplier that the ship is ready to commence fueling operations.

15-4.25 Fuel Tank Stripping.

(a) Ships shall not use eductors to strip fuel or cargo tanks.

(b) On ships equipped with fuel tank stripping systems, ships shall discharge the strippings to CFSTs for reuse. Ships shall not discharge fuel tank strippings overboard. CFSTs are for strippings from fuel storage and service tanks only. Ships shall not discharge bilge water and waste or other wastewater into CFSTs.

15-4.26 Compensated Fuel/Ballast Water Systems and OW/WO. Under normal circumstances, compensated fuel/ballast water is neither OW/WO nor HW. Ships with compensated fuel/ballast systems shall comply strictly with fuel transfer and ballasting procedures to ensure ballast water does not become contaminated with oil or any other waste. Ships utilizing self-compensating fuel tanks shall ensure adequate margin is preserved in tanks to prevent inadvertent discharges of oil with the compensating water. Some state regulations require supporting shore activities to collect and process compensated fuel/ballast water prior to discharge to the environment.

15-4.27 Oil-Contaminated Solid Waste.

(a) Surface ships shall containerize oil and fuel filters and other items coated or soaked with oil for shore disposal. They may weight these items for negative buoyancy and jettison them beyond 50 nm of shore if necessary for safety of ship or health of crew.

(b) Surface ships equipped with thermal destruction equipment shall not burn heavily

soaked oily rags or rags contaminated with hazardous materials (HM). Ships may only dispose of rags that are lightly soaked (i.e., less that 50 percent of the rag surface area wetted and not dripping without wringing) with petroleum products or other non-hazardous liquids via thermal destruction equipment beyond 12 nm from shore.

(c) Ships should store all rags that are not incinerated aboard in suitable closed containers designed to contain flammable or combustible materials in a space fitted with adequate ventilation and fire suppression systems.

15-4.27 Vegetable Oils. Ships may dispose of vegetable oils and cleaning solutions (wash or rinse water) containing these oils outside of 12 nm from land without restriction. Inside of 12 nm, ships may not dispose of such material in such quantities that create a sheen on the water. Ships should containerize larger quantities (e.g. the content of a deep fat fryer) for disposal ashore. Ships should not dispose of quantities of vegetable oil via the sanitary or graywater systems as this has the potential to clog piping and associated system components. Rags, paper towels, and other materials used to absorb vegetable oil should be disposed of per solid waste processing requirements for the material.

15-4.28 Exemption from Oily Waste Requirements. Exemption from oily waste requirements may be necessary at certain times and under certain circumstances. Instances of specifically authorized exemptions include the following:

(a) While operating in waters beyond 50 nm from land, with shipboard oily waste processing equipment inoperable due to equipment malfunction, a ship may discharge oily bilge water directly to the sea if the on board retention of such water poses a safety hazard. They may conduct the discharge only after a concerted effort has been expended to repair the equipment malfunction. Ship captains shall minimize discharges under such circumstances. The ship shall duly note the details of a discharge (nature, quantity and geographic location) in the engineering log. Ships shall report equipment casualties that either threaten or result in a discharge of oily water through their chain of command to the OU. The initial report shall note the potential for discharge. All subsequent status reports shall report the frequency and approximate amount of actual discharges.

(b) A NOAA ship may discharge oily waste to the sea in any other situation in which a captain decides that a discharge of such wastes is required to ensure crew or ship safety, or to prevent machinery damage. For example, the ship shall not allow oily bilge water to reach levels that threaten chloride contamination of shipboard condensate systems. Ship captains shall minimize such discharges and ensure the recording of details of the discharge (nature, quantity and geographic location) in the engineering log. If such a discharge is necessary within 12 nm from shore and it creates a sheen, ships shall treat the discharge as an oil and hazardous substance spill.

(c) While operating in waters beyond 50 nm from land, a ship may discharge directly overboard oily waste from isolated spaces, such as JP-5 pump rooms, if the ship does not have the capability to collect and transfer such waste for processing through the OWS system. Such discharges shall contain only distillate (non-persistent) oils and shall result in discharges of minimal quantities of oily waste.

15-5 Responsibilities

15-5.1 T**he Office of the Secretary** shall have the same responsibilities as OUs listed below for the facilities it owns, manages, and/or leases. **OSBM** is responsible for ensuring compliance within the Herbert C. Hoover Building.

15-5.2 OUs shall:

(a) Ensure that shore activities meet Federal, state and local requirements related to the prevention of oil spills and the preparation and review of SPCC plans;

(b) Ensure that shore activities meet USCG requirement related to the preparation and implementation of Operations Manuals;

(c) Provide technical advice and assist facilities in the preparation of Operations Manuals;

(d) Provide technical and administrative guidance associated with the collection, segregation, re-refining and disposal of used lubricating oil and used contaminated fuels;

(e) Provide technical advice and preparing appropriate manuals or other forms of guidance for used oil management;

(f) Provide technical advice and assist facilities and ships in including oily waste/waste oil management in P2 plans, as required;

(g) Ensure that facilities prepare activity SPCC plans per Federal, state, and local requirements and implement and review them within prescribed periods;

(h) Ensure that facilities conduct training as specified in the Facility Operations Manual (reference (c)) and SPCC Plan for the appropriate personnel and at the appropriate frequency, and that training records are maintained;

(i) Ensure that facilities comply with Federal, state, and local requirements concerning oil pollution and used oil fuels for energy recovery;

(j) Ensure that facilities establish and maintain a used oil-recycling program;

(k) Ensure that facilities comply with USCG, PHMSA, and state regulations for transportation-related oil storage facilities and EPA for non-transportation-related facilities;

(l) Ensure that facility operations manuals are prepared, implemented, maintained, and submitted per USCG guidance reference (c); and

(m) Ensure that facilities include OW/WO management information in the facility P2 Plans or equivalent state-required plan as needed.

15-6 Training

(a) Facilities and ships shall train personnel who operate or maintain waste oil and oily waste holding, processing, disposal, or transfer equipment on the proper procedures for oily waste processing and disposal, including hookup and transfer of waste oil and oily waste to shore facilities. Ship personnel shall also be trained on in-port and at-sea discharge restrictions.

(b) All facility oil handling personnel must be given initial SPCC training as well as annual SPCC briefings as specified in section 112.7 (f) of reference (d).

15-7 Reporting Requirements

- None

CHAPTER 16:
STORAGE TANKS

16-1 Scope

16-1.1 This chapter provides information and guidance applicable to the regulation of storage tanks (STs). This includes both underground storage tanks (UST) and above ground storage tanks (AST). It includes those containing petroleum products, and/or HS. However, it excludes those containing HW at facilities within the United States, the Commonwealth of Puerto Rico, U.S. Virgin Islands, Guam, American Samoa, and the Commonwealth of the Northern Marianas Islands.

16-1.2 Related Chapters. Chapter 14, Oil and Hazardous Substance Spill Preparedness and Response; Chapter 15, Oil Pollution; and Chapter 17, Hazardous Waste Management.

16-1.3 References.

(a) 40 CFR Part 112, EPA Regulations on Oil Pollution Prevention;

(b) 40 CFR Part 280, EPA Technical Standards and Corrective Action Requirements for Owners and Operators of Underground Storage Tanks; and

(c) 40 CFR Part 110, EPA Regulations on Discharge of Oil.

16-2 Legislation

16-2.1 Clean Water Act as amended by the Oil Pollution Act of 1990, 33 U.S.C. § 1221 et seq.

(a) The goal of the CWA is to protect the surface waters of the United States. Under the CWA, EPA published oil pollution prevention regulations in 1973 (amended in 1974, 1976, 2002 and 2004). These regulations, contained in reference (a), require the preparation of SPCC Plans and contain specific guidelines for the design and operation of bulk storage containers.

(b) The guidelines for oil storage tanks, specifically bulk storage containers, include preventative measures such as requirements for secondary containment, control of drainage from containment areas, corrosion protection of buried metallic tanks and piping, inspection and testing of aboveground tanks and piping, requirements for spill prevention devices such as high level alarms, security requirements for oil storage areas, and personnel training requirements.

16-2.2 Hazardous and Solid Waste Amendments (HSWA)**.** HSWA extended and strengthened the provisions of the SWDA as amended by RCRA. Subtitle I provides for the development and implementation of a comprehensive regulatory program for USTs containing "regulated substances" and releases of these substances to the environment. HSWA requires that Federal facilities comply with all Federal, state, and local requirements regarding USTs, including payment of registration fees or permit fees when such fees are not taxes. States with approved UST programs or Memoranda of Understanding (MOUs) with the EPA have primary enforcement

responsibility regarding UST program requirements in their States. Federal facilities must comply with all applicable provisions of the approved state UST programs.

16-2.3 Energy Policy Act of 2005 **(EPAct05).** EPAct05, Subtitle B is the UST Compliance Act of 2005. The UST Compliance Act of 2005 contains amendments to Subtitle I of the Resource Conservation and Recovery Act (RCRA) which significantly affect Federal and state UST programs. The UST Compliance Act of 2005 focuses on preventing releases and includes provisions regarding inspections, operator training, delivery prohibition, secondary containment, financial responsibility, and cleanup of releases that contain oxygenated fuel additives. Section 1528 of EPAct05 modified section 9007 of the SWDA. This modification waived sovereign immunity for reasonable non-discriminatory user fees, inspection fees, monitoring fees; civil sanctions; civil fines; and criminal acts in owning, managing, and oversight of USTs.

16-3 Terms and Definitions

16-3.1 Aboveground Storage Tanks. Term used to describe oil and hazardous substance bulk storage containers or storage tanks not clearly identified as UST's and normally placed on or above the surface of the ground which are also regulated under reference (a). For purposes of this section, containers in vaults, bunkered tanks, or partially buried tanks are considered aboveground storage tanks or aboveground storage containers**.** Note that a tank defined as an UST in reference (b) may also be defined as an AST in reference (a) as is the case with deferred UST systems.

16-3.2 Bulk Storage Container. Any container used to store oil. These containers are used for purposes including, but not limited to, the storage of oil prior to use, while being used, or prior to further distribution in commerce. Under reference (a) only bulk storage containers of 55 gallons or more in capacity are regulated. Oil Water Separators and grease traps are considered bulk storage containers in reference (a); however, they are generally exempted from any requirements per reference (a) paragraph 112.1(d)(5) unless they are used for the purpose of storing oil (see 67 *Federal Register* (FR) 47068 for more information). Oil-filled electrical, operating, or manufacturing equipment is not considered a bulk storage container. However operating equipment with containment with onboard petroleum storage capacity of greater than 55 gallons is subject to the general secondary containment requirements in reference (a) paragraph 112.7(c).

16-3.3 Designated Responsible Official. The DRO is the senior individual who assumes responsibility for the accuracy and completeness of permit applications, permits and statutorily required environmental compliance. A DRO could be subject to criminal sanctions under some environmental laws and regulations. The DRO will also at times have to certify ongoing compliance with all permit provisions once the permit is issued. The DRO is typically a facility or program manager with direct responsibility for a facility or program that is subject to environmental requirements.

16-3.4 Hazardous Substance.

(a) Any substance so designated by the CWA.

(b) Any element, compound, mixture, solution, or substance so designated by CERCLA. The CERCLA list of hazardous substances can be found in 40 CFR § 302.4 or at http://www.atsdr.cdc.gov/cercla/.

(c) Any solid waste having the characteristics identified under or listed pursuant to the Solid Waste Disposal Act (but not including any waste suspended by an Act of Congress).

(d) Any hazardous air pollutant listed under the CAA.

(e) Any imminently hazardous chemical substance or mixture upon which the Administrator of the EPA has acted under TSCA.

The term does *not* include substances regulated as hazardous waste under the Solid Waste Disposal Act (42 U.S.C. § 6921).

The term does *not* include petroleum, including crude oil or any fraction thereof, which is not otherwise specifically listed or designated as a hazardous substance under CERCLA, CWA or the SWDA.

The term also does *not* include natural gas liquids, liquefied natural gas, or synthetic gas usable for fuel.

16-3.5 Petroleum. Petroleum, including crude oil or any fraction thereof, that is liquid at standard conditions of temperature and pressure (60 degrees Fahrenheit and 14.7 pounds per square inch absolute).

16-3.6 Regulated Substance. Any HS and EHS regulated under CERCLA and EPCRA respectively, excluding any substances regulated as HW under RCRA Subtitle C, and petroleum substances including crude oil, motor fuels, jet fuels, distillate fuel oils, residual fuel oils, lubricants, petroleum solvents, and used oils. Some States exclude certain types of petroleum products and therefore, facilities should refer to their respective state regulations.

16-3.7 Release. Any spilling, leaking, emitting, discharging, escaping, leaching, or disposing of hazardous substances, EHS, or petroleum from a ST into ground water, surface water, or subsurface soils.

16-3.8 Storage Tanks. All tanks and bulk storage containers (both above and underground) containing petroleum products or hazardous substances that are regulated under either reference (a) or (b). Under reference (b) only non-exempted or deferred tanks are regulated (see further information in the UST definition). Under reference (a), only containers of 55-gallons in capacity or larger are regulated.

16-3.9 Tank Management Plan. A management document, for facility-level use, that stresses above and underground storage tank spill prevention, planning, regulatory compliance, and record keeping.

16-3.10 Underground Storage Tanks.

(a) As defined in RCRA, Subchapter IX, section 6991, the term “underground storage tank” means any one or combination of tanks (including underground pipes connected thereto) which is used to contain an accumulation of regulated substances, and the volume of which (including the volume of the underground pipes connected thereto) is 10 percent or more beneath the surface of the ground. The regulations exclude the following:

– Farm or residential tank of 1,100 gallons or less capacity used for storing motor fuel for non-commercial purposes;

– Tanks used for storing heating oil for consumptive use on the premises where stored;

- Septic tanks;
- Pipeline facility (including gathering lines) regulated under (1)the Natural Gas Pipeline Safety Act of 1968, (2)the Hazardous Liquid Pipeline Safety Act of 1979, or an intrastate pipeline facility regulated under state laws comparable to the provisions of law referred to in (1) or (2);
- Surface impoundment, pit, pond or lagoon;
- Stormwater or waste water collection system;
- Flow-through process tank;
- Liquid trap or associated gathering lines directly related to oil or gas production and gathering operations; or
- Storage tank situated in an underground area (such as a basement, cellar, mine, drift, shaft, or tunnel) if the storage tank is situated upon or above the surface of the floor.
- The term underground storage tank shall not include any pipes connected to any tank described above in paragraphs 16-3.10.a.

(b) In addition to the RCRA exclusions, EPA excluded the following UST systems from regulation under reference (b):

- Any UST system holding hazardous wastes listed or identified under Subtitle C of the SWDA, or mixture of such HW and other regulated substances;
- Any wastewater treatment tank system that is part of a wastewater treatment facility regulated under section 402 or 307(b) of the CWA;
- Equipment or machinery that contains regulated substances for operation purposes such as hydraulic lift tanks and electrical equipment tanks;
- Any UST system whose capacity is 110 gallons or less;
- Any UST system that contains a *de minimis* concentration of regulated substances;
- Any emergency spill or overflow containment UST system that is expeditiously emptied after use.

NOTE: The above UST information concerns Federal statutes and regulations. State laws and regulations occasionally define UST systems differently than the Federal laws and regulations.

(c) **Deferred UST.** Certain categories of USTs are not yet subject to the full Federal UST regulations. Tanks systems in these categories are called deferred USTs. USTs that are deferred from Subparts B (UST Systems; Design, Construction, Facility, and Notification), C (General Operating Requirements), D (Release

Detection), E (Release Reporting, Investigation, and Confirmation), and G (Out of Service UST Systems and Closure) of reference (b). These include:

- Wastewater treatment tank systems;
- Any UST systems containing radioactive materials that are regulated under the Atomic Energy Act of 1954 (42 U.S.C. 2011 and following);
- Airport hydrant fuel distribution systems; and
- UST systems with field-constructed tanks.

NOTE: **The tanks listed above as deferred from subparts B, C, D, E, and G of reference (b) are still regulated by paragraph 280.11 of reference (b) and may be regulated by reference (a). Additionally, Emergency Power Generators USTs are deferred from subpart D only of reference (b). Excluded USTs are listed in paragraph 280.10(b) of reference (b).**

NOTE: States with approved plans may elect not to contain the above deferrals; therefore, state and local laws and regulations should be consulted.

16-4 Requirements

16-4.1 Designated Responsible Official. The general duty of the DRO is to ensure day-to-day compliance with all environmental laws, regulations, and requirements imposed on their facility and their facility staff's activities. Each OU shall establish a policy regarding DROs. The policy shall define who are considered DROs and what their duties are. There are several environmental laws and regulations that assign specific responsibilities to responsible officials (e.g. Clean Air Act), therefore care should be taken and coordination should be done with the Department in establishing DROs. OUs shall be responsible for designating the Responsible Official for each facility and permit under their administration. It is generally better to appoint the DRO at the lowest level that still has the authority to submit permit applications and sign reports required by regulatory permits, as he/she will be closer to the operations being certified. The Department recommends that the DRO for a given facility or permit be the facility manager or equivalent. In no case shall the responsibility for permits be any lower than the Federal facility manager, operations director, or the manager responsible for facility operations. If an OU can assure itself that its facilities are not owned and they cannot be classified as the operator of a facility then the paragraph does not apply. Some indications that an OU could be classified as an operator of a facility:

- Does the facility have EPA ID number in the OU's name?
- Does the facility ship hazardous waste under their EPA ID number?
- Does the facility hold registration certificates for USTs in the OU's name?
- Does the facility contract for fuel deliveries under its OU name?
- Does the facility operate and/or accept fuel deliveries under their OU name and address?
- Does the facility hold Clean Water Act, Clean Air Act, or Safe Drinking Water Act operating permits?

– Does the facility report under EPCRA under their OU name and address?

16-4.2 General Operation and Maintenance Requirements.

(a) Facilities with STs will monitor transfer operations to ensure that spilling or overflowing does not occur. They will install and maintain overfill protection equipment in order to prevent releases.

(b) Facilities will maintain and inspect corrosion protection measures, including coatings and cathodic protection systems. Cathodic protection systems will be tested according to Federal, state, and local laws and regulations.

(c) Facilities will install ST systems and make repairs to existing ST systems according to Federal, state, and local requirements.

(d) Facilities will conduct temporary or permanent closure of STs in a manner ensuring protection of soil, surface water, and groundwater. In addition, such closures shall be conducted according to Federal, state and local regulations.

(e) The facility will maintain written records demonstrating compliance with operational requirements.

(f) Facilities will operate, monitor, and test release detections systems according to Federal, state, and local laws and regulations.

(g) The Department's ST Program policy is to comply with all applicable Federal, state, and local regulations pertaining to the management of ASTs and USTs. Because of the limited waiver of Federal sovereign immunity to the regulation of ASTs (e.g., the requirement that the AST could have an impact on "navigable water of the U.S.") (see 40 CFR Part 112), legal counsel should be contacted if there are any questions concerning compliance with state or local AST regulations.

(h) As per section 16-2.3 above, regulatory agencies may charge Federal facilities for reasonable non-discriminatory user fees, inspection fees, monitoring fees, civil sanctions, civil fines, and criminal acts in owning, managing, and oversight of USTs. Facilities should refer any new request for user fees to their legal counsel for a determination of applicability.

(i) Whenever possible, the Department shall replace older, unprotected steel tanks with state-of-the-art ASTs or state-of-the-art double-wall fiberglass USTs with continuous interstitial monitoring.

(j) Department facilities with STs shall have a tank management plan containing the following information:

– Listing of all STs at the facility;

– Regulatory requirements for each ST;

– A plan of action for achieving and maintaining compliance through monitoring, testing, inspection, removal, repair, retrofit, and replacement, of ST systems;

– Testing, inspection, maintenance, and repair schedules for ASTs and

USTs; and

– Compliance inspection records of ASTs and USTs referenced or included.

Facilities should include in the ST management plan all STs that have potential to cause environmental damages and/or health hazards, as well as non-regulated ASTs that are likely to be included in future Federal, state, or local regulations.

(k) **SPCC Plans.** Facilities will determine if a SPCC Plan is required. If so the facility will ensure that a plan is in place that complies with EPA SPCC regulations (reference (a)). SPCC Plan requirements are covered in greater detail in Chapter 2 of this instruction.

16-4.3 Aboveground Storage Tanks.

(a) **General Operating Requirements.** ASTs containing petroleum are not regulated by RCRA. For ASTs containing petroleum, current Federal regulation is limited to the petroleum pollution prevention and discharge reporting requirements of references (a) and (c). Some States or local governments have developed AST, containing petroleum, regulatory standards, which may not apply to the Department. In the event of discrepancy, facilities shall obtain assistance from their OU environmental staff or legal counsel to determine applicability of regulations.

(b) **Release Detection, Testing, and Inspection.** Whenever possible, facilities will install release detection systems on AST, containing petroleum per references (a) and (c). Such release detections devices, storage tank's tank supports, and alarms, will be routinely inspected to ensure they are operating properly and are in good condition. Inspections will be documented and inspection records kept for at least three years.

(c) **Spill Prevention Devices.** ASTs will have overfill prevention devices or operating procedures in place that prevent overfilling the tank. A secondary containment system will be in place for each petroleum storage tank or container of 55 gallons, or greater, capacity. Spill prevention devices and secondary containment will be routinely inspected to ensure they are operating properly and are in good condition. Inspection reports will be kept for at least three years.

(d) **Release Reporting, Investigation, and Confirmation.** Facilities will report releases of petroleum or HS from ASTs according to the guidance in Chapter 14. Facilities will immediately investigate suspected releases from ASTs by reviewing storage records, conducting integrity testing, and/or by performing a subsurface investigation. If regulated substances are found in adjacent properties not known to have been previously contaminated, then facilities shall conduct a release investigation of suspect ASTs in accordance with EPA or respective state regulations.

(e) **Out-of-Service ASTs and Closure.** Facilities will conduct permanent closure of ASTs per applicable state or local regulations. At a minimum, facilities will empty and clean ASTs and associated pipelines and place locking caps on fill lines/risers. For permanent closure, if the AST is not removed, facilities will also cap, blank flange, or grout affected pipelines, fill the tank volume with an inert material such as concrete, and maintain associated closure records. Facilities will record site conditions, pipelines affected, actions taken, and maintain correspondence records with state and Federal regulators.

16-4.4 Underground Storage Tanks.

(a) **General Operating Instructions.**

(i) Facilities will ensure all UST systems have corrosion protection and spill/overfill prevention equipment combined with an approved method of release detection. These systems must meet applicable Federal and state regulations, and be installed per nationally recognized standards. Underground piping that conveys regulated substances must be properly designed and constructed to ensure protection from corrosion. Facilities must provide automatic leak detection on pressurized piping and some types of suction piping and must conduct either annual tightness testing or monthly monitoring. After any repairs, the system must be tested for tightness and records of all repairs must be maintained for at least 5 years.

(ii) Facilities may be required to replace or upgrade existing USTs that are either exempt or deferred from Federal, state, or local UST regulations per the facility's SPCC plan or per best management practices.

(b) **Release Detection, Testing, and Inspections.** UST systems that store fuel solely for emergency power generators are exempt from Federal regulatory release detection requirements. Some state or local regulations may be more stringent. However, these USTs are covered by the SPCC regulation (40 CFR Part 112). All completely buried metallic tanks require regular leak testing for release detection (40 CFR § 112.8(c)(4)).

(i) Facilities will install release detection systems on petroleum and HS UST systems as required by Federal, state, or local regulations. Facilities will also install release detection systems on non-regulated USTs whenever possible.

(ii) Facilities will maintain records demonstrating compliance with release detection, testing and inspection requirements.

(c) **Release Reporting, Investigation and Confirmation.**

(i) Facilities will report releases and suspected releases from USTs to the EPA or state agency within 24 hours of discovery. The facility will report petroleum, HS releases into surface waters from USTs according to the guidance in Chapter 14.

(ii) Facilities will immediately investigate suspected releases from USTs by conducting integrity testing and/or by performing a subsurface investigation.

If regulated substances are found in adjacent properties, then the EPA or state agency can require a facility to conduct a release investigation of suspect STs.

(d) **Release Response and Corrective Action for UST.**

(i) If a release from a UST is detected, the facility must stop any further releases from the UST, and mitigate fire, explosion, and vapor hazards, by preventing any further release through the emptying of the UST system. The facility will take steps to prevent further migration of any aboveground or exposed below ground releases. If the source of an underground release is not known, the facility will conduct subsurface sampling in order to determine the source and investigate the possible presence of free product and recover free product as soon as practicable. UST releases into surface waters require facilities to take the response actions described in Chapter 14 or in Chapter 17, as appropriate, in addition to the requirements described in this section.

(ii) UST releases require an initial abatement report, initial site characterization report, and free product recovery report to be submitted by the facility to the EPA or state agency in accordance with their respective regulations. In addition, a release investigation report and/or corrective action plan may be required by the EPA or state agency.

(iii) Facilities will clean up soil and groundwater contamination resulting from UST releases per approved corrective action plan or as otherwise authorized or requested by the EPA or state agency. Prior to any cleanup, the facility will notify the EPA or state agency.

(iv) Facilities will remove free-floating product to the maximum extent practicable.

(e) **Out-of-Service UST Systems and Closure.**

(i) Facilities will maintain corrosion protection systems during temporary closure of UST system even if the system is empty. Continue to operate release detection systems unless the system is emptied.

(ii) When temporarily closing USTs for 3 months or more, leave vent lines open and functioning, and cap and secure all other lines, pumps, manways, and ancillary equipment.

(iii) Facilities will either meet the standards for USTs by upgrading or replacing them or will permanently close USTs that do not meet the standards within 12 months of temporary closure unless the EPA or state agency grants an extension.

(iv) Facilities will notify the EPA or state agency at least 30 days in advance of UST permanent closure. For a permanent closure, empty, clean, and either fill USTs with a solid inert material or remove them from the ground. The preferred method of UST system closure is by removal. Facilities shall leave a UST system in the ground and fill it with an inert material only when extenuating circumstances preclude the removal of a UST system. Preferably, facilities will remove associated piping and ancillary equipment

associated with USTs; if not, they shall cap, blank flange, and keep records of actions taken during closure. The facility shall conduct a site assessment at the time of permanent closure per local, state and Federal regulations. If contamination is encountered during closure, the facility will initiate corrective action. For USTs regulated under SPCC regulations, the UST cannot be considered "permanently closed until all product and sludge have been removed from the tank and associated lines, all connecting lines, and piping have been disconnected from the container and blanked off; all valves, except ventilation valves, have been closed and locked; and conspicuous signs have been posted on each container stating that it is a permanently closed container and the closure date.

(v) Continued use of a regulated UST system to store a non-regulated substance is considered a change-in-service. A change-in-service requires that the facility empty and clean out the UST and that a site assessment be performed by the facility. Notify the EPA or state agency 30 days in advance of a change-in-service.

(vi) The EPA or state agency can require investigation and cleanup of USTs permanently closed prior to 22 December 1988 if the UST site poses a threat to human health or the environment.

(vii) Facilities will retain a permanent closure, site assessment, site characterization, and corrective action records for at least 50 years to protect the Department from potential liability.

16-5 Responsibilities

16-5.1 OUs shall:

(a) Ensure that facility managers include requests for resources to meet ST compliance requirements in budget submittals;

(b) Assist facilities in estimation of resource requirements;

(c) Provide funding and execution of ST corrective actions;

(d) Ensure funding is available to train facility personnel involved with STs;

(e) Assist facilities in the preparation of ST Management Plans, SPCC Plans, and Emergency Preparedness and Response Reports;

(f) Provide technical advice and assistance to facilities for leak detection requirements;

(g) Update technical directives and design manuals to reflect the latest regulatory requirements for STs, including underground piping, other ancillary equipment, and leak detection devices;

(h) Ensure that facilities assemble and collate ST data including storage tank volume, type, facility date, monitoring system, and tank contents for achieving and maintaining compliance with all applicable Federal, state, and local laws and regulations;

(i) Ensure that facilities complete notification forms for regulated STs and submit them to the appropriate Federal, state, or local agency;

(j) Ensure that facilities prepare and maintain ST Management Plans and SPCC Plans if required. The ST Management Plan shall include at a minimum, the requirements identified in Section 16-4.2;

(k) Ensure that facilities accomplish leak detection, inspection, maintenance, and product inventory requirements, record keeping and operation of monitoring systems required by Federal, state, and local ST laws and regulations;

(l) Request sufficient resources to replace or repair STs including monitoring systems as required by applicable Federal, state, and local laws and regulations or by best management practices;

(m) Comply with applicable Federal, state, and local laws and regulations concerning the installation and closure of ST systems; and

(n) Ensure that actions involving upgrading, removing and replacing tanks comply with health and safety requirements. Whether government personnel or contractors remove the tanks, they shall plan and conduct associated activities to preclude injury to personnel and accidental damage to the environment.

16-6 Training

Facility managers shall ensure that all personnel involved in design, construction, installation, management and operation of storage tanks, receive appropriate storage tank training. They shall include the following topics in this training as applicable: Contents of the facility SPCC Plan; Federal, state, and local regulations pertaining to storage tank inspection and maintenance requirements; spill response procedures; standard operating procedures for transfers of oil or filling tanks; corrosion protection measures; compliance records; release detection reporting, investigation, and confirmation; corrective action plans; closure, site assessment, monitoring, removal, repair, retrofit, replacement, remediation, leak detection and product inventory requirements, record keeping, and operation of monitoring systems.

16-7 Reporting Requirements

16-7.1 Reporting to the Office of the Secretary.

- None

16-7.2 Reporting to Federal, State, and Local Regulatory Agencies. Facilities shall report leaks to regulatory agencies in accordance with 16-4.3(e), 16-4.4(c)-(d) above. Facilities shall notify their regulatory agency 30 days prior to permanent closure or change-of-state of a UST as per 16-4.4(e) above.

CHAPTER 17:
HAZARDOUS WASTE MANAGEMENT

17-1 Scope

17-1.1 This chapter identifies requirements and responsibilities for the management of hazardous waste **(**HW). Proper HW management is important in order to provide healthy and safe working conditions for employees, to protect the environment, and to ensure compliance with applicable Federal, state, and local laws and regulations. This chapter is applicable to the generation, minimization, storage, recycling and disposal of HW. Safe work practices and information identified in this chapter for the handling of HW are applicable to hazardous materials in general.

17-1.2 **Related Chapters.** Chapter 7, Pollution Prevention; and Chapter 16, Storage Tanks.

17-1.3 **References.**

- 40 CFR Parts 260-279, EPA Hazardous Waste Management Regulations;

17-2. Legislation

17-2.1 Resource Conservation and Recovery Act, 42 U.S.C. § 6901 et seq**.** The purpose of RCRA is to protect human health and the environment from improper hazardous waste management practices.

17-2.2 Toxic Substances Control Act of 1976, 15 U.S.C. § 2601 et seq**.** TSCA provides the EPA with authority to require reporting, record-keeping and testing requirements, and restrictions relating to chemical substances and/or mixtures. Certain substances are generally excluded from TSCA, including, among others: food, drugs, cosmetics, and pesticides.

17-2.3 Superfund Amendments and Reauthorization Act**.** SARA stressed the importance of permanent remedies and innovative treatment technologies in cleaning up hazardous waste sites. SARA required Superfund actions to consider the standards and requirements found in other state and Federal environmental laws and regulations. It also provided new enforcement authorities and settlement tools; increased state involvement in every phase of the Superfund program; increased the focus on human health problems posed by hazardous waste sites; encouraged greater citizen participation in making decisions on how sites should be cleaned up; and increased the size of the trust fund to $8.5 billion. It also required EPA to revise the Hazard Ranking System to ensure that it accurately assessed the relative degree of risk to human health and the environment posed by uncontrolled hazardous waste sites that may be placed on the National Priorities List.

17-2.4 Clean Water Act, 33 U.S.C. § 1251 et seq **.** The CWA establishes the basic structure for regulating discharges of pollutants into the waters of the United States and regulating quality standards for surface waters.

17-2.5 Clean Air Act, 42 U.S.C. § 7401 et seq**.** The CAA is the comprehensive Federal law that regulates air emissions from stationary and mobile sources. Among other things, this law authorizes EPA to establish NAAQS to protect public health and public welfare and to regulate emissions of hazardous air pollutants.

17-2.6 Emergency Planning and Community Right-to-Know Act, 42 U.S.C. § 11001 et seq**.** EPCRA provides for the planning for state and local chemical emergencies, notification of emergency releases of chemicals, and addresses the communities' right-to-know about toxic and hazardous chemicals.

17-2.7 Federal Facility Compliance Act, Pub. L. No. 102-386**.** The FFCA of 1992 subjects Federal facilities to all provisions of Federal, state, interstate, and local HW laws and regulations. The full range of available enforcement tools, including civil fines and penalties, are available to EPA, States, and local governments in enforcing these laws and regulations. The FFCA exempts agents, employees, and officers of the United States from personal liability for any civil penalty arising from acts or omissions within the scope of their official duties. The installation or command whose activities most directly led to the violation(s) is responsible for payment of possible penalties with its operating budget or other available sources of funds. The FFCA also requires payment of any non-discriminatory fees or service charges assessed in connection with a Federal, state, interstate, or local HW regulatory program. This includes assessments in connection with the processing and issuance of HW permits; amendments to permits; reviews of plans, studies, and other documents; and, the inspection and monitoring of facilities.

17-3 Terms and Definitions

17-3.1 Chemical Hazardous Waste. RCRA, and its subsequent 1984 Hazardous and Solid Waste Amendments required the EPA to issue Federal regulations to manage hazardous waste, including defining what is hazardous chemical waste. Most states also regulate hazardous chemical waste. Hazardous chemical waste by legal definition is “solid” waste (this includes solid, liquid, and gaseous material) that meets specific criteria, and is either listed as a hazardous waste, or exhibits any of the characteristics of a hazardous waste. The EPA describes solid waste as: *Any solid, liquid or contained gaseous material that is being disposed of (including being burned or incinerated) or recycled, or being accumulated, stored, or treated before being disposed of or recycled.*

17-3.2 Designated Responsible Official. The DRO is the senior individual who assumes responsibility for the accuracy and completeness of permit applications, permits and statutorily required environmental compliance. A DRO could be subject to criminal sanctions under some environmental laws and regulations. The DRO will also at times have to certify ongoing compliance with all permit provisions once the permit is issued. The DRO is typically a facility or program manager with direct responsibility for a facility or program that is subject to environmental requirements.

17-3.3 Unused Chemicals. If the material is an unused chemical or from a spill of an unused chemical, check whether the material is listed as an acute hazardous waste or toxic hazardous waste. If the chemical is listed, then it is a hazardous waste. If it is not listed, refer to “Characteristic Waste” below.

17-3.4 Waste from Procedure/Experiment. If the material is a waste from a protocol or is otherwise used, check to see if the waste is listed by the EPA (40 CFR Part 261, Subpart D). The lists include the F-list (wastes from common manufacturing and industrial processes), K-list (wastes from specific industries), and P- and U-lists (wastes from commercial chemical products).If it is not listed, refer to “Characteristic Waste” below.

17-3.5 Characteristic Waste. If the waste material is a chemical that is not listed by the EPA, or if it is any other waste material, determine if the chemical meets any of the characteristics of a hazardous waste. Any waste material that meets one or more of the following characteristics is considered hazardous, as described in 40CFR Part 261, Subpart C:

(a) **Ignitability.**

(i) It is a liquid with a flash point less than 60°C (140°F), unless it is an aqueous solution containing less than 24 percent alcohol by volume.

(ii) It is not a liquid and is capable, under standard temperature and pressure, of causing fire through friction, absorption of moisture or spontaneous chemical changes, and when ignited, burns so vigorously and persistently that it creates a hazard.

(iii) It is an ignitable compressed gas.

(iv) It is an oxidizer as described in DOT regulations.

(b) **Corrosivity.**

(i) It is aqueous and has a pH less than or equal to 2 or greater than or equal to 12.5

(ii) It is a liquid and corrodes steel (SAE 1020) at a rate greater than 6.35 mm (0.250inch) per year at a test temperature of 55°C (130°F)

(c) **Reactivity.**

(i) It is normally unstable and readily undergoes violent change without detonating.

(ii) It reacts violently with water.

(iii) It forms potentially explosive mixtures with water.

(iv) When mixed with water, it generates toxic gases, vapors or fumes in a quantity sufficient to present a danger to human health or the environment.

(v) It is a cyanide or sulfide bearing waste which, when exposed to pH conditions between 2 and 12.5, can generate toxic gases, vapors or fumes in a quantity sufficient to present a danger to human health or the environment.

(vi) It is capable of detonation or explosive reaction if it is subjected to a strong initiating source or if heated under confinement.

(vii) It is readily capable of detonation or explosive decomposition or reaction at standard temperature and pressure.

(viii) It is a forbidden explosive per DOT regulations.

(d) **Toxicity.** A waste is considered to exhibit the characteristic of toxicity if it is in solution in amounts greater than regulatory levels determined by the EPA or, if the leachate (using the Toxicity Characteristic Leaching Procedure Test, or "TCLP") meets or exceeds these regulatory levels. For liquids, the TCLP result is approximately the same as the actual mass concentration. For solid state materials that contain any of the listed contaminants, the TCLP test needs to be conducted to determine if the waste is hazardous.

17-3.6 Facility. For the purposes of this chapter, a facility is a contiguous piece of land with structures, other appurtenances, and improvements under common ownership or control.

17-3.7 Hazardous Waste. A solid waste, or combination of solid wastes, which because of its quantity, concentration, or physical, chemical, or infectious characteristics may:

- Cause or significantly contribute to an increase in mortality or an increase in serious irreversible or incapacitating reversible illness; or

- Pose a substantial present or potential hazard to human health or the environment when improperly treated, stored, transported, disposed of, or otherwise managed.

17-3.8 Hazardous Waste Generator. Any person, by site, whose act or process produces HW or whose act first causes a HW to become subject to regulation.

17-3.9 Waste Generator Status Type. A Generator's status is defined by the type of hazardous waste created and the quantity of waste that is generated and stored onsite. This section will discuss the different statuses and their associated regulatory requirements. There are three Generator statuses: Conditionally Exempt Small Quantity Generator, Small Quantity Generator, and Large Quantity Generator.

(a) **Large Quantity Generator.** Monthly generation quantity of 1,000 kilograms (kg) (2,200 pounds (lbs)) or more HW or 1 kg (2.2 lbs) or more acute HW.

(b) **Small Quantity Generator.** Monthly generation quantity of 100 – 1,000 kg (220 - 2,200 lbs) HW and less than 1 kg (2.2 lbs) acute HW.

(c) **Conditionally Exempt Small Quantity Generator.** Monthly generation quantity less than 100 kg (220 lbs) HW and less than 1 kg (2.2 lbs) of acute HW. Such generators are exempt from substantially all RCRA requirements. Further discussion is found in reference (a).

17-3.10 Solid Waste. Any garbage, refuse, sludge from a waste treatment plant, water supply treatment plant, or air pollution control facility and other discarded material, including solid, liquid, semisolid, or contained gaseous material resulting from industrial, commercial, mining, and agricultural operation, and from community activities, but does not include solid or dissolved material in domestic sewage, or solid or dissolved materials in irrigation return flows or industrial discharges which are point sources subject to permits under Section 402 of the Clean Water Act, or source, special nuclear, or byproduct material as defined by the Atomic Energy Act of 1954, as amended (68 Stat. 923) [42 U.S.C. Sect. 2011 et seq.].

17-3.11 Universal Waste. Any of the following hazardous waste that are subject to the universal waste requirements 40 CFR Part 273: (1) Batteries as described in 40 CFR § 273.2; (2) Pesticides as described in 40 CFR § 273.3; (3) Mercury thermostats as described in 40 CFR § 273.4; and (4) Lamps as described in 40 CFR § 273.5.

17-4 Requirements

17-4.1 Designated Responsible Official. The general duty of the DRO is to ensure day-to-day compliance with all environmental laws, regulations, and requirements imposed on their facility and their facility staff's activities. Each OU shall establish a policy regarding DROs. The policy shall define who are considered DROs and what their duties are. There are several environmental laws and regulations that assign specific responsibilities to responsible officials (e.g. Clean Air Act), therefore care should be taken and coordination should be done with the Department in establishing DROs. OUs shall be responsible for designating the Responsible Official for each facility and permit under their administration. It is generally better to appoint the DRO at the lowest level that still has the authority to submit permit applications and sign reports required by regulatory permits, as he/she will be closer to the operations being certified. The Department recommends that the DRO for a given facility or permit be the facility manager or equivalent. In no case shall the responsibility for permits be any lower than the Federal facility manager, operations director, or the manager responsible for facility operations. If an OU can assure itself that its facilities are not owned and they cannot be classified as the operator of a facility then the paragraph does not apply. Some indications that an OU could be classified as an operator of a facility:

- Does the facility have EPA ID number in the OU's name?
- Does the facility ship hazardous waste under their EPA ID number?
- Does the facility hold registration certificates for USTs in the OU's name?
- Does the facility contract for fuel deliveries under its OU name?
- Does the facility operate and/or accept fuel deliveries under their OU name and address?
- Does the facility hold Clean Water Act, Clean Air Act, or Safe Drinking Water Act operating permits?
- Does the facility report under EPCRA under their OU name and address?

17-4.2 General. Any activity that generates, transports, treats, stores, or disposes of HW and any activity that produces, burns, distributes, or markets any HW-derived fuels must notify the EPA or state environmental agency of their activities, obtain an EPA or state HW generator ID number, and comply with applicable Federal, state, and local HW laws and regulations. Nearly all states are authorized by EPA to administer and enforce the RCRA program. A state with final authorization administers its HW program in lieu of EPA administering the Federal program in that state. When new, more stringent Federal requirements are promulgated, authorized States are obligated to enact equivalent authority within specified time frames. However, if such newly issued requirements are imposed under HSWA and are more stringent than the existing Federal RCRA program, they are enforceable by EPA until the state is granted authorization to do so. Compliance with applicable state and local HW regulations is also required.

17-4.3 Identification of HW. Generators must identify and designate all waste streams to determine if the waste streams are HW. HW is either "listed" (specifically named in Federal/state regulations) or may exhibit any of four characteristics:

(a) Ignitability;

(b) Corrosives;

(c) Reactivity; or

(d) Toxicity (as determined by TCLP or additional procedures under state law).

A determination of whether any of these four characteristics apply to a waste can be made by reviewing the definitions in the appropriate Federal and state regulations, comparing the properties of the waste to those that define HW, or by using EPA-approved test methods. Mixtures of a solid waste and a listed HW are also considered hazardous and are regulated under RCRA, unless the listed HW was listed solely for the characteristic of ignitability, reactivity, and/or corrosive. Such mixtures are excluded from regulation as a hazardous waste once they no longer exhibit a characteristic. It is the generator's responsibility to determine whether their waste is a HW subject to regulation under RCRA and/or applicable state and local laws.

17-4.4 HW Generation and Accumulation. Threshold monthly generation rates and accumulation quantities are established in Federal or state regulations. A large quantity generator may, subject to state and local regulations, accumulate hazardous waste on-site for 90 days or less without a permit or interim status provided certain waste management, contingency planning, and employee training requirements are met. A large quantity generator who accumulates HW for more than 90 days, as prescribed in Federal or state regulation, becomes an operator of a storage facility, subject to RCRA permit requirements, unless an exception has been approved by the appropriate Federal or state regulatory agency. Generation rates between 100 and 1,000 kilograms per month subject the generator, known as a Small Quantity Generator, to HW generator requirements that include obtaining an EPA ID Number and using the Uniform Hazardous Waste Manifest to transport wastes off-site. A Small Quantity Generator may accumulate HW on site for 180 days or less without a permit or interim status provided the quantity of waste accumulated on-site never exceeds 6,000 kilograms, for all entities that produce waste within the property line of your facility, and the Small Quantity Generator complies with all other applicable regulations. If more than 1,000 kilograms per month are generated, the generator and the waste are subject to full regulation under RCRA. According to Federal HW regulations, HW accumulation at a satellite accumulation point is limited to a cumulative maximum of 55 gallons of all (not each) HW or one quart of acute HW. Satellite accumulation points must be located at or near the point of generation and be under the control of the operator of the process generating the HW at all times. Waste accumulated in excess of 55 gallons (cumulative) must be removed within three days (may be less in accordance with local regulations) to a less than 90-day accumulation area or a permitted storage facility. Generators are obligated to send their HW to TSD facilities that comply with RCRA regulations. The generator must certify on the HW manifest that the method selected for treatment, storage, or disposal is the practicable method available to the generator that minimizes the present and future threat to human health and the environment. In addition, generators must certify that they have a HW minimization program in place to reduce the volume and toxicity of waste generated. A generator who generates a HW subject to Federal land disposal restrictions must notify the TSD facility that the waste is a restricted waste or certify that the waste meets the requirements for land disposal.

17-4.5 HW Transportation. Transportation of HW off-site requires a HW manifest. Transporters must have an EPA identification number to pick up and haul waste to a TSD facility. A transporter of HW is also subject to the hazardous material transportation requirements of DOT, including

labeling, marking, use of proper containers, spill reporting, and hazardous material employee training. Transport of HW over a public highway requires the vehicle operator to have a commercial driver's license with a hazardous material endorsement. Some states may require additional training over DOT requirements.

17-4.6 HW Treatment, Storage, and Disposal. TSD facilities need a permit to continue existing operations or to initiate new operations. EPA initially developed a two-part permitting procedure. The application conferred interim status to an existing TSD facility, allowing the TSD facility to operate until receipt of a decision on the Part B final permit application. TSD facilities may only be expanded or significantly changed and still remain in an interim status with the approval of EPA regional offices or the state HW office. Interim status cannot be conferred on a new TSD facility if operation commenced after 19 November 1980. In such instances, a final permit must be applied for and obtained before operation begins. Any operation before award of a Part B permit or modification of an existing Part B permit must be approved by the cognizant state or EPA. Any existing facility that becomes subject to RCRA, due to new regulations or amendments to the existing regulations, may be granted interim status after timely submission of a Part A application and may have a 12 month grace period to submit its Part B permit application.

17-4.7 HW Manifest System. The Uniform Hazardous Waste Manifest or state equivalent must accompany all HW transported over any public road. A generator who offers HW for transport off-site must prepare a manifest. Further, the generator or designated representative must sign the manifest certifying that the shipment has been prepared according to applicable EPA and DOT regulations. Sufficient copies of the manifest shall be provided to allow the generator, each transporter, and the TSD facility operator designated to receive the HW to keep a copy for their records and to allow copies to be returned to the generator for recordkeeping and distribution to the appropriate state(s). Activities shall also include a 24-hour manned duty telephone number in the "generator" block on each manifest. Each generator signatory shall be authorized in writing to sign the manifest.

17-4.8 Compliance with HW Management Requirements. All OUs shall comply with applicable HW management Federal, state, and local requirements. Compliance with all aspects of an EPA-approved state or local HW management program is considered compliance with Federal requirements. Contracting offices shall ensure that contractors performing work for the Department on Federal property, or on private property through a grants program, shall comply with all applicable requirements. If a state has a program that is not approved by EPA, Department's activities shall comply with both the state and Federal program requirements.

17-4.9 RCRA Permit. The RCRA HW permitting program helps ensure the safe treatment, storage, and disposal of HW by establishing specific requirements that must be followed by OUs when managing hazardous wastes. Permits for the treatment, storage, or disposal of hazardous wastes are issued by Authorized States or by EPA Regional Offices.

(a) The RCRA permit establishes the waste management activities that a facility can conduct and the conditions under which it can conduct them. The permit outlines facility design and operation, lays out safety standards, and describes activities that the facility must perform, such as monitoring and reporting. Permits typically require facilities to develop emergency plans, find insurance and financial backing, and train employees to handle hazards. Permits also can include facility-specific requirements such as ground-water monitoring. The permitting agency has the authority to issue or deny permits and is responsible for monitoring the facility to ensure that it is complying with the conditions in the permit. According to RCRA and its regulations, a Treatment Storage Disposal Facility (TSD facility) cannot operate without a permit, with a few exceptions.

(b) All OUs that currently or plan to treat, store, or dispose of hazardous wastes must obtain a RCRA permit.

- New TSD facilities must receive a permit before they even begin construction. They must prove that they can manage hazardous waste safely and responsibly. The permitting agency reviews the permit application and decides whether the facility is qualified to receive a RCRA permit. Once issued, a permit may last up to ten years.

- Operating TSD facilities with expiring permits must submit new permit applications six months before their existing permits run out.

- TSD facilities operating under Interim Status must also apply for a permit. Congress granted "interim status" to facilities that already existed when RCRA was enacted. Interim status allows existing facilities to continue operating while their permit applications are being reviewed.

17-4.10 HW Management Plans. Every OU that generates HW shall develop and use a HW Management Plan. A HW Management Plan shall:

(a) Identify applicable Federal, state, and local regulations pertaining to the generation and management of HW.

(b) Identify training requirements and describe procedures for obtaining training and maintaining training records.

(c) Assign responsibilities for the generation, designation, handling, storage, treatment, disposal, and all documentation.

(d) Describe all HW generation and management procedures.

(e) Include or reference the HW minimization plan and goals.

(f) Include or reference contingency plans and emergency response procedures.

The plan or component shall be kept up to date to include changes in HW generation and management procedures, as well as changes in applicable Federal, state, and local HW regulations. The plan or component shall include or reference minimization procedures sufficient to achieve the Department's minimization goals.

17-4.11 Reporting and Recordkeeping. Many recordkeeping requirements apply to generators and TSD facilities. Some records are specific to the generator or type of facility, and others are required by law. The following is a list of the most common reporting and recordkeeping requirements:

(a) **Biennial Reports.** Generators and TSD facilities shall submit a Biennial Report to the appropriate EPA regional office or designated state agency by 1 March of each even-numbered year (some States require an annual report rather than the biennial report). Maintain a copy of each Biennial Report for a period of at least 3 years from the due date of the report.

(b) **Manifests.** Except as otherwise required by state law, copies of manifests signed by the generator, the transporter, and the TSD owner or operator must be maintained for three years from the date the HW was accepted by the original transporter. Large Quantity Generators who have not received a signed manifest within 35 days of the date the HW was shipped must contact the transporter or designated TSD facility to determine the status of the waste. Generators who do not receive a copy of the manifest with the handwritten signature of the owner or operator of the designated TSD facility within 45 days of the date the HW was shipped must file an Exception Report with the EPA or state, as appropriate. Maintain a copy of each Exception Report for a period of at least three years from the due date of the report. Small Quantity Generators who do not receive a copy of the manifest with the handwritten signature of the owner or operator of the designated facility within 60 days of the date the waste was accepted by the initial transporter must submit a legible copy of the manifest, with some indication that the generator has not received confirmation of delivery, to the EPA Regional Administrator for the Region in which the generator is located. If a TSD facility accepts hazardous waste from an off-site source without an accompanying manifest, the TSD operator must submit a report to the EPA Regional Administrator or appropriate state office within 15 days after receiving the waste.

(c) **Land Disposal Restriction (LDR) Notifications and Certifications.** Generators of waste must determine whether their waste meets the LDR treatment standards, either by testing or using knowledge of the waste. With the initial shipment of waste, the generator must transmit a one-time written notice to each TSD facility receiving the waste and place a copy in the generator's file. No further notification is necessary unless the waste or TSD facility change, in which case a new notification must be sent and a copy placed in the generator's file. Whether waste determinations are based on knowledge of the waste or analytical testing, generators must retain all supporting data used to make the determination in the on-site files. Generators managing and treating HW in less than 90 day tanks or containers, in order to meet applicable LDR treatment standards, must develop and follow a written waste analysis plan that contains all information necessary to treat the waste(s) in accordance with the LDR requirements. The plan must be kept on site in the generator's records. Generators managing hazardous waste in a Clean Water Act system must maintain a one-time note to the on-site file. Generators must retain on-site a copy of all notices, certifications, waste analysis data, and other documentation related to the RCRA Land Disposal Restrictions for at least three years from the date that the waste was last sent to on-site or off-site treatment, storage, or disposal. The three-year record retention period is automatically extended during the course of any unresolved enforcement action.

(d) **Spill Reporting.** In the event of a fire, explosion, or other release which could threaten human health outside the facility or when a spill has reached surface water, the emergency coordinator must immediately notify the National Response Center (using their 24-hour toll free number 1-800-424-8802). Additional notification may be required by the facility spill response plan. See Chapter 14 for spill procedures and reporting requirements. Transporters shall report any discharge of HW in transit as specified in Federal regulations.

(e) **Training Documentation.** Generators and operators of TSD facilities shall develop a training plan and maintain personnel training records of those engaged in hazardous waste management, as required by Federal and state regulation. Federal RCRA regulations require that training records on current personnel be kept until closure of the facility. Training records on former employees must be kept for at least three years from the date the employee last worked at the facility. Training documentation requirements apply to the following types of training:

- General awareness training;
- 40-hour initial training for facility operators;
- 24-hour supervisory operations for facility managers;
- 24-hour technical training for technicians;
- Eight-hour HAZWOPER refresher annual training; and
- Annual Spill response training.

(f) **Pollution Prevention.** See Chapter 7. Additional reports and recordkeeping requirements apply for specific types of facilities. A thorough review of the regulations applicable to the facility is necessary to ensure complete records are maintained. Though not required by regulation, it is good practice to keep a written record of inspections such as that of waste accumulation and container storage areas. In addition, copies of correspondence with regulators, applications for permits and renewals, report of releases, documentation of response actions, etc., are all useful should a question arise.

17-5 Responsibilities

17-5.1 The Office of the Secretary.

(a) **OSEEP shall:**

(i) Monitor OUs compliance with appropriate Federal and state regulations.

(ii) Ensure that OUs that currently or plan to treat, store, or dispose of hazardous wastes obtain a RCRA permit.

(b) **OSBM shall** comply will all HW requirements for the Herbert C. Hoover Building (HCHB).

17-5.2 OUs shall:

(a) OUs shall ensure OSEEP have copies of permits on file.

(b) Ensure that their sites comply with applicable Federal, state, and local HW laws and regulations.

(c) Ensure employees develop and use HW Management.

(d) Budget and allocate sufficient resources to ensure site activities manage HW per all applicable Federal, state, and local HW laws and regulations, including the assignment and training of operational and management personnel, operation and maintenance of equipment and facilities, transport and disposal of waste, etc.

(e) Ensure their site activities comply with the Department HM and HW management and reporting requirements.

CHAPTER 18:
POLYCHLORINATED BIPHENYL (PCB) MANAGEMENT

18-1 Scope

18.-1.1 This chapter identifies requirements and responsibilities applicable to the prevention of pollution from polychlorinated biphenyls (PCBs) at Department shore facilities within the United States, Commonwealth of Puerto Rico, Virgin Islands, Guam, American Samoa, and the Commonwealth of the Northern Marianas Islands.

18-1.2 Related Chapters. None.

18-1.3 References.

(a) 40 CFR Parts 750 and761, EPA Regulations for Controlling PCBs; and

(b) 29 CFR § 1910.1200, OSHA Hazard Communication (Worker Right To Know) Training.

18-2 Legislation

18-2.1 Toxic Substances Control Act, 15 U.S.C. § 2601 et seq**.** TSCA bans the use, manufacture, processing, and distribution in commerce of PCBs. TSCA prohibits import of PCBs of any concentration, for disposal, without an exemption. TSCA and the PCB regulations also strictly regulate the marking, storage, and disposal of PCBs. Regulations issued under TSCA require generator identification numbers and the manifesting of PCB wastes. Some States regulate PCBs more stringently than the Federal program, including the regulation of PCBs at concentrations less than 50ppm or regulation of PCBs as hazardous waste.

18-3 Terms and Definitions

18-3.1 Capacitor. A device for accumulating and holding a charge of electricity, consisting of conducting surfaces separated by a dielectric. There are three types of capacitors:

- **Small Capacitor.** A capacitor that contains less than 1.36 kg (3 lbs) of dielectric fluid.
- **Large, High Voltage Capacitor.** A capacitor that contains 1.36 kg (3 lbs) or more of dielectric fluid and operates at 2,000 volts (alternating current (ac) or direct current (dc)) or above.
- **Large, Low Voltage Capacitor.** A capacitor that contains 1.36 kg (3 lbs) or more of dielectric fluid and operates below 2,000 volts (ac or dc).

18-3.2 Designated Responsible Official. The DRO is the senior individual who assumes responsibility for the accuracy and completeness of permit applications, permits and statutorily required environmental compliance. A DRO could be subject to criminal sanctions under some environmental laws and regulations. The DRO will also, at times have to certify ongoing compliance with all permit provisions once the permit is issued. The DRO is typically a facility or program manager with direct responsibility for a facility or program that is subject to environmental requirements.

18-3.3 In or Near Commercial Buildings. Within the interior of, on the roof of, attached to the exterior wall of, in an adjacent parking area serving, or within 30 meters (98 ft) of a non-industrial, non-substation building. Commercial buildings include:

- Personnel assembly buildings;
- Educational properties;
- Institutional properties (including museums, hospitals, or clinics)
- Residential properties (living quarters)
- Stores
- Office buildings (including administrative buildings)
- Transportation centers (including airport terminal buildings, bus stations, or train stations).

18-3.4 Non-PCB Transformer. Any transformer that contains less than 50 ppm PCB; except that any transformer that has been converted from a PCB transformer or a PCB-contaminated transformer cannot be classified as a non-PCB transformer until reclassification has occurred per the requirements of reference (a).

18-3.5 PCB or PCBs. Any chemical substance, limited to the biphenyl molecule that has been chlorinated to varying degrees or any combination of substances that contain such substance.

18-3.6 PCB Article. Any manufactured article, other than a PCB container, that contains PCBs and whose surface(s) has/have been in direct contact with PCBs. This includes capacitors, transformers, electric motors, pumps, pipes, and any other manufactured items.

18-3.7 PCB Article Container. Any package, can, bottle, bag, barrel, drum, tank, or other device used to contain PCB articles or PCB equipment and whose surface(s) have not been in direct contact with PCBs.

18-3.8 PCB Bulk Product Waste. PCB bulk product waste means waste derived from manufactured products containing PCBs in a non-liquid state where the concentration at the time of designation for disposal is greater than or equal to 50 ppm PCBs. PCB bulk product waste includes, but is not limited to:

- non-liquid bulk wastes or debris from the demolition of buildings and other man-made structures manufactured, coated, or serviced with PCBs;
- PCB-containing wastes from the shredding of automobiles, household appliances, or industrial appliances;
- plastics (such as plastic insulation from wire or cable; radio, television and computer casings; vehicle parts; or furniture laminates); other similar coatings or sealants; caulking; adhesives; paper; Galbestos; sound deadening or other types of insulation; and felt or fabric products such as gaskets; and
- Fluorescent light ballasts containing PCBs in the potting material.

PCB bulk product waste does not include: PCB remediation wastes, Mineral Oil Dielectric Fluid removed from electrical equipment, hydraulic fluids, heat transfer fluids, oils removed from household appliances or equipment, bulk paint, waste oil.

18-3.9 PCB Container. Any package, can, bottle, bag, barrel, drum, tank, or other device that contains PCBs or PCB articles and whose surface(s) has been in direct contact with PCBs.

18-3.10 PCB-Contaminated Electrical Equipment. Any electrical equipment including, but not limited to, transformers, capacitors, circuit breakers, re-closers, voltage regulators, switches, electromagnets, and cable that contain 50 ppm or greater PCB but less than 500 ppm PCB.

18-3.11 PCB Equipment. Any manufactured item, other than a PCB container, that contains a PCB article or other PCB equipment. This may include appliances, electronic equipment, and fluorescent light ballasts and fixtures.

18-3.12 PCB Item. Any PCB article, PCB article container, PCB container, or PCB equipment that deliberately or unintentionally contains any PCB or PCBs at 50 ppm or greater.

18-3.13 PCB Leak. Any instance in which a PCB item has any PCB on any portion of its external surface or surroundings.

18-3.14 PCB Transformer. Any transformer that contains 500 ppm or greater PCB. The transformer classifications are:

- <50 ppm Non-PCB Transformer;
- 50 - <500 ppm PCB Contaminated Transformer; and
- 500 ppm PCB Transformer

18-3.15 PCB Waste Generator. Any person whose act or process produces PCBs that are regulated for disposal or whose act first causes PCBs or PCB items to become subject to disposal requirements or who has physical control over the PCBs when a decision is made that the use of the PCBs has been terminated.

18-3.16 Quantifiable Level/Level of Detection. For PCB analysis, quantifiable level/level of detection means 2 micrograms/gram (2 ppm) from any resolvable gas chromatographic peak.

18-3.17 Totally Enclosed Manner. Any manner that will ensure no exposure of human beings or the environment to any concentration of PCBs.

18-4 Requirements

18-4.1 Designated Responsible Official. The general duty of the DRO is to ensure day-to-day compliance with all environmental laws, regulations, and requirements imposed on their facility and their facility staff's activities. Each OU shall establish a policy regarding DROs. The policy shall define who are considered DROs and what their duties are. There are several environmental laws and regulations that assign specific responsibilities to responsible officials (e.g. Clean Air Act), therefore care should be taken and coordination should be done with the Department in establishing DROs. OUs shall be responsible for designating the Responsible Official for each facility and permit under their administration. It is generally better to appoint the DRO at the lowest level that still has the authority to submit permit applications and sign reports required by regulatory permits, as he/she will be closer to the operations being certified. The Department recommends that the DRO for a given facility or permit be the facility manager or equivalent. In no case shall the responsibility for permits be any lower than the Federal facility manager, operations director, or the manager responsible for facility operations. If an OU can assure itself that its facilities are not owned and they cannot be classified as the operator of a facility then the paragraph does not apply. Some indications that an OU could be classified as an operator of a facility:

- Does the facility have EPA ID number in the OU's name?
- Does the facility ship hazardous waste under their EPA ID number?
- Does the facility hold registration certificates for USTs in the OU's name?
- Does the facility contract for fuel deliveries under its OU name?
- Does the facility operate and/or accept fuel deliveries under their OU name and address?
- Does the facility hold Clean Water Act, Clean Air Act, or Safe Drinking Water Act operating permits?
- Does the facility report under EPCRA under their OU name and address?

18-4.2 General. Except as authorized in reference (a), EPA regulations ban the use of PCBs in any manner other than totally enclosed.

18-4.3 Transboundary Shipments of PCBs for Disposal. Per reference (a), no person may import PCBs or PCB Items of any concentration for disposal without an EPA exemption issued under the authority of TSCA section 6(e)(3). No person may export PCBs or PCB Items for disposal without an exemption, except that PCBs and PCB Items at concentrations <50 ppm (or <10ug PCB/100 cm^2 if no free-flowing liquids are present) may be exported for disposal. Other treaties and international agreements may also apply to export.

18-4.4 Compliance with PCB Management Requirements. Facilities shall comply with the requirements of reference (a) and applicable state and local PCB management requirements. In addition, facilities shall observe the following:

(a) **PCB Materials.** All items or materials containing PCBs or suspected of containing PCBs shall be considered regulated unless exempt by regulation. PCBs may exist in older electrical equipment and hydraulic and lubricating oils, subject to the restrictions in reference (a). Perform all repair, removal, handling, storage, and disposal of PCB materials in accordance with applicable Federal,

state, and local requirements.

NOTE:
Prior to stringent regulation of PCBs, PCBs were used in a variety of applications as a fire retardant, in paints, and for other purposes such as sound insulating felt and electrical cables. Often, PCBs were added in these applications without being specified in material or equipment procurement specifications; thus, the presence of PCBs cannot always be determined through review of applicable procurement documents. In the disposal of materials and components, care should be taken to identify all potentially hazardous substances and carry out the disposal accordingly.

(b) **PCB Spill Reporting.** Federal regulations list PCBs as a Hazardous Substance. A spill of a reportable quantity of "pure PCB" shall be immediately reported as required by regulation (see Chapter 14). Use the PCB concentration of the spilled material, the amount of material spilled, and the density of the particular type of PCB (if unknown, assume 10 lbs/gallon) to calculate the quantity of "pure PCB" spilled. The NCP requires the reporting of all spills involving 1 pound or more PCBs to the NRC at 1-800-424-8802. Report spills that directly contaminate surface water, sewers, drinking water supplies, grazing lands, or vegetable gardens to the appropriate EPA regional office within 24 hours. States, particularly those that regulate PCBs as a HM/HW, may have a more stringent reporting requirement.

(c) **PCB Spill Cleanup.** All PCB spills shall be cleaned up per reference (a). The Federal PCB Spill Cleanup Policy presented in reference (a) applies to spills of PCBs (50 ppm or greater) that have occurred since 4 May 1987. Spills that occurred before 4 May 1987 are subject to the self-implementing cleanup provisions of reference (a) or requirements established at the discretion of the EPA or other authorized cleanup authority.

(d) **Contractors.** Facilities shall ensure that contractors performing work for the Department on Department property comply with all applicable PCB requirements while on-site, including Department requirements.

18-4.5 Department PCB Equipment Removal Policy. Department policy is to eliminate PCBs from all Department-owned electrical distribution systems and equipment, hydraulic fluids, and cooling and lubricating oils to the maximum extent practicable. The following procedures shall be followed:

(a) **Transformers:**

(i) Determine by EPA-approved method, the PCB concentration for all pad-mounted and pole-mounted transformers. Transformers shall be marked according to classification: the ML mark for PCB transformers, a tag showing PCB concentration and sample identification number for PCB-contaminated transformers, or a label indicating non-PCB. Activity records shall note the PCB test results (in ppm) for each transformer.

(ii) To reduce future potential liabilities, transformer elimination shall be accomplished by replacement or removal with load transfer to non-PCB transformers. Retrofill is an acceptable alternative to replacement for transformers when it has a clear economic benefit (typically transformers

in good condition, less than 25 years old, and 300 kilo-volt-ampere (KVA) or larger), and for those transformers that are difficult or impossible to replace due to the constraints of their physical location. For retrofill applications, consider environmentally preferred and/or biobased products.

(b) **Capacitors:** Establish an accurate inventory of high and low voltage capacitors based on manufacturing information. Mark large capacitors established to contain PCBs over 50 ppm as PCB-contaminated and label each with the sample identification (ID) number and concentration. Mark large capacitors established as not containing PCBs as non-PCB. Activity records shall note the PCB classification of each large capacitor.

(c) **PCB Elimination Plan:** All facilities shall prepare a plan for the elimination of PCBs and PCB-contaminated material from all transformers, capacitors, and associated electrical equipment; and hydraulic and lubricating fluids. The plan shall include the proposed date of removal and the requested source of funding for each PCB item. Transformer and capacitor owners shall prioritize corrective projects based on risk and impact to mission if a fire, explosion, or major PCB spill were to occur and the likelihood of such an incident occurring. Transformer and capacitor owners shall coordinate priorities with impacted customers. Pay special attention to the redesign of the power grid to accommodate PCB removal.

(d) **Procurement:** All future procurement of transformers or any other equipment containing dielectric or hydraulic fluid shall be accompanied by a manufacturer's certification that the equipment contains no detectable PCBs (less than 2 ppm) at the time of shipment. Newly procured transformers and equipment no longer require permanent labels stating they are PCB-free (no detectable PCBs); however, facilities may find it useful to mark the items non-PCB for inventory purposes.

18-5 Responsibilities

18-5.1 OUs shall:

(a) Comply with applicable Federal, state, and local PCB requirements;

(b) Evaluate alternatives to the use of PCBs in existing PCB equipment and transformers and provide such information to appropriate commands and activities;

(c) Make necessary changes to facility design criteria and operating instructions to incorporate Federal, state, and local regulations regarding PCBs and PCB items;

(d) Ensure that all facilities develop and implement PCB Elimination Plans and that funding is programmed to meet the goals of the elimination plans. At a minimum, program funding to ensure compliance with all applicable regulations and Department goals for elimination of PCBs;

(e) Ensure that facility managers budget, fund, and manage PCBs in full compliance with applicable Federal, state, and local PCB laws and regulations;

(f) Ensure that facility managers sign and submit, as appropriate, reports and other

required data to EPA, state, or local agencies;

(g) Ensure that facility managers train personnel involved in PCB operations per section 18-6 below;

(h) Ensure that facilities handle, store, mark, inspect, and assess risks of PCBs and PCB items according to applicable Federal, state, or local regulations. With regard to PCB transformers and PCB-contaminated transformers:

(i) Inspect for PCB leaks;

(ii) Repair all leaks;

(iii) Maintain records; and

(iv) Provide notification to EPA.

(i) Ensure that facilities inventory or validate all PCBs and PCB items annually per procedures required by regulatory agencies and maintain records of testing for PCB concentrations in hydraulic systems, heat transfer systems, and converted or reclassified transformers for the life of the equipment (through disposal);

(j) Ensure that facilities Report PCB spills or incidents involving combustion as prescribed in Chapter 14 when the spill exceeds the reportable quantities established in Federal regulations. Report fire-related incidents involving PCB transformers immediately to the NRC, regardless of quantity;

(k) Maintain training records and documentation as required by Federal, state, and local regulations;

(l) Ensure all owners of PCB transformers, including those in storage for reuse, register their transformers with EPA in accordance with reference (a). A transformer owner who discovers a PCB transformer must register the newly identified PCB transformer, in writing, with EPA no later than 30 days after it is identified as such. This requirement does not apply to transformer owners who have already registered PCB transformers and are located at the same address. Further, it is recommended that all PCB transformers and equipment be registered with cognizant fire departments; and

(m) Ensure that facility managers develop and implement a PCB Elimination Plan in compliance with Federal, state, and local PCB regulations. Update the plan on an annual basis.

18-6 Training

(a) Every person who repairs, maintains, replaces, inventories, or tests PCB, PCB-contaminated or suspected PCB articles and their immediate supervisors shall receive applicable Worker Right-to-Know Training on hazardous materials in accordance with reference (b); shall receive job specific training on marking, inventorying, reporting, inspection, and spill reporting on PCBs; and, shall receive job specific training regarding additional requirements specific to their facility.

(b) Every person involved in PCB program management shall receive general environmental overview training; shall receive specific comprehensive training on Federal, state, and local PCB regulations related to their job assignment, and; shall be familiar with the provisions of this chapter.

(c) Environmental professionals who provide implementation, technical guidance, or oversight of the PCB management program shall receive general environmental overview training specified in Chapter 2 of this instruction, introductory or executive overview training in PCB management, and shall be familiar with the provisions of this chapter.

18-7 Reporting

18-7.1 Reporting to the Office of the Secretary.

- None

18-7.2 Reporting to Federal, State, and Local Regulatory Agencies. PCB spills shall immediately be reported to the NRC as per 18-4.4(b) above and Chapter 14, Oil and Hazardous Substance Spill Preparedness and Response.

18-7.3 PCB Transformers in Commercial Buildings. Register PCB transformers in commercial buildings with the building owner. Register PCB transformers in or near commercial buildings with owners of all buildings located within 30 meters of the PCB transformer(s). For facilities that host non-Department tenants, compliance with the requirement is adequate if PCB transformers in or near commercial buildings are registered with EPA in accordance with reference (a) and with the local fire department.

CHAPTER 19:
SOLID WASTE MANAGEMENT, RESOURCE RECOVERY AND RECYCLING

19-1 Scope

19-1.1 This chapter identifies solid waste management, waste prevention, and recycling procedures and policy. All Department of Commerce sites worldwide that generate one or more ton of solid waste per day must follow the solid waste reporting, solid waste management planning, and affirmative procurement requirements outlined in this chapter. Requirements derived from RCRA and similar statutes apply to Department of Commerce sites within the United States and its territories.

19-1.2 **Related Chapters.** Chapter 3, Awards; Chapter 7, Pollution Prevention; Chapter 14, Oil and Hazardous Substance Spill Preparedness and Response; and Chapter 17, Hazardous Waste Management.

19-1.3 **References.**

(a) 29 CFR Part 1910, Occupational Safety and Health Standards;

(b) 40 CFR Part 247, Guidelines for Procurement of Products that Contain Recycled Material;

(c) 40 CFR Part 246, Guidelines for Source Separation for Materials Recovery;

(d) 40 CFR Part 243, Guidelines for Solid Waste Storage and Collection;

(e) 40 CFR § 262.11, Hazardous Waste Determination;

(f) 40 CFR Part 240, Guidelines for the Thermal Processing Of Solid Wastes;

(g) 40 CFR Part 268, Regulations on Land Disposal Restrictions;

(h) 40 CFR Part 257, Regulations on Criteria for Classification of Solid Waste Disposal Facilities and Practices;

(i) 40 CFR Part 258, Criteria for Municipal Solid Waste Landfills;

(j) E.O. 13423, Strengthening Federal Environmental, Energy, and Transportation Management, dated January 24, 2007;

(k) E.O. 13514, Federal Leadership in Environmental, Energy, and Economic Performance, dated October 5, 2009; and

(l) Commerce Acquisition Manual, Chapters 1323.70.

19-2 Legislation

19-2.1 Federal Facilities Compliance Act, Pub. L. No. 102-386**.** This law allows Federal and state regulators to enforce Federal, state, and local solid waste laws and regulations at Federal facilities. FFCA requires Federal facilities to pay any nondiscriminatory fees or service charges assessed in connection with a Federal, state, interstate, or local solid or HW regulatory program.

19-2.2 Occupational Safety and Health Act, 1970, 29 U.S.C. § 651 et seq**.** This Act assures safe and healthful working conditions for men and women by authorizing enforcement of the standards developed under the Act; by assisting and encouraging the States in their efforts to assure safe and healthful conditions; and by providing for research, information, education, and training in the field of occupational safety and health. See reference (a). OSHA is made applicable to Federal facilities through E.O. 12196.

19-2.3 Solid Waste Disposal Act of 1965, as amended by RCRA, 40 U.S.C. Part 247**.** SWDA requires that Federal facilities comply with all Federal, state, interstate, and local requirements concerning the disposal and management of solid wastes. Such requirements include permitting, licensing and reporting. The SWDA encourages beneficial reuse of wastes through recycling and burning for energy recovery. The Act also requires Federal agencies to procure EPA guideline products containing recovered materials to the maximum extent possible. The Comprehensive Procurement Guideline is codified as 40 CFR Part 247. See reference (b).

19-3 Terms and Definitions

19-3.1 Activity. An independent facility performing a specific mission.

19-3.2 Composting. A controlled process for managing the degradation of plant and other organic wastes to produce a useful product that can be used as mulch or soil conditioner.

19-3.3 Contained Disposal. Land filling or incineration of solid waste in a permitted facility. This is the least desirable solid waste option and ranks at the bottom of the priority list for integrated solid waste management.

19-3.4 Designated Responsible Official. The DRO is the senior individual who assumes responsibility for the accuracy and completeness of permit applications, permits and statutorily required environmental compliance. A DRO could be subject to criminal sanctions under some environmental laws and regulations. The DRO will also, at times have to certify ongoing compliance with all permit provisions once the permit is issued. The DRO is typically a facility or program manager with direct responsibility for a facility or program that is subject to environmental requirements.

19-3.5 Diversion Rate. The rate at which non-hazardous solid waste is diverted from a disposal facility. Disposal facilities include landfills (both solid waste and inert) and incinerators. Composting, mulching, recycling, reuse, and donation are generally accepted waste diversion methods. The diversion rate will be calculated twice, once without considering construction and demolition (C&D) debris, and once considering C&D.

19-3.6 Energy Recovery. Steam or electrical energy produced from solid waste used as a fuel in a waste to energy plant. All incineration, including energy recovery, is counted as disposal in diversion rate calculation.

19-3.7 Integrated Solid Waste Management Plan (ISWMP). A comprehensive study and plan for solid waste management and recycling.

19-3.8 Managing Activity. An activity or an administrative element assigned to manage a recycling program (including personnel, funds, and equipment).

19-3.9 Office Waste. Solid wastes generated by the everyday affairs of government workers in government buildings. Excludes waste generated in cafeterias, snack bars, or other food preparation spaces.

19-3.10 Qualified Recycling Program (QRP). An organized operation that requires concerted efforts to divert or recover scrap or waste from waste streams, as well as efforts to identify, segregate, and maintain the integrity of the recyclable materials in order to maintain or enhance their marketability.

19-3.11 Recyclable Material. A material that can be transformed into a new, useable product through the process of recycling.

19-3.12 Recycling. The result of a series of activities by which materials that would become or otherwise remain waste, are diverted from the solid waste stream by collection, separation, and processing, and are used as raw materials in the manufacture of goods sold or distributed in commerce, or the reuse of such materials as substitutes for goods made of virgin materials. For purposes of a quality recycling program, scrap metal is a recyclable material (reference (c)).

19-3.13 Resource Recovery. The recovery of materials or energy from solid waste.

19-3.14 Resource Recovery Facility. Any physical plant that processes non-hazardous, commercial, or institutional solid waste, biologically, chemically, or physically and recovers useful products, such as shredded fuel, combustible oil or gas, steam, metal, and glass for resale or reuse.

19-3.15 Solid Waste. Any garbage, refuse, or sludge from a wastewater treatment plant, water supply treatment plant, or air pollution control facility, and other discarded material, including solid, liquid, semisolid, or contained gaseous material resulting from industrial, commercial, mining, and agricultural operations, and from community activities, but not including solid or dissolved material in domestic sewage, or solid or dissolved materials in irrigation return flows or industrial discharges that are point sources subject to permits under Section 402 of the Clean Water Act.

19-3.16 Source Reduction. Reducing, at the point of introduction into the process, the volume or weight of material used before the products are purchased, used or discarded. This includes reuse of materials, items, or products prior to recycling and/or disposal.

19-3.17 Source Separation. The separation of recyclable materials at their point of generation by the generator. See reference (c).

19-3.18 Waste Office Paper. Letterhead, dry copy papers, miscellaneous business forms, stationary, typing paper, tablet sheets, and computer printouts.

19-4 Requirements

19-4.1 Designated Responsible Official. The general duty of the DRO is to ensure day-to-day compliance with all environmental laws, regulations, and requirements imposed on their facility and their facility staff's activities. Each OU shall establish a policy regarding DROs. The policy shall define who are considered DROs and what their duties are. There are several environmental laws and regulations that assign specific responsibilities to responsible officials (e.g. Clean Air Act), therefore care should be taken and coordination should be done with the Department in establishing DROs. OUs shall be responsible for designating the Responsible Official for each facility and permit under their administration. It is generally better to appoint the DRO at the lowest level that still has the authority to submit permit applications and sign reports required by regulatory permits, as he/she will be closer to the operations being certified. The Department recommends that the DRO for a given facility or permit be the facility manager or equivalent. In no case shall the responsibility for permits be any lower than the Federal facility manager, operations director, or the manager responsible for facility operations. If an OU can assure itself that its facilities are not owned and they cannot be classified as the operator of a facility then the paragraph does not apply. Some indications that an OU could be classified as an operator of a facility:

- Does the facility have EPA ID number in the OU's name?
- Does the facility ship hazardous waste under their EPA ID number?
- Does the facility hold registration certificates for USTs in the OU's name?
- Does the facility contract for fuel deliveries under its OU name?
- Does the facility operate and/or accept fuel deliveries under their OU name and address?
- Does the facility hold Clean Water Act, Clean Air Act, or Safe Drinking Water Act operating permits?
- Does the facility report under EPCRA under their OU name and address?

19-4.2 General. As set forth in E.O. 13514 (reference (k)), all Commerce facilities that generate more than 1 ton of solid waste must divert at least 50% of its non-hazardous waste from landfill disposal by 2015.

19-4.3 Solid Waste Collection, Storage, and Disposal. Federal, state, and local requirements concerning collection, storage, and disposal apply to Commerce OUs and facilities generating solid wastes, whether the solid waste is collected by another Federal agency or non-government collector. See references (e), (f), (h), (i), (j), and (k). Reference (g) requires any person who generates solid waste to determine if that waste is a hazardous waste. Refer to Chapter 17, Hazardous Waste Management, for hazardous waste determination and management requirements.

19-4.4 Source Reduction. Federal, state, and local requirements concerning source reduction apply to Commerce activities. This technique of preventing waste is the preferred method of managing solid waste.

19-4.5 Solid Waste Resource Recovery.

(a) **Resource Recovery Alternatives.** Alternatives for disposition of recovered materials include:

(i) Sale of recovered materials through GSA.

(ii) Transfer of waste materials to a voluntary or community organization, even when the materials are located on Commerce-owned, leased, or occupied facilities if:

– Materials were not government purchased or generated.

– Materials, while owned or generated by Commerce, are uneconomical for government supported collection and disposal.

(b) **Recyclable Materials Sales Program.** OUs with recycling programs shall first use recyclable materials sales proceeds to cover the costs directly attributable to all OUs recycling programs, including, but not limited to, manpower, facilities, training, program awareness expenses, equipment, overhead, and other capital investments. After these costs are recovered, the Department may use the remaining proceeds for pollution abatement, pollution prevention, composting, and energy conservation, with first consideration given to projects included in the OU's recycling programs. If there are any questions on whether the purchase of a particular item with recycling funds is appropriate, please contact the General Law Division of the Office of General Counsel.

19-4.6 Solid Waste Disposal. Federal, state, and local requirements apply to incineration facilities. OUs shall interpret the application of capacity emission standards established by EPA and state government. They shall sufficiently treat all waters discharged from the facility to meet applicable effluent limitation standards. They shall obtain all necessary permits. An OU may operate an incineration facility for solid wastes in conjunction with a final land disposal facility. Land disposal is required, under EPA guidelines and applicable state regulations, for residues from the incineration operation and those non-hazardous wastes that cannot be incinerated for reasons of health, safety, or technological limitation. OUs will use only those land disposal facilities with appropriate operating permits for residues and non-combustible materials. (See reference (e)). OUs shall not open new solid waste disposal facilities without consulting and receiving concurrence from Commerce's Chief Financial Officer first.

The OUs shall consider solid waste generated by its operations and actions as government property for purposes of disposal. Contractors shall manage solid waste they generate on Commerce owned land under the requirements of their contracts (See reference (i)). OUs are encouraged to divert 50% of their construction demolition debris from landfill disposal to recycling or recovery operations with a goal of zero percent by 2030. Implementation of this policy will utilize four methods: source reduction, reuse of materials, recycling, and purchase of recycled materials. Every OU has a personal responsibility for implementing this policy.

19-4.7 Commerce Integrated Solid Waste Management Programs. All U.S. Department of Commerce OUs shall develop and implement ISWMPs and QRPs. OUs shall design these programs as total systems that consider relative economic advantages of the latest technology as well as the potential for resource recovery. OUs shall develop ISWMPs using the following priority basis:

(a) Source reduction

(b) Reuse

(c) Recycling

(d) Disposal

19-4.8 Source Reduction. OUs shall incorporate the following in the Department resource reduction programs, where feasible:

(a) Process modifications.

(b) Procurement of materials that generate less solid waste.

(c) Reduction of waste generation in the office by:

(i) Reusing materials (i.e., file folders, paper clips, interoffice routing envelopes, etc.).

(ii) Dual-sided copying.

(iii) Using electronic mail instead of paper memos.

(iv) Reduced mailing and distribution lists.

(v) Duplex Printing.

(vi) Good housekeeping or best management practices.

(vii) Employee awareness training.

(viii) Any reasonable mechanism that successfully avoids, prevents, or reduces solid waste at the source.

19-4.9 Solid Waste Resource Recovery.

(a) **Recycling.** The OUs shall comply with Federal and state recycling laws, regulations, and policies. The OUs shall ensure that there is a recycling program at its facilities. The building owner usually administers the QRP; however, the owner may delegate the QRP to a tenant. All construction and demolition projects awarded to contractors at Commerce-owned property shall include a Construction Waste Management Plan for construction and demolition debris. The Construction Waste Management Plan shall evaluate and determine the extent of recycling, reuse, and composting possible for the project. The recycling manager shall either conduct or request from GSA a recovered materials market analysis, including estimated return from sale and length of market availability prior to any source separation effort. The recycling manager may add any

suitable material to those being recycled. As a general rule, sites shall recycle all non-hazardous solid waste where the cost of recycling is less than the cost of disposal. All OUs shall establish a recycling program for the following purposes:

(i) To comply with Federal, state, and local environmental laws and regulations.

(ii) To reuse readily available resources.

(iii) To avoid excessive costs for disposal of solid waste by other means (cost avoidance).

(iv) To reduce the volume of wastes disposed of in landfills and incinerators.

(v) To meet the Department's goals set forth by E.O. 13514 (reference (k)).

(vi) To obtain proceeds for the Department from the sale of recyclable materials.

(b) OUs/Commerce facilities must have a recycling program and must comply with Federal, state, and local recycling laws, regulations and policies.

(i) All OUs/Commerce facilities must establish recycling programs and procedures that:

- Ensure, where cost effective, (including savings associated with cost avoidance) that all Commerce facilities and OUs activities have, or participate in, qualified recycling programs, and that facilities recycling programs are available to serve all DOC tenant occupying space on site, including leased space.

- Ensure, where cost effective, that contracts awarded after the effective date of this manual which provide for contractor operation of a government-owned or leased facility located within the United States, its territories, or possessions, include provisions that obligate the contractor to participate in a recycling program where cost effective. Existing contracts covering DOC facilities should be modified to incorporate recycling provisions. The DOC components should require participation by contractors operating government-owned or leased facilities overseas where recycling programs are available.

  Recycling includes aluminum cans, batteries, cardboard, glass bottles, hard back books, microfiche, news blend, office blend, plastic bottles, toner cartridges, transparencies, videotapes, newspapers, phone books, catalogs and magazines, brown paper bags, and additional items as implemented. Facilities management recycling includes construction/demolition debris, motor oil, oil filters, paint, pallets, refrigerants, scrap metal, solvents, yard waste, and additional items as implemented.

- All C&D projects awarded to contractors at Commerce facilities shall include a Construction Waste Management Plan for C&D debris. The Construction Waste Management Plan shall evaluate and determine the extent of recycling, reuse, and composting possible for the project. A facility shall establish a C&D recycling program for the following purposes:

- To comply with Federal, state, and local environmental laws and regulations.

- To reuse readily available resources.

- To avoid excessive costs for disposal of solid waste by other means (cost avoidance).

- To reduce the volume of wastes disposed of in landfills and incinerators.

- To meet DOC's Strategic Sustainability Performance Plan goals.

- To obtain proceeds for the Department from the sale of recyclable materials.

(1) Commerce facilities may recycle scrap metal (ferrous and non-ferrous) through a QRP.

(2) The QRP manager may add any suitable material to those being recycled. As a general rule, OUs/Commerce sites shall recycle all non-hazardous solid waste where the cost of recycling is less than the cost of disposal.

(ii) C&D Debris Containing Mercury. Commerce facilities preparing for demolition inside buildings containing waste must be managed and disposed of as RCRA hazardous waste if they meet the toxicity characteristics for mercury (see Chapter 17). Mercury-contained batteries, thermostats, and lamps may be managed under the Universal Waste Program.

(iii) C&D Debris Containing Lead-Based Paint. Commerce facilities working with lead-based paint waste from removal or remediation activities, such as debris, paint chips, dust, and etc., that exhibit the toxicity characteristic must be managed as RCRA hazardous waste.

(iv) C&D Debris Containing Asbestos. Asbestos present at Commerce sites designated for demolition or renovation must be properly packaged in leak-tight containers or wrapped and disposed of at an approved of licensed disposal site. Ten working days prior to start of construction activities the local pollution control center/EPA must be notified. Facilities must follow the guidelines set forth by both EPA and OSHA, paying strict attention to NESHAP, promulgated under the Clean Air Act.

(c) **Purchase of Recycled Content Material.** All OUs are responsible for taking

efforts to purchase and use products manufactured from or containing recycled materials.

(d) **Qualified Recycling Programs.** Only OUs that have a QRP are authorized to receive proceeds from the sales of recyclable materials. After the establishment of an organized QRP or concurrent with such program development, the OUs shall coordinate with the Office of Sustainable Energy and Environmental Programs to determine whether the specific materials to be sold are actually QRP recyclable materials. Scrap paper, officer paper, cardboard, wood, glass and other obvious scrap can be sold via the QRP. Excluded items are not to be sold. The QRP manager can determine if an item is scrap eligible for the QRP. A usable item may be downgraded to scrap if it has no value except for its material content. A QRP includes the following program requirements:

(i) Means for maintaining fiscal accountability for all funds received and disbursed.

(ii) Maintenance of records of the quantity and types of materials sold for recycling.

(iii) Review of all projects funded with the proceeds of recycling sales by its headquarters that would normally review such projects if funded from normal appropriations.

19-4.10 Returnable Beverage Containers. OUs in States with beverage container recovery laws already in force must comply with state laws. The OUs should bring any conflicts between Federal and state requirements, as well as any situations that preclude compliance, to the attention of the Office of Sustainable Energy and Environment.

19-4.11 Composting Vegetation Waste. If feasible, OUs should compost organic waste as an alternative to land filling whenever possible. Organic material management is regulated at the state level. Refer to your state laws, as some states have permit requirements for composting. Examples of topics covered in the permitting process include: a detailed facility design, operating plans, a description of incoming materials, the amount and types of residue to be generated, monitoring plans, and potential environmental releases. In-vessel composting or contractor composting is recommended.

(a) OUs shall consider vessel composting or contractor composting for food waste.

(b) OUs shall compost landscaping cuttings, yard and green waste, limbs, branches, and other organic materials suitable for composting at an site, municipal, or private facility. OUs shall consider the following composting alternatives when determining the most feasible composting method:

(i) Require landscaping contractors to deposit green waste at a site, municipal or private composting facility.

(ii) Use municipal or regional composting facilities (regional composting facilities' tipping fees are almost always less than landfill tipping fees).

(iii) Establish composting facilities at the site if municipal composting facilities are not available or feasible.

19-5 Responsibilities

19-5.1 The Office of the Secretary.

(a) **OSEEP shall:**

(i) Publish and maintain policy and program guidance for a Department wide solid waste reduction and recycling program; and

(ii) Review OU solid waste data, analyze their five year plans, and provide an assessment of OU progress against goals to the Facilities Management Council and/or Department Management Council.

(b) **OSBM shall** ensure compliance within the HCHB.

19-5.2 OUs shall:

(a) Establish a Qualified Recycling Program at all facilities.

(b) Identify which of their facilities generate at least one ton of solid waste using 2010 as a "baseline."

(c) Implement plans for robust Qualified Recycling Programs such that the 50% 2015 diversion goal is attained.

(d) Ensure that all facilities (owned or leased) comply with current Federal requirements as well as applicable requirements of state, interstate, or local solid waste management agencies.

(e) Ensure that all contracts include, to the maximum extent practical, clauses or provisions that require contract deliverables that meet the affirmative procurement guidelines for recycled material content, see reference (1). Proponent offices that generate scopes of work should assist the Contracting Officer by identifying the required salient characteristics of their requirements, so the Contracting Officer can insert the proper clauses in the contract.

(f) Appoint a technical point of contact for all recycling and solid waste management issues.

(g) Maintain appropriate technical directives, design manuals, and operation manual concerning solid waste source reduction, collection, storage, disposal, affirmative procurement and resource recovery.

(h) Ensure that appropriate management controls are in place for recyclable materials that may be hazardous, such as lead-acid batteries.

(i) Maintain records for the annual data call by the actual weight measurement (in tons and also by material and product type. Each OU shall also keep records of quantities (measured by actual weight) and types of wastes that are recycled, proceeds from the sale of recyclable materials, and avoided costs for disposal. OUs shall maintain records of the quantities of waste disposed and recycled by C&D contractors. Materials recycled by a C&D contractor shall be counted as

recycled when calculating the OU Diversion Rate.

19-6 Training

(a) Solid waste and recycling managers should budget for necessary training to ensure that their programs make progress to reach the goals and guidelines established in this manual.

(b) Training topics should include QRP management, public policies, communications, sales management, financial management, budgeting, metals identification, qualified and non-qualified scrap identification, and recycling techniques.

19-7 Reporting

All OUs are required to report quantities of waste sent to a landfill, as well as quantities of material diverted through recycling or other means. These data points will be required to be submitted to OSEEP at least twice annually, once for the June SSPP update and once at the end of each FY, and potentially more frequently as required by higher authorities. Information obtained from the solid waste annual report should also be used to track Facility and Organizational EMS goals, refer to Chapter 2. OUs shall:

(a) Develop and maintain solid waste reporting and information collecting systems; and

(b) Report quantities of all solid waste disposed of to a landfill and quantities of all material recycled through a qualified recycling program on an annual basis or more frequently if requested.

19-7.1 Reporting to External Agencies. OSEEP will report the Department's progress in meeting the legislative and E.O. solid waste goals indicated above to the U.S. Environmental Protection Agency, The Council on Environmental Quality (CEQ), and OMB.

CHAPTER 20:
PESTICIDE COMPLIANCE

20-1 Scope

20-1.1 This Chapter provides policy and compliance requirements relative to the procurement, storage and use of pesticides at Department of Commerce facilities. The provisions of this Chapter apply to all Department OUs and facilities that use, handle, or store restricted use pesticides.

20-1.2 **Related Chapters.** Chapter 11, Clean Water; Chapter 14, Oil and Hazardous Substance Preparedness and Response; and Chapter 17, Hazardous Waste Management.

20-1.3 **References.**

(a) 40 CFR Parts 150-180, EPA Regulations for Pesticide Programs;

(b) 40 CFR Part 262, EPA Regulations for Hazardous Waste Generators; and

(c) 29 CFR Part 1910, Occupational Safety and Health Standards.

20-2 Legislation

20-2.1 Comprehensive Environmental Response, Compensation and Liability Act of 1980, 42 U.S.C. § 9601 et seq. (Superfund)**.** CERCLA authorized Federal action to respond to the release, or substantial threat of release, into the environment of hazardous substances, pollutants, or contaminants that may present an imminent and substantial danger to public health or welfare. Section 107(i) exempts application of pesticide products registered under FIFRA from CERCLA requirements.

20-2.2 Endangered Species Act, 16 U.S.C. § 1531 et seq **(ESA).** ESA provides for the protection of threatened and endangered species of fish, wildlife, and plants and their habitats. The Act requires Federal agencies to ensure that no agency action is likely to jeopardize the continued existence of endangered or threatened species.

20-2.3 Federal Facility Compliance Act**.** The FFCA waives immunity for Federal facilities under solid and hazardous waste laws, CERCLA, and the RCRA by allowing States to fine and penalize for violations. This is applicable only to pesticides that are a hazardous waste, or are managed or disposed of as hazardous wastes requiring management under RCRA. See Chapter 17, Hazardous Waste Management.

20-2.4 Federal Insecticide, Fungicide, and Rodenticide Act, 7 U.S.C. § 136 et seq**.** FIFRA provides the principal means for preventing adverse effects on the environment from pesticides through product registration and applicator certification. The registration of all pesticide products by EPA results in label instructions on each container for use, storage, and disposal. Label instructions are legally applicable to all users. It is unlawful to purchase, distribute, or use any pesticide that does not have an EPA registration number or for which registration has been canceled or suspended. It is also unlawful to apply, store, or dispose of any pesticide or container in any manner inconsistent with applicable regulations. All pesticides must be applied by appropriately certified personnel except when used for personal relief.

Under FIFRA:

(a) The pesticide label, regulated by EPA, establishes directions for use, precautions for preventing adverse environmental effects, and disposal requirements. Failure to adhere to the labeling requirements or using the substance in a manner inconsistent with the product label is a violation of Federal law.

(b) EPA approves state and Federal agency plans for training and certification of pesticide applicators.

20-2.5 Clean Water Act, 33 U.S.C. § 1251 et seq**.** The CWA provides for protection of surface waters from contamination by pesticides in wastewater and in land runoff.

20-2.6 Migratory Bird Treaty Act, 16 U.S.C. 703-712**.** This Act protects migratory birds and their nests and eggs from being hunted, captured, purchased, or traded. If a facility uses pesticides to manage bird populations other than European starlings (*Sturnus vulgaris)*, house sparrows (*Passer domesticus*), and feral pigeons (*Columba livia*), it may be required to coordinate with the U.S. Fish and Wildlife Service.

20-2.7 Occupational Safety and Health Act, 29 U.S.C. § 651 et seq**.** OSHA establishes safety and health standards to ensure that every worker (including pesticide applicators) in the nation enjoys safe and healthful working conditions. Federal facilities must comply with OSHA.

20-2.8 Resource Conservation and Recovery Act, 42 U.S.C. § 6901 et seq**.** RCRA governs the disposal of pesticides. Commercial chemical products such as pesticides become solid wastes (and potentially, hazardous wastes) at the point where the pesticide's holder (i.e., end-user, dealer, distributor, or registrant) decides to discard them. If a pesticide product is listed in 40 CFR § 261.31 or § 261.33, or exhibits a hazardous waste characteristic identified in 40 CFR §§ 261.21 through 261.24, RCRA indicates it becomes a hazardous waste at the point when its holder decides to discard it. Sections 261.21 through 261.24 identify the following criteria: ignitability, corrosivity, reactivity, or toxicity characteristics.

Some pesticides are also regulated as toxic pollutants under Section 307(a) of the Clean Water Act and by the Primary Drinking Water Standards under the Safe Drinking Water Act.

20-3 Terms and Definitions

20-3.1 Integrated Pest Management (IPM). IPM is a planned program incorporating education, continuous monitoring, record keeping, and communication to prevent pests and disease vectors from causing unacceptable damage to operations, people, property, material, or the environment. Integrated pest management uses targeted, sustainable (effective, economical, environmentally sound) methods including habitat modification; biological, genetic, cultural, mechanical, physical, and regulatory controls; and, when necessary, the judicious use of least-hazardous pesticides.

20-3.2 Integrated Pest Management Plan (IPMP). A detailed document for the design implementation, and maintenance of all pest management and pesticide storage and use at a Department facility.

20-3.3 Material Safety Data Sheet. A document (OSHA form 174, or equivalent) that accompanies a pesticide product, providing the handler with chemical information on ingredients, handling instructions, potential hazards, and manufacturer address and emergency contact information.

20-3.4 Pest. Any organism (except for microorganisms that cause human or animal diseases) that adversely affects operations, preparedness, the well being of humans or animals, real property, material, equipment or vegetation, or is otherwise undesirable.

20-3.5 Pesticide. Any substance or mixture of substances registered by EPA under FIFRA, intended to destroy, repel, or mitigate pests. Includes, insecticides, rodenticides, herbicides, fungicides, plant regulators, defoliants, desiccants, disinfectants, antifouling paints and biocides (such as water treatment chemicals).

20-3.6 Pesticide Cancellation. An action by EPA that may limit the use of a pesticide. EPA often issues instructions with the pesticide cancellations providing information on the disposition of cancelled pesticides.

20-3.7 Pesticide Facility. The building and areas designated for handling and storing pesticides.

20-3.8 Registered Pesticide. A pesticide registered by EPA for sale and use within the United States.

20-4 Requirements

20-4.1 Records and Recordkeeping. Facilities are to complete and retain pest management operation records. All pest management operations performed at Department facilities shall be recorded, including surveys, non-chemical control operations, tenants and work performed by facility pest management personnel. Records shall include, at a minimum, the date of the operation, type of operation, site description, pest, size of area treated, pesticide applicator's name and certification number, pesticide trade name, EPA registration number of the pesticide, active ingredient(s), formulation, quantity and final concentration applied. Pest management records shall be archived on-site for a minimum of two years. Record retention policies vary by state. Please check with the state to verify recordkeeping requirements.

20-4.2 Wastewater Discharges. Facilities shall prohibit the discharge of any wastewater from any pesticide mixing, or equipment cleanup area. Rinsate from triple-rinsed containers shall be applied to the application site in accordance with the pesticide label. Hazardous waste and storage requirements apply, per reference (b).

20-4.3 State and Local Requirements. Facilities shall comply with substantive state and local pesticide regulatory guidance whenever practicable and in a manner that does not unnecessarily interfere with the mission.

20-4.5 Integrated Pest Management Plans. Facilities that conduct pest management operations, whether by in-house personnel or by contract, shall develop, implement, and maintain written comprehensive IPMPs, or be covered by the plan of another facility. IPMPs shall be specific to the facility(s). Assistance for writing IPMPs is available from the Department Environmental Manager. IPM plans shall be updated annually by the facility IPM coordinator, submitted to the OU Environmental

Manager, and rewritten every five years, if significant changes have occurred in laws, instructions, technology or the installation pest management program.

20-4.6 Program Maintenance. IPMPs should be reviewed by facility managers every three years. Program reviews will assess compliance with the plans and project sheets and evaluate the effectiveness of management operations, identify deficiencies, and provide additional recommendations to keep the plan current. These reviews will confirm that facility pest management plans remain in compliance with FIFRA and other applicable Federal and state regulations.

20-4.7 Pesticide Labels and MSDS.

(a) **Pesticide Labels.** Facilities shall ensure that EPA-approved labels are on all pesticide containers (reference (a)). If required, additional labels shall be placed so as not to obscure the pesticide label. Copies of pesticide labels shall be maintained at a central location and made available to interested departments (e.g., Fire, Safety, etc.).

(b) **MSDS.** A copy of MSDS and pesticide label(s) for every pesticide product in the shop inventory shall be available at all pesticide facilities.

20-4.8 Integrated Pest Management and Pesticide Use Reduction. E.O. 13514 requires Federal agencies to promote pollution prevention by implementing integrated pest management and other appropriate landscape management practices. This policy also pertains to pesticide use by contractors. Wherever practicable, integrated pest management practices shall be employed to minimize pesticide use. This does not apply to minor uses of pesticides for minor abatement of nuisance species (e.g., wasps, bees, etc.) to protect worker safety. Further, where additional regulation prevails, the Department, OUs and all facilities shall comply with substantive state and local pesticide regulatory guidance whenever possible.

20-4.9 Pesticide Disposal and Spill Management.

(a) **Disposal.** Stringent regulations govern the disposal of pesticides, their containers, and related wastes. General guidance for hazardous waste applies to pesticide waste per reference (b). Pesticide labels list general guidance on the disposal of pesticide containers. The competent pest management consultant shall provide guidance for disposal on a case-by-case basis.

(b) **Spill Management.** The facility IPMP shall address a plan for pesticide spill management, coordinated with the facility's hazardous materials program, and included in the facility's Oil and Hazardous Substance spill contingency plans (see Chapter 14). Ready to-use pesticide spill kits must be present in every storage and mixing facility, and in vehicles used to transport or apply restricted use pesticides. Contractors shall be responsible for providing their own spill kits.

20-4.10 Safety and Health in the Workplace. Facilities shall monitor workplace safety through the responsible safety offices.

– **Pesticide Facility Requirements.** Facilities shall store all liquid, dust, and granular pesticide formulations in an area with adequate spill containment. Facilities shall install powered ventilation effecting six changes of air per hour at pesticide storage areas containing pesticides that emit vapors including liquid,

dust, and granular formulations. Pesticide applicators, whether contractor or in-house personnel, shall perform all pesticide mixing in an area with adequate spill containment. Reference (c) provides detailed information on the design and operation of pesticide facilities and workplace requirements.

20-4.11 Occupied Spaces. Facilities shall not permit the application of liquid, dust, or aerosol pesticide formulations in any space occupied by unprotected personnel. However, pesticides contained in gel or paste bait formulations may be applied in occupied spaces in accordance with the pesticide label directions.

20-4.12 Personal Protective Equipment. Facilities shall provide Federal personnel engaged in pesticide application with appropriate personal protective equipment, (i.e., face shields, respirators, eye protection, impermeable gloves, and protective clothing). Occupational safety and health standards in reference (c), the MSDS, and the pesticide labels establish the requirements for personal protective equipment.

20-5 Responsibilities

20-5.1 The Office of the Secretary.

(a) **OSEEP shall:**

(i) Develop and manage policy for the Department's pesticide program;

(ii) Keep a record of any reportable spills or releases for not less than five years; and

(iii) Notify Departmental Offices and OUs of any amendments or changes to current legislation impacting pesticide use, storage, or disposal.

(b) **OSBM shall** ensure compliance within the HCHB.

20-5.2 Departmental Offices and OUs shall:

(a) Ensure compliance with FIFRA, as amended, EPA implementing regulations, and the policies prescribed in this Chapter;

(b) Evaluate, control, and monitor pesticide use for safety, protection of the environment, and compliance with the NEPA, as amended, and the Endangered Species Act, as amended;

(c) Notify the Department Environmental Manager of any significant spill or release within 2 business days of the event;

(d) Determine whether pesticide use is required and select a pesticide that selectively targets the pest, is the least toxic, and least likely to harm or impact the environment;

(e) Use only pesticides registered by the EPA in full accordance with FIFRA, as amended, and as provided in regulations, orders, or permits issued by EPA;

(f) Utilize pest management research, control, education, and assistance programs to develop, support, and adopt IPM strategies wherever practical;

(g) In wilderness areas, use pesticides only where necessary to protect human health or to prevent loss of significant resource values on public or private lands within or bordering the wilderness area;

(h) Not use pesticides in areas with endangered and threatened animal or plant species unless it is determined the use will not adversely affect the species or its critical habitat. Make this determination according to the Endangered Species Act consultation process prescribed in 50 CFR Part 402; and

(i) Maintain pesticide application records.

20-6 Reporting Requirements

In the event of a significant spill or release of pesticides, OUs are to notify the Department Environmental Manager.

CHAPTER 21:
PROCEDURES FOR IMPLEMENTING
THE NATIONAL ENVIRONMENTAL POLICY ACT (NEPA)

21-1 Requirements

The Department will comply with the National Environmental Policy Act of 1970. Pursuant to Department Organization Order 25-5 and DAO 216-6, the Department has delegated primary implementing responsibility to NOAA. This responsibility is supported by the NOAA Office of Program Planning and Integration in accordance with NOAA Administrative Order 216-6.

Environmental review procedures for implementing NEPA are listed in DAO 216-6 and should be followed by all OUs without their own approved implementing instructions. The Department also has a list of approved categorical exclusions located at 74 FR 33204-7.

CHAPTER 22:
NATURAL RESOURCES MANAGEMENT

22-1 Scope

22-1.1 This chapter establishes Department of Commerce program requirements for complying with natural resource protection laws, and conserving and managing natural resources in the United States, its territories, and possessions.

This chapter also summarizes the natural resources management program for managing Department lands, waters, forests, fish and wildlife, and outdoor recreation resources

22-1.2 References.

(a) 15 CFR Part 923, Coastal Zone Management Program Regulations;

(b) 15 CFR Part 930, Federal Consistency with Approved Coastal Management Programs;

(c) 50 CFR Part17, Endangered and Threatened Wildlife and Plants;

(d) 50 CFR Parts10, 18, 216, & 228, Regulations Concerning Marine Mammals;

(e) Magnuson-Stevens Fishery Conservation and Management Act, 16 U.S.C. § 1801 et seq;

(f) 50 CFR § 10.13, List of Migratory Birds, and;

(g) 33 CFR 320-330, Clean Water Act Section 404, and Rivers and Harbors Act Section 10 Regulatory Programs.

22-2 Legislation

(a) Bald Eagle Protection Act, 16 U.S.C. § 668;

(b) Coastal Barrier Resources Act of 1982, 16 U.S.C. § 3505;

(c) Coastal Zone Management Act, 16 U.S.C. § 1451;

(d) Endangered Species Act, 16 U.S.C. § 1531 et. seq;

(e) Federal Insecticide, Fungicide, and Rodenticide Act, 7 U.S.C. § 136;

(f) Clean Water Act, 33 U.S.C. § 1251;

(g) Fish and Wildlife Conservation Act, 16 U.S.C. § 2901;

(h) Fish and Wildlife Coordination Act, 16 U.S.C. § 661;

(i) Forest Resources Conservation and Shortage Relief Act, 16 U.S.C. § 620;

(j) Marine Mammal Protection Act, 16 U.S.C. § 1361;

(k) Marine Protection, Research, and Sanctuaries Act of 1972, 16 U.S.C. § 1431;

(l) Migratory Bird Treaty Act, 16 U.S.C. § 703;

(m) National Environmental Policy Act, 42 U.S.C. § 4321;

(n) National Invasive Species Act of 1996, 16 U.S.C. § 4701;

(o) Oil Pollution Act of 1990, 33 U.S.C. § 2701;

(p) Outdoor Recreation - Federal/State Programs Act, 16 U.S.C. § 460 P-3;

(q) Soil Conservation Act, 16 U.S.C. § 3B; and

(r) Wild and Scenic Rivers Act, 16 U.S.C. § 1271-1287.

22-3 Executive Orders

(a) E.O. 11644, as amended by E.O. 11989, Use of Off-Road Vehicles on Public Lands, dated May 24, 1977;

(b) E.O. 11988, Floodplain Management, dated May 24, 1977;

(c) E.O. 11990, Protection of Wetlands, dated May 24, 1977, as amended;

(d) E.O. 12962, Recreational Fisheries, dated June 7, 1995;

(e) E.O. 13089, Coral Reef Protection, dated June 11, 1998;

(f) E.O. 13112, Invasive Species, dated February 3, 1999;

(g) E.O. 13148, Greening the Government through Leadership in Environmental Management, dated April 21 2000;

(h) E.O. 13158, Marine Protected Areas, dated May 26, 2000;

(i) E.O. 13186, Responsibilities of Federal Agencies to Protect Migratory Birds, dated January 17, 2001.

22-4 Terms and Definitions

22-4.1 Biological Assessment (BA). A biological evaluation conducted by the action agency as part of the interagency consultation process under the Endangered Species Act (ESA). The purpose of the assessment is to determine whether or not the proposed action is likely to: (1) adversely affect listed species or designated critical habitat; (2) jeopardize the continued existence of species that are proposed for listing; or (3) adversely modify proposed critical habitat.

22-4.2 Biological Opinion. A document stating the opinion of U.S. Fish and Wildlife Service (USFWS) or National Marine Fisheries Service (NMFS) about whether or not a Federal action, described in a BA, is likely to jeopardize the continued existence of a listed species or result in the destruction or adverse modification of critical habitat.

22-4.3 Candidate Species. Any species being considered by the Secretary of Interior or Commerce for listing under ESA as an endangered or a threatened species, but not yet the subject of a proposed listing.

22-4.4 Coastal Zone. An area specifically identified or otherwise delineated by a coastal State in its approved Coastal Zone Management Plan (CZMP). It is an area of coastal waters and adjacent shorelines strongly influenced by each other and in proximity to the shorelines of the several coastal States, including islands, transitional and intertidal areas, salt marshes, wetlands, and beaches.

22-4.5 Critical Habitat. The geographic area on which are found those physical or biological features essential to the conservation of a species listed and published by the USFWS or NMFS under the authority of the ESA.

22-4.6 Endangered or Threatened Species. A species of fauna or flora that has been listed by the USFWS or the NMFS for special protection and management under the ESA.

22-4.7 Essential Fish Habitat (EFH). The water and substrates necessary to fish for spawning, feeding, or growth to maturity, per reference (e).

22-4.8 Fish and Wildlife Management. Actions designed to preserve, enhance and regulate indigenous wildlife and its habitats, including conservation of protected species and non-game species, management and harvest of game species, and animal damage control.

22-4.9 Habitat. An area where a plant or animal species lives, grows, and reproduces, and the environment that satisfies its life requirements.

22-4.10 Natural Resources. Landforms, soils, waters, and their associated flora and fauna.

22-4.11 Natural Resources Management Professional. Individual with an undergraduate or graduate degree from an accredited university in a natural resources-related science and who has the responsibility for managing natural resources on a regular basis.

22-4.12 Nonpoint Source (NPS) Pollution/Polluted Runoff. Pollution caused by diffuse sources that are not regulated as point sources; normally associated with runoff from construction activities, urban, agricultural and silvicultural runoff, and other land disturbing such as military training and operations that disturb lands, soils, and waters. NPS pollution can result from stormwater runoff, precipitation, atmospheric deposition, or percolation.

22-4.13 Proposed Species. Any species of fish, wildlife or plant that is proposed in the Federal Register to be listed under section 4 of the ESA.

22-4.14 Watershed. The ridge or crestline dividing two drainage areas; the area drained by a river or stream.

22-4.15 Wetlands. Those areas that are inundated or saturated by surface or ground water at a frequency and duration sufficient to support a prevalence of vegetation typically adapted for life in saturated soil conditions, such as swamps, marshes, and bogs.

22-4.16 Wild and Scenic Rivers. Certain selected rivers of the Nation which, with their immediate environments, possess outstandingly remarkable scenic, recreational, geologic, fish and wildlife, historic, cultural, or other similar values, that are preserved in their free-flowing condition.

22-5 Requirements

22-5.1 Coastal Zone Management. See reference (a) and Chapter 23, Coastal Zone Management.

(a) **Support of State Programs.** The Department shall support, as applicable, the conservation requirements detailed in an approved state Coastal Zone Management Plan. The Department shall encourage research and development efforts to address nonpoint sources of pollution to identify and understand Department impacts on the coastal and marine environment.

(b) **Consistency with Coastal Zone Plans.** Reference (b) requires that Department grant programs and facilities ensure their operations, activities, projects, and programs in or on coastal lands or waters that affect coastal zones, comply with the coastal state's approved management program to the maximum extent practicable and shall cooperate in resolving concerns identified during the consistency review process.

(c) **Protection of Coastal Barriers.** Before construction, maintenance, or other Federal expenditures may take place in designated Coastal Barrier Resources, the Department is required to consult with the Secretary of the Interior.

(d) **Protection of Coral Reefs.** The Department recognizes that coral reefs and related endemic mangrove and sea grass ecosystems are biologically rich and diverse habitats. High priority should be given to the protection of these resources in accordance with E.O. 13089. Any action that is likely to adversely affect a U.S. coral reef system or that may qualify as an exemption under the E.O. shall be promptly reported to OSEEP.

22-6 Fish and Wildlife

22-6.1 Fish and Wildlife Management. It is Department policy to comply with applicable laws for the protection and management of wildlife resources, and to develop, where compatible with the mission, programs for the development, enhancement, and use of wildlife resources. Where appropriate, the Department shall perform those programs under cooperative agreements with state and Federal wildlife agencies.

22-6.2 Endangered Species. The Department shall, in consultation with the USFWS and NMFS, ensure that any action authorized, funded or carried out by the Department that "may effect" protected species or critical habitat is not likely to jeopardize the continued existence of any endangered species or threatened species or result in the destruction or adverse modification of critical habitat. Such consultations can be either formal or informal (see reference (c)).

(a) **Biological Assessment.** When necessary, the Department will prepare a BA. The BA evaluates the effects of a proposed action on listed and proposed species and designated and proposed critical habitat. This document assists in the determination whether the action is likely to jeopardize the continued existence of listed species or result in the destruction or adverse modification of critical habitat.

(b) **Surveys.** The Department shall conduct surveys of Federally listed threatened or endangered, proposed and candidate species, review its mission activities, identify those that may affect Federally listed species or habitats, and consult formally or informally with the appropriate agency as required.

22-6.3 Marine Mammals. The Marine Mammal Protection Act (MMPA), subject to limited exceptions, prohibits any person (including Federal agencies) or vessels subject to the jurisdiction of the United States from "taking" marine mammals on the high seas, in U.S. waters or on land under the jurisdiction of the U.S. "Taking" includes the "harassment" of a marine mammal. Section 101(a)(5) of the MMPA directs the Secretaries of Commerce and Interior to allow upon request, the incidental (but not intentional) taking of marine mammals by U.S. citizens who engage in a specified activity (exclusive of commercial fishing) within a specified geographical region if certain findings are made and regulations are issued (see reference (d)).

22-6.4 Recreational Fisheries. As applicable, Department facilities, grant programs and other activities shall incorporate into natural resource management planning provisions for habitat restoration projects, public access where feasible, and participation in outreach programs for recreational fisheries. In keeping with E.O. 12962, Federal agencies shall improve the quantity, function, sustainable productivity, and distribution of U.S. aquatic resources for increased recreational fishing opportunities by restoring degraded habitat, fostering conservation, providing access and awareness of opportunities for recreational fishing.

22-6.5 Essential Fish Habitat. Under the provisions of the Magnuson-Stevens Fishery Conservation and Management Act (reference (e)), as reauthorized by the Sustainable Fisheries Act Amendments, Federal agencies must consult with NMFS prior to undertaking any actions that may adversely affect EFH. Federal agencies retain the discretion to determine what actions fall within the definition of "adverse affect." It is Department policy that temporary or minimal impacts, as defined below, are not considered to "adversely affect" EFH. "Temporary impacts" are those that are limited in

duration and that allow the particular environment to recover without measurable impact. “Minimal impacts” are those that may result in relatively small changes in the affected environment and insignificant changes in ecological functions. Note that even minor, localized effects can be adverse when the reduction in the quality and/or quantity of EFH is not insignificant.

22-6.6 Migratory Birds. Department facilities and grant programs shall coordinate with the USFWS to minimize the effects of actions that may harm or kill migratory birds listed in reference (f), their young, or eggs. Contractors must have the appropriate permits when performing work for the Department.

22-6.7 **Fish and Wildlife Coordination.** When a Department OU proposes to take an action that modifies any stream or body of water, the Fish and Wildlife Coordination Act requires that the OU first consult with the USFWS and the cognizant state wildlife agency with a view to the conservation of wildlife resources possibly affected by the proposed action. Recommendations of the USFWS and state must be included in reports to Congress or to persons authorizing the construction. The OU must fully consider the wildlife aspects of the proposed action.

22-6.8 Fish and Wildlife Conservation. Congress directs all Federal agencies to use their statutory and administrative authority, to the maximum extent practicable and consistent with each agency's responsibilities, to conserve and to promote conservation of non-game fish and wildlife and their habitats.

22-6.9 Fish and Wildlife Management. The Department OUs will obtain the services of a professional biologist for management of fish and wildlife resources. When contracting fish and wildlife work on Department-controlled lands, OUs will give priority to Federal and state agencies having responsibilities for conservation and management of fish and wildlife.

22-7 Land Management

22-7.1 Wetlands Protection. Section 404 of the Clean Water Act prohibits discharges of dredged or filled material into waters of the U.S., including wetlands, without first obtaining a permit from the USACE, reference (g). The Department will comply with the national goal of no net loss of wetlands, and will avoid loss of size, function and value of wetlands. In addition, the Department will preserve and enhance the natural and beneficial values of wetlands in carrying out its activities.

The Department shall plan all construction and operational actions to avoid adverse impacts to or destruction of wetlands. Any construction requirement that cannot be sited to avoid wetlands shall be designed to minimize wetlands degradation and shall include compensatory mitigation as required by wetlands regulatory agencies in all phases of the project's planning, programming, and budgeting process.

22-7.2 Floodplain Management. The Department will provide leadership in avoiding direct or indirect development of flood plains, and in restoring and preserving the natural and beneficial values served by floodplains. The Department must evaluate potential effects of actions in floodplains and provide early opportunity for public review of proposals in floodplains.

22-8 Responsibilities

22-8.1 The Office of the Secretary. OSEEP shall issue policy and guidance for the overall implementation of natural resource management requirements.

22-8.2 OUs shall:

(a) Act as the assessment sponsor for projects with potential impacts to natural resources;

(b) Implement the natural resource requirements as related to operations, facilities and programs;

(c) Ensure that facilities and program implementation remains in compliance with all Federal, state and local regulations, executive orders and Department policy pertaining to natural resources. This includes planning, programming and budgeting resources to meet requirements;

(d) Ensure that all personnel involved in evaluating and implementing natural resource requirements are properly trained; and

(e) Plan, program, budget, and provide funding for current and future requirements of all Federal, state and local natural resource regulations, applicable executive orders, and Department policy.

22-9 Training Requirements

General. All department personnel involved in natural resource protection, conservation and management of natural resources in the United States, its territories and possessions shall receive appropriate environmental training related to natural resource conservation and management.

Training for natural resources management may include the following elements:

(a) Wetlands delineation;

(b) Wetlands soil and hydrology;

(c) Wetlands functions;

(d) Wetlands regulation policy;

(e) Wetland ecology;

(f) Managing development in floodplains;

(g) Floodplain mitigation; and/or

(h) Overview of the Endangered Species Act.

22-10 Reporting Requirements

22-10.1 Reporting to the Office of the Secretary

- None.

22-10.2 Reporting to External Federal, State, and local agencies

- None.

CHAPTER 23:
COASTAL ZONE MANAGEMENT

23-1 Scope

23-1.1 The CZMA, reference (a), establishes National policy to protect resources in the coastal zone and requires Federal agencies whose activities affect any land or water use or natural resource of the coastal zone to be consistent to the maximum extent practicable with the enforceable policies of Federally approved state Coastal Management Programs (CMPs). This chapter contains policy and guidance to ensure that Department activities with the potential to affect coastal uses or resources are in full compliance with the Federal consistency provisions of CZMA.

23-1.2 References

(a) 16 U.S.C. § 1451 et seq, The Coastal Zone Management Act of 1972, as amended;

(b) 15 CFR Part 923, Coastal Zone Management Program Regulations; and

(c) 15 CFR Part 930, Coastal Zone Management Act Federal Consistency Regulations.

23-2 Legislation

The purpose of the CZMA (reference (a)) is to "preserve, protect, develop, and where possible, restore and enhance the resources of the Nation's coastal zone for this and succeeding generations." The Act encourages coastal States to properly manage use of their coasts and coastal resources, prepare CMPs for areas requiring special attention, and provide for public and governmental participation in decisions affecting the coastal zone.

23-3 Terms and Definitions

23-3.1 Any Coastal Use or Resource. Any land or water use or natural resource of the coastal zone. Coastal uses include, but are not limited to: public access, recreation, fishing, historic or cultural preservation, development, hazards management, marinas and floodplain management, scenic and aesthetic enjoyment, and resource creation or restoration projects. Natural resources include biological or physical resources that are found permanently or cyclically within a state's coastal zone. Biological and physical resources include, but are not limited to: air, tidal and non-tidal wetlands, ocean waters, estuaries, rivers, streams, lakes, aquifers, submerged aquatic vegetation, land, plants, trees, minerals, fish, shellfish, invertebrates, amphibians, birds, mammals, reptiles, and coastal resources of national significance. Coastal uses and resources also include uses and resources described in the state's CMP.

23-3.2 Coastal Management Program. The program of a coastal state or Territory, which has been approved by NOAA pursuant to reference (b), and which includes, but is not limited to, a comprehensive statement in words, maps, illustrations, or other media of communication, prepared and adopted by the state, that sets forth objectives, policies, and standards to guide public and private uses of lands and waters in the coastal zone.

23-3.3 Coastal States. States of the U.S. bordering on the Atlantic, Pacific, or Arctic Oceans, the Gulf of Mexico, Long Island Sound, or one or more of the Great Lakes. The term also includes Puerto Rico; the Virgin Islands; Guam; the Commonwealth of the Northern Mariana Islands; the Trust Territories of the Pacific Islands; and American Samoa.

23-3.4 Coastal Zone. Coastal waters (including lands lying in coastal waters and submerged thereunder and adjacent shore lands) within the meaning of Section 304(1) of the CZMA and as more fully defined and described in each coastal state's Federally-approved CMP.

23-3.5 Consistent to the Maximum Extent Practicable. The Department is required by the CZMA to ensure its activities affecting any coastal use or resource to the "maximum extent practicable," which is defined in Section 930.32(a)(1) of reference (c) to mean "fully consistent" with the enforceable policies of the CMP.

23-3.6 Effect on any Coastal Use or Resource. Any reasonably foreseeable effect on coastal uses or resources resulting from a Department action or activity. These reasonably foreseeable effects can take the form of:

(a) Direct effects - effects that occur at the same time or place as the Department action.

(b) Indirect effects - secondary and cumulative impacts that result from the action and are later in time or farther removed in distance, but are still reasonably foreseeable. Indirect effects are effects resulting from the incremental impact of the Department action when added to other past, present, and reasonably foreseeable actions, regardless of what agency or individual undertakes such actions. This definition is consistent with the CEQ's definition of cumulative effects (40 CFR § 1508.7).

23-3.7 Effects Test. Test by which the Department action proponent factually determines compliance with the Federal consistency requirements of CZMA Section 307 and the implementing regulations set forth at 15 CFR Part 930.

23-3.8 Enforceable Policies of a State CMP. State policies that are legally binding through constitutional provisions, laws, regulations, land use plans, ordinances, or judicial or administrative decisions, by which a state exerts control over private and public land and water uses and natural resources in the coastal zone and which are incorporated in a Federally-approved state CMP. An enforceable policy contains standards of sufficient specificity to guide public and private uses, but need not establish detailed criteria, such that an action proponent is capable of determining the consistency of an activity without interaction with the state agency.

23-3.9 Land Use. A use or activity conducted in, or on, the shore lands within the coastal zone.

23-3.10 Listed Activities. Activities or actions listed by state agencies in their CMPs that, in the opinion of the state agency, will have reasonably foreseeable coastal effects.

23-3.11 Department Action or Activity. Any function performed by or on behalf of the Department action proponent in the exercise of its statutory responsibilities (e.g., facilities development, tests, or exercises). The term "action" is used interchangeably with the term "activity" in this instruction.

23-3.12 Department Development Project. A Department action that involves: (a) the planning, construction, modification, or removal of public works facilities or other structures within the coastal zone or occurring outside the coastal zone but that could result in effects being felt within the coastal zone; and (b) includes the acquisition, use, or disposal of any coastal use or resource. All Department development projects within the coastal zone shall be deemed to cause coastal effects unless excluded from state agency review as *de minimis* activities.

23-3.13 Thorough Consistency Assessment. An assessment of coastal effects fully meeting the requirements of CZMA Section 307 and the implementing regulations set forth at 15 CFR Part 930. Department policy is that an Environmental Assessment (EA) or Environmental Impact Statement (EIS) (prepared by the Department action proponent pursuant to the requirements of NEPA constitutes a "thorough consistency assessment") if that document includes an analysis of effects to coastal uses or resources for which there are enforceable policies under the States CMP.

23-3.14 Unlisted Activities. Activities or actions not specifically listed in a state's CMP, but which may have reasonably foreseeable coastal effects and for which a state may advise the Department action proponent that a consistency review is required.

23-3.15 Water Use. A use or activity conducted in or on waters within the coastal zone.

23-4 Requirements

23-4.1 Consistency Review Process. The regulations implementing Federal consistency requirements require the Department and other Federal agencies proposing actions, whether within or outside of a state's coastal zone, to determine if the action is reasonably likely to directly or indirectly (cumulatively or secondarily) affect any land or water use or natural resource within that coastal zone. A consistency review should result in one of the following actions: preparation of a Consistency Determination; preparation of a Negative Determination; or a determination that no further action is necessary. During consistency review, the Department action proponent may conduct a thorough consistency assessment in the context of preparing an EA or EIS, as required to comply with NEPA.

23-4.2 Determining Effects. The proponent of the Department action shall conduct an effects test to factually determine whether an action will affect any coastal use or resource in a coastal state. The effects test shall be undertaken regardless of whether or not the action will be conducted within the coastal zone, as defined in the state's Federally-approved CMP. If an action initiates a series of events where direct and/or indirect effects on a coastal use or resource are reasonably foreseeable, the Department action shall be consistent to the maximum extent practicable with the enforceable policies of a state's Federally-approved CMP. In carrying out its effects test, the Department action proponent shall:

(a) Review the Federally-approved state CMP's relevant enforceable policies for compliance, keeping in mind the definitions of coastal uses and resources;

(b) Consider the definition of effects as identified in paragraph 25-3.7; and

(c) Assess whether the effects of the action taking place outside of a state's coastal zone will be felt by: (1) a state's coastal uses or resources within the coastal zone; and/or (2) coastal resources that may occur (e.g., migrate) outside the state coastal zone.

23-4.3 Department Activities Where Coastal Effects are Reasonably Foreseeable Consistency Determination.

(a) A Consistency Determination must be submitted to each affected coastal state when an action may have a reasonably foreseeable direct or indirect effect(s) on any coastal use or resource.

(b) A Consistency Determination shall be submitted for all Department development projects occurring within the coastal zone.

23-5 Responsibilities

23-5.1 The Office of the Secretary. OSEEP shall issue policy and guidance for the overall implementation of CZMA requirements.

23-5.2 OUs shall:

(a) Act as the assessment sponsor for all projects that require a CZMA consistency determination;

(b) Evaluate CZMA requirements against all operations, facilities and programs;

(c) Ensure compliance with all CZMA requirements. This includes planning, programming and budgeting resources to meet requirements;

(d) Ensure that all personnel involved in evaluating and implementing requirements are properly trained; and

(e) Plan, program, budget, and provide funding for current and future requirements of CZMA.

23-6 Training Requirements

General. All Department and OU personnel involved in CZMA consistency determinations shall receive appropriate training related to natural resource conservation and management.

23-7 Reporting Requirements

23-7.1 Reporting to the Office of the Secretary.

- None.

23-7.2 Reporting to External Federal, State, and local agencies.

- None.

CHAPTER 24:
CULTURAL RESOURCES MANAGEMENT

24-1 Scope

24-1.1 This chapter states Department policy regarding the management of cultural resources and establishes Department responsibilities under pertinent legislation.

24-1.2 **Applicability.** Cultural resources management requirements apply to all real properties under the control of the Department by ownership, lease, or similar instrument that are located in the United States, the District of Columbia, and the commonwealths, territories and possessions of the U.S. (reference (a)), and other properties eligible for or listed in the National Register of Historic Places. While the Department does not have management responsibility for historic properties it does not own, it may have compliance responsibilities associated with its undertakings that affect them. (for more information see reference (b)) Waters contiguous to land areas may contain archaeological resources and historic Department properties or may be significant due to an historic event; therefore, this instruction applies to land and water areas under direct control of the Department and to submerged historic properties owned by the Department, and to undertakings financed by the Department funds regardless of whose land they affect.

24-1.3 **References.**

(a) 36 CFR Part 800, Protection of Historic Properties;

(b) 63 FR 20496, The Secretary of the Interior's Standards and Guidelines for Federal Agency Historic Preservation Programs Pursuant to the National Historic Preservation Act;

(c) 36 CFR Part 79, Curation of Federally owned and Administered Archaeological Collections;

(d) 43 CFR Part 10, Native American Graves Protection and Repatriation Act Regulations;

(e) E.O. 13007, Indian Sacred Sites, dated May 24, 2006;

(f) E.O. 13175, Consultation and Coordination with Indian Tribal Governments, dated November 6, 2000;

(g) DAO 218-8, Consultation and Coordination with Indian Tribal Governments, dated April 26, 2012; and

(h) E.O. 13287, Preserve America, dated March 3, 2003.

24-2 Legislation

24-2.1 American Indian Religious Freedom Act (AIRFA), 42 U.S.C. § 1996**.** Requires Federal agencies to consult with native traditional religious leaders and to consider, but not necessarily defer to, Native American religious values. Agencies should permit access to religious sites, when possible.

24-2.2 Antiquities Act of 1906, 16 U.S.C. 431-433**.** Requires the issuance of permits for study, removal, or excavation of any ruins, sites, structures, or objects of historical or scientific interest.

24-2.3 Archaeological Resources Protection Act (ARPA), 16 U.S.C. 470aa-mm**.** ARPA authorizes Federal land managers to protect archaeological resources through permits authorizing excavation and/or removal of archaeological resources; through civil and criminal penalties for unauthorized excavation and/or removal, damage, alteration, or defacement of archaeological resources or attempts to perform such unauthorized acts; through provisions for the preservation of archaeological resource collections and data; and through provisions for ensuring confidentiality of information about archaeological resources when disclosure would threaten the resource. Additional requirements include developing plans to survey all lands that are eligible for survey to determine the nature and extent of archaeological resources and prepare schedules to survey lands that are likely to contain the most scientifically valuable archaeological resources. ARPA also requires Federal agencies to create public awareness programs promoting resource protection.

24-2.4 National Historic Preservation Act (NHPA), 16 U.S.C. 470 et seq**.** Established the National Register of Historic Places (National Register) and the Advisory Council on Historic Preservation (Advisory Council). Additionally, requires each Federal agency to designate a qualified Federal Preservation Officer who will coordinate that agency's activities under this Act. Section 106 of the Act requires Federal agencies to take into account the effects of their undertakings on historic properties. Federal agencies must also allow the Advisory Council an opportunity to comment whenever agency undertakings may affect historic properties or resources that are eligible for listing on the National Register. Section 110 of the Act requires Federal agencies to identify, evaluate, inventory, and protect historic properties (or resources that are eligible for listing on the National Register) on properties that they control. NHPA imposes no absolute preservation requirement, as long as the Department follows and documents mandated procedures for any Department decision regarding undertakings that affect cultural resources. See references (a)and (c) for further guidance.

24-2.5 Native American Graves Protection and Repatriation Act (NAGPRA), 25 U.S.C. 3001 et seq**.** Requires each Federal agency to summarize and inventory Native American cultural items (including human remains, associated and unassociated funerary objects, sacred objects, and objects of cultural patrimony) in their collections; to identify lineal descendants and culturally affiliated Federally-recognized Indian tribes and Native Hawaiian organizations; and to repatriate the cultural items in consultation with the specified groups. Section 3 requires notification of and consultation with lineal descendants, Federally-recognized tribes and Native Hawaiian organizations prior to the intentional excavation of NAGPRA cultural items from archaeological sites and establishes a process to follow in cases of their inadvertent discovery, including procedures for transfer of custody.

24-3 Terms and Definitions

24-3.1 Advisory Council on Historic Preservation. An independent Federal agency charged with advising the President, Congress, and Federal agencies regarding the protection of historic properties. Plays a key role in the NHPA Section 106 review process. 36 CFR Part 800, Appendix A provides the criteria for ACHP involvement in individual Section 106 cases.

24-3.2 Adaptive Use. A new or different use of a historic property which does not irreversibly alter its character defining features and is appropriate for the context and is consistent with the significance and character of the property.

24-3.3 Archaeological Resources. Material remains of past human life capable of contributing to scientific or humanistic understanding of past human behavior, cultural adaptation, and related topics through the application of scientific or scholarly techniques. To qualify as "archaeological resources" under ARPA, the remains have to be at least 100 years old. Archaeological remains less than 100 years old may be eligible for listing in the National Register, and if so would be National Register resources for which NHPA compliance is required.

24-3.4 Archaeological Survey. Archaeological survey is a systematic analysis by a professional meeting Secretary of Interior Standards sufficient to allow categorization of archaeological potential to the degree required to make decisions. The Secretary of Interior's Standards and Guidelines for Archaeology and Historic Preservation recognizes several techniques, methodologies, and types of surveys to allow a Federal land manager to make decisions about property use that is consistent with the legislated intent of protecting important archaeological properties, including archival research, field surveys, reconnaissance surveys, intensive surveys, predictive modeling, sampling methodologies, and special survey techniques such as remote sensing or deep testing.

(a) **Reconnaissance survey.** A reconnaissance survey is an examination of all or part of an area conducted by a qualified professional in sufficient detail to make generalizations about type and distribution of archaeological properties that may be present. A reconnaissance survey will usually include archival research, and may include predictive modeling, remote sensing, surface inspection and subsurface testing to determine presence or absence of archaeological properties. Often referred to as a Phase I survey.

(b) **Intensive survey.** An intensive survey is a systematic detailed examination of an area designed to gather information about historic properties sufficient to evaluate them against predetermined criteria of significance within specific historic contexts to determine eligibility for listing on the National Register. Appropriate survey methods vary widely for different environments and archaeological resource types. Often referred to as a Phase II survey.

24-3.5 Architectural Survey and Evaluation. A survey and evaluation effort to determine which real properties, sites, buildings, structures, works of engineering, industrial facilities, fortifications, and landscapes, are eligible for the National Register of Historic Places.

24-3.6 Consultation. The process of seeking, discussing, and considering the views of others, and, where feasible, seeking agreement with them on how historic properties shall be identified, considered, and managed.

24-3.7 Cultural Resources. A generic term commonly used to include buildings, structures, districts, archaeological sites, historic landscapes, cemeteries, Traditional Cultural Places, Indian sacred sites, and objects of significance in history, architecture, archaeology, engineering or culture. The term also includes associated documents and records.

24-3.8 Cultural Resources Professional. A person who meets the professional standards and qualifications established by the Secretary of the Interior in the appropriate disciplines. Such an individual is not necessarily qualified as a cultural resources manager, and must complete appropriate training to perform the Cultural Resources Manager duties.

24-3.9 Curation. The management and preservation of an archaeological collection, including all associated documentation, according to professional museum and archival practices, in accordance with 36 CFR Part 79 (reference (c)), to insure long term care and protection of these resources.

24-3.10 Designated Tribal Representative. A tribal official appointed by the tribe's governing body to represent tribal interests in issues with the potential to impact protected tribal resources or tribal rights off reservation.

24-3.11 Federal Trust Responsibility. The Federal trust responsibility between American Indians and the Federal government is an outgrowth of the Federal treaty period where tribes ceded lands in return for protection and certain assurances. Treaties are construed as the tribes would have understood them at the time they were signed, with ambiguities being resolved in favor of the tribes because of the disproportionate bargaining power between the tribes and the United States. Among the Federal assurances were that the tribes retained any rights that were not expressly ceded, such as the use of their ancestral lands for fishing, hunting, and gathering in usual and accustomed places and tribal sovereignty.

24-3.12 Heritage Assets. Plant, Property, and Equipment (PP&E) items that are unique due to historical or natural significance, cultural, educational or artistic importance, or significant architectural characteristics for the purposes of accountability under the Chief Financial Officers (CFO) Act. "Heritage Assets" as addressed by CFO Act procedures and "historic properties" as addressed by NHPA are related but separate categories.

24-3.13 Historic property. Broad concept that includes all resources that meet National Register significance criteria, even if the resources have not yet been formally listed, identified or acknowledged as significant. National Register regulations set the criteria for definition of a historic property. "Historic properties" addressed by NHPA and "heritage assets" as addressed by CFO Act procedures are related but separate categories.

24-3.14 Indian Tribe. Any Tribe, band, nation, or other organized group or community, including any Alaska native village that is recognized by the Bureau of Indian Affairs as eligible for the special programs and services provided by the United States to Indians because of their status as Indians. A list of Federally acknowledged Indian Tribes for the contiguous 48 states and Alaska is published by the Department of Interior's Bureau of Indian Affairs' "Indian Entities Recognized and Eligible to Receive Services from the United States Bureau of Indian Affairs".

24-3.15 Integrated Cultural Resources Management Plan (ICRMP). An ICRMP is a plan that defines the process for the management of cultural resources on Department properties, and is required of all Department and Operating Unit facilities.

24-3.16 Memorandum of Agreement. Written product of NHPA Section 106 consultation, signed by the Department, the State Historic Preservation Officer (SHPO), Tribal Historic Preservation Office (THPO), other interested Federally-recognized Indian tribes, other interested groups and individuals, and under certain circumstances the Advisory Council, specifying how an undertaking will be carried out so as to avoid, minimize, or mitigate adverse effects.

24-3.17 National Historic Landmark. A historic property designated by the Secretary of the Interior as having exceptional significance in the nation's history and which is subject to additional consultation requirements.

24-3.18 The National Register of Historic Places. NHPA authorizes the Secretary of the Interior to maintain a National Register that lists sites, districts, buildings, structures, and objects of significance in American history, architecture, archaeology, engineering, and culture. Historic properties may be of local, state, or national significance. The purpose of the National Register is to aid Federal agencies in project planning. Each Federal agency is authorized to include preservation costs of historic property as eligible project costs for all undertakings.

24-3.19 Native Hawaiian. Any descendant of the aboriginal people who, prior to 1778, occupied and exercised sovereignty in the area that now constitutes the state of Hawaii.

24-3.20 Program Alternatives. May be used as an alternative to case-by-case NHPA Section 106 consultation. Program alternatives provide a way to streamline compliance with regard to categories of similar undertakings, categories of similar effects, or regional or multi-state programs. Implementation and use of program alternatives generally requires up-to-date inventories and a comprehensive management approach. 36 CFR Part 800.14 defines several Program Alternatives, including programmatic agreements, program comments, standard treatments, exemptions, and alternate procedures. Adopting any Program Alternative requires consultation with relevant stakeholders, and for regional or national alternatives, coordination with the chain of command and other affected OUs and agencies.

24-3.21 Recordation. Measured drawings, photographs and other techniques permanently recording historic properties that must be destroyed or substantially altered. Recordation normally must meet the standards of the Historic American Buildings Survey/Historic American Engineering Record (HABS/HAER), as administered by the appropriate regional office of the National Park Service. Consultation may result in the use of other standards in lieu of HABS/HAER.

24-3.22 State Historic Preservation Officer. Official appointed by the governor of each state and territory, responsible for administering cultural resources programs within a given jurisdiction. Plays a key role in the NHPA Section 106 review process. SHPO may assist the DOC in other cultural resource matters as well.

24-3.23 Tribal Historic Preservation Officer. Individual officially designated by a Federally-recognized Indian tribe to direct a program approved by the National Park Service

under the authority of Section 101(d)(2) of the National Historic Preservation Act. The THPO must have assumed some or all of the functions of State Historic Preservation Officers on Tribal lands. Department OUs typically consult with tribes on matters of tribal interest on Department lands vice tribal lands, and so typically consult with a designated tribal representative (see 20-3.10).

24-3.24 Undertaking. A project, activity, or program funded in whole or in part under the direct or indirect jurisdiction of a Federal agency, including those carried out by or on behalf of a Federal agency; those carried out with Federal financial assistance; those requiring a Federal permit, license or approval; and those subject to state or local regulation administered pursuant to a delegation or approval by a Federal agency. Undertakings that may affect historic properties are subject to NHPA Section 106 review.

24-3.25 Undertaking Proponent. The responsible proponent of a unit, activity, or organization who has the legal and financial authority to commit the Department to agreements undertaken in compliance with cultural resources laws and regulations regarding a particular undertaking.

24-4 Requirements

24-4.1 Preservation Program. In accordance with the NHPA, each Federal agency must establish a preservation program for the identification, evaluation, nomination to the National Register, and protection of historic properties and designate a qualified Federal Preservation Officer. In accordance with NHPA Section 110, an agency must manage and maintain historic properties under its jurisdiction or control in a manner that considers the preservation of their historic, architectural, archaeological, and cultural values. Furthermore, Federal agencies shall ensure that such resources are not inadvertently transferred, leased, sold, demolished, substantially altered, or allowed to deteriorate significantly. Each Agency must, to the maximum extent feasible, use historic properties available to it in carrying out its responsibilities, and shall carry out related activities in consultation with other Federal, state and local agencies, Indian tribes, Native Hawaiian organizations engaged in historic preservation planning, and the private sector. Failure to identify resources that meet National Register criteria does not exempt an agency from any legal responsibilities.

(a) **Planning and Management.** In accordance with NHPA Sections 110 and 112, an agency shall provide for the timely identification and evaluation of historic properties under agency jurisdiction or control and/or subject to effect by agency actions. This includes properties of traditional religious and cultural significance to Indian tribes or Native Hawaiian organizations in accordance with NHPA Section 101 and Indian sacred sites in accordance with E.O. 13007 (reference (e)). Additionally, ARPA and 32 CFR § 229.21 (require that Federal land managers must develop plans to survey all lands that are eligible for survey to determine the nature and extent of archaeological resources and prepare schedules to survey lands that are likely to contain the most scientifically valuable archaeological resources following guidance provided by the Secretary of Interior's Standards and Guidelines for Archaeology and Historic Preservation.

(i) **Historic Inventory Identification and Management.** The Department will establish and maintain a historic inventory management program to allow the Department to take into account its effects on historic properties and conduct consultation using the most accurate information concerning what properties are historic, what makes them historic, and what are the best technical and operational practices for keeping historic properties in current mission use. National Register eligibility recommendations must be conducted by a qualified person, must identify the characteristics that make the property historic, must include an analysis of the property's historic integrity, and must be reviewed by a Department cultural resources professional before adoption by the Department. Properties previously determined eligible or ineligible may periodically require reevaluation due to the passage of time, evolving understanding of historical significance, or inadequate previous evaluations.

(ii) **National Register Nomination.** The decision to pursue National Register nomination of a particular property is reserved to the OU responsible for the property, in coordination with the local entity responsible for the property. The OU responsible for a property will be informed of requests received for Department comment on National Register nominations originated by SHPOs or other persons under the provisions of 36 CFR Part 60.

(b) **Phased Approach.** The Secretary of Interior's Standards and Guidelines for Archaeology and Historic Preservation recognizes several techniques, methodologies, and types of surveys to allow a Federal land manager to make decisions about property use that is consistent with the legislated intent of protecting important historic properties including archival research, field surveys, reconnaissance surveys, intensive surveys, predictive modeling, sampling methodologies, and special survey techniques such as remote sensing or deep testing as appropriate. In compliance with Federal requirements, all DOC lands are to be systematically analyzed by qualified professionals, using appropriate survey methodology, sufficient to make generalizations about type and distribution of historic properties that may be present, for purposes of master planning. Systematic detailed examinations to determine National Register eligibility will be conducted prior to initiation of any project with the potential to affect any historic properties or sites of religious or cultural significance to Indian tribes.

(c) **Integrated Cultural Resource Management Plans.** The Department requires that all OUs develop and implement ICRMPs for appropriate resources in consultation and partnership with State Historic Preservation Officers and other appropriate consulting parties. The ICRMP is the planning tool for consolidating the inventory and management requirements of NHPA and other statutes, and so is an essential element in legal compliance with those statutes. The Department develops ICRMPs as a management tool to insure the most time- and cost-efficient method of integration with project and operations planning to facilitate

mission. All ICRMPs will be reviewed annually and updated as required.

(i) ICRMP Implementation. An ICRMP is a plan that defines the process for the management of cultural resources on Department properties that:

- Identifies the areas of probability for historic properties, based on overviews and surveys performed by cultural resources professionals.

- Contains an inventory and evaluation of associated cultural resources, and/or a strategy for phased inventory and evaluation of unevaluated areas or resources. The inventory and evaluation process will also be used to enter or validate and update historic property information held in data repositories such as real property information systems.

- Recommends treatment categories and management priorities as appropriate, and describe applicable legal compliance strategies that avoid potential conflicts between Department mission and preservation considerations. The ICRMP should incorporate applicable existing local and national agreements, and discuss whether new or revised agreements are recommended.

- Provide a recommended interpretation strategy to ensure that appropriate information about Department historic properties is disseminated to Department members, employees, families, and the general public.

- Recommend compliance actions to be taken if Department undertakings affect historic properties.

(ii) Development of ICRMP.

Approval authority for ICRMPs rests with the Operating Unit.

ICRMP plans are to be consistent with state and Federal preservation programs, culturally affiliated or interested Indian tribes, and other Department planning documents and processes. ICRMPs are reviewed annually and revised when required.

The information contained in the ICRMP should be made widely available to planners, facilities managers, and other installation and regional personnel in the performance of their duties, subject to the confidentiality restrictions placed on the dissemination of information about archaeological sites and certain Native American resources.

An electronic copy of the final signed ICRMP should be provided to Operating Unit’s Federal Preservation Officer (if

applicable) and the Federal Preservation Officer (FPO) for the Department.

(d) **Program Alternatives.** Program alternatives, as defined in 36 CFR Part 800.14, may be used as an alternative to case-by-case NHPA Section 106 consultation. Appropriate applications are described in 36 CFR Part 800 and include efforts to streamline compliance with regard to categories of similar undertakings, categories of similar effects, or programmatic approaches that apply state, regional, or nationwide. Implementation and use of program alternatives requires up-to-date inventories and a comprehensive approach to managing cultural resources. As applicable, cultural resources staff shall incorporate the terms of existing programmatic alternatives into NHPA, Section 106 consultations as appropriate. Such programmatic alternatives include programmatic agreements, program comments, standard treatments, exemptions and alternate procedures. Adopting any Program Alternative requires consultation with relevant stakeholders, and for regional or national alternatives, coordination with OAS and other affected OUs, and agencies.

(e) **Use of Historic Structures.** Federal agencies will use available historic buildings, when feasible, prior to new construction, lease, or any acquisition of a building for the purpose of carrying out its responsibilities. Additionally, NHPA Section 111 requires a Federal agency to establish and implement alternatives, including adaptive use, for historic properties that are not needed for current or projected agency purposes. Furthermore, Section 111 authorizes Federal agencies to lease, exchange, or enter into contracts for management of any of its historic properties to ensure their preservation. The economic analysis of alternatives should include an evaluation of life-cycle maintenance costs, utility costs, replacement costs and other pertinent factors for both new construction and rehabilitation/conversion alternatives. Potential reuse should be considered before deciding to demolish or dispose of a historic property.

24-4.2 Compliance. Case-by-case compliance with the requirements of NHPA section 106 is governed by 36 CFR Part 800, which provides a step-by-step description. Termination of consultation requires the participation of both the Secretary of the Department and OSEEP in the specified process of Department notification of termination. Because of this, Advisory Council comment, Department consideration of comment, and internal requests to consider termination must be coordinated well in advance, and with full consideration of both costs and benefits of termination.

24-4.3 Consultation.

(a) **Consultation with Stakeholders.** Requirements regarding consultation with outside parties such as Advisory Council, SHPO, THPO, Indian tribes, Native Hawaiian organizations, and interested public vary according to specific legislation. In general, Federal agencies are to consult with interested parties at earliest stages in the planning process to

allow consideration of all possible alternatives that facilitate timely completion of the project or mission while avoiding or mitigating impact to a historic property.

(b) **Tribal Consultation.** All DOC operating units must follow actions described in reference (f) and (g).

(i) NHPA, AIRFA, NAGPRA, and the Federal Trust Responsibility specifically require the Department to consult with Federally recognized Indian tribes on a government-to-government basis about proposed actions with the potential to affect sites of religious or cultural importance to the tribe. In most cases, this requirement also extends to Native Alaskan and Native Hawaiian organizations. Consultations with tribes shall be conducted in accordance with the *Tribal Consultation and Coordination Policy of the U.S. Department of Commerce*.

(ii) Section 106 tribal consultation may take place in one of three ways:

- If the tribe has assumed the responsibilities of the SHPO on tribal lands, then the Department will consult with the tribe's THPO in lieu of the SHPO for undertakings affecting Indian lands.

- If the tribe has not assumed the duties of the SHPO for undertakings on tribal lands, then the Department will consult with both the tribe's designated representative and the SHPO for undertakings potentially affecting Indian lands.

- For undertakings that do not directly affect tribal lands, the Department will consult with the tribe's designated representatives regarding sites of religious or cultural importance to the tribe.

(c) **Agreement Documents with Tribes.** Department policy requires consultation with tribes to develop and implement protocol agreements. Such agreements will outline which issues are of interest to individual tribes and the manner in which consultation is to occur. E.O. 13007, AIRFA, and the Federal Trust Responsibility require Federal agencies to protect and provide access to Native American sacred sites and treaty resources, the management of which can be outlined in a Memoranda of Understanding. Other agreements with tribes may include Comprehensive Agreements under NAGPRA, to structure the process and disposition of inadvertently discovered Native American human remains, funerary objects, sacred objects and objects of cultural patrimony. Agreement documents with tribes are recommended as a best practice in Department policy as a way to document adequate consultation within the administrative record as well as streamline Department actions and facilitate mission.

24-4.4 Native American Graves Protection and Repatriation Act. NAGPRA requires each Federal agency to summarize and inventory Native American cultural items (including human remains, associated and unassociated funerary objects, sacred objects, and objects of cultural patrimony) in their collections; to identify lineal descendants and culturally affiliated Federally-recognized Indian tribes and Native Hawaiian organizations; and to repatriate the cultural items in consultation with the specified groups. Section 3 requires notification of and consultation with lineal descendants, Federally-recognized tribes and Native Hawaiian organizations prior to the intentional excavation of NAGPRA cultural items from archaeological sites and establishes a process to follow in cases of their inadvertent discovery, including procedures for transfer of custody.

24-4.5 National Historic Landmarks. NHPA Section 101 provides for inclusion of National Historic Landmarks (NHLs) in the National Register. Section 110(f) imposes more requirements on NHLs than other historic properties, requiring the heads of Federal agencies, to the maximum extent possible, to undertake planning and actions necessary to minimize harm to any NHL. Federal regulations (36 CFR Part 65) outline procedures for consultation with the SHPO, the Advisory Council, and possible National Park Service review and afford consulting partners adequate time to comment on any undertakings with the potential to effect an NHL.

(a) Monitoring of National Historic Landmarks. The NPS maintains a continuing relationship with owners of NHLs. The Department cooperates in periodic visits or contacts with SHPOs and other appropriate means that the National Park Service uses to compile its annual report to Congress on threats to the integrity of NHLs, to advise agencies concerning accepted preservation standards, and to update administrative records on NHL properties.

(b) Landmark Designation Actions. The decision to initiate pursuit of NHL designation of a particular property is reserved to the Operating Unit responsible for the property, in coordination with the local command directly responsible for the property.

24-4.6 Archaeology.

(a) **Permitting for Archaeological study.** In accordance with ARPA, any person proposing to study, remove, and/or excavate archaeological resources from Department lands requires a permit under ARPA and/or the Antiquities Act. However, persons carrying out official duties under the Federal land manager's direction need not apply for permits as long as Federal land manager insures that all provisions of ARPA have been met by other documented means. Permit requests must explicitly address and ensure professional curation of all remains, samples, and documentation in accordance with 36 CFR Part 79.

In cases where the Department contracts with an archaeologist (or a Department contractor subcontracts with an archaeologist) to perform archaeological work for the Department, OUs may consider a brief compliance statement in the contract or subcontract as the equivalent of a permit. In cases where employees of the Department perform

archaeology on Department lands, satisfy legal permitting requirements by ensuring that such employees are professionally qualified archaeologists (as defined by current Federal regulations).

(b) **Curation.** ARPA and 36 CFR Part 79 establish that archaeological collections excavated or removed from lands owned by the United States remain Federal property. Federal agencies are required to deposit these collections and all associated documentation in an institution with adequate long-term curatorial capabilities to provide for their maintenance, physical security and research. Agencies are to regularly monitor the care of collections and the capacity of the repository to continue meeting the standards stipulated under Federal regulations.

(c) **Penalties.** ARPA authorizes criminal and civil penalties against any person who violates any prohibition of the act.

(d) **Archaeological Site Location Protection and Management.** NHPA requires Federal agencies to withhold information from the public regarding nature and location of archaeological sites if disclosure of this information might create a risk of harm to such resources. The Freedom of Information Act (FOIA) exemption (b)(3) permits the restriction of such information. NHPA authorizes withholding information after consultation with the Department of Interior, Departmental Consulting Archaeologist, in order to protect the resource from potential harm. The release or distribution of precise or exact site location data or information must be limited to the absolute minimum number of individuals who need to know. Access to such information in databases and geographic information systems should be limited to cultural resource managers and professionals and others with a substantial need to know.

24-4.7 Public Outreach and Heritage Tourism. ARPA and E.O. 13287 require agencies to create public awareness and education programs promoting significance and protection of archaeological resources and other historic properties.

24-4.8 NEPA Integration. The statutory requirements of NHPA and NEPA, although independent, are interrelated. Agency officials may use the NEPA process and documentation required for the preparation of NEPA documents to comply with Section 106 in lieu of the procedures set forth in 36 CFR §§ 800.3-800.6; the agency official must notify in advance the SHPO/THPO and the Council that it intends to do so and follows the standards discussed in 36 CFR Part 800.

24-5 Responsibilities

24-5.1 The Office of the Secretary shall:

(a) Designate a Federal Preservation Officer (FPO) who will be responsible for policy development and oversight of the Department's historic preservation program. On October 31, 2003, the Secretary designated the Assistant Secretary for Administration as the Department's FPO. The Secretary further directs NOAA, NIST, Census, USPTO, EDA, and NTIA as owners of class 1 and/or 2 real property or action proponents of grants potentially affecting historic properties to designate in writing a Deputy FPO, each of whom shall report to and defer to the FPO. Deputy FPOs shall:

(i) Ensure that accurate information is provided in a timely manner to EDA in support of compiling and assimilating the Department's Preserve America and National Park Service Annual Federal Archeological data call.

(ii) Ensure comprehensive implementation and compliance of all requirements throughout their organization as addressed in 24-4 above.

(b) Represent the Department on the Advisory Council for Historic Preservation (ACHP), or delegate a senior Department Officer at the Assistant Secretary level or above, to occupy this seat. On April 2, 2010, the Secretary delegated this representation to the Assistant Secretary of the Economic Development Administration (EDA). Responsibilities include, but are not limited to:

(i) Attend meetings of the ACHP and vote on behalf of the Secretary of Commerce.

(ii) Collect, compile, and deliver Operating Unit responses representing Department data required for ACHP Preserve America Report.

(c) Designate a Tribal Consultation Official whose authority includes, but is not limited to:

(i) Act as a liaison between the Secretary of Commerce and tribal officials.

(ii) Coordinate compliance with DOC Tribal Consultation Policy.

(iii) Provide training, resources, and guidance to Department personnel assisting with tribal consultations.

24-5.2 OSEEP shall:

(a) Provide guidance for cultural resources programs to Department OUs and cultural resources aspects of Department environmental programs.

(b) Ensure a cultural resource management program is appropriately integrated with other planning and management processes to provide the most effective and efficient management of Department historic properties.

(c) Designate a qualified staff person to oversee and coordinate the Department's cultural resources programs. This person will serve as the FPO for the Department.

(d) Identify Department-wide priorities for cultural resources surveys and other stewardship actions so as to achieve compatibility with Department missions and budgets.

(e) Provide guidance on implementation of cultural resources policy and advise all levels of command regarding compliance with cultural resources legislation, regulations, and professional standards.

(f) Review interagency cultural resources compliance agreements and National Register nominations recommended and prepared by OUs.

(g) Coordinate interagency consultation concerning cultural resources and Indian tribes/NHOs at Department properties or affected by Department programs.

(h) Coordinate response(s) to Congressional inquiries and requests for cultural resources information from Federal, state or private interests.

24-5.3 OUs shall:

(a) Consult with and defer to the Assistant Secretary of EDA on all matters relevant to matters involving ACHP and compliance with provisions of NHPA.

(b) Ensure compliance with cultural resources management requirements. This includes developing and implementing ICRMPs, conducting consultations, and developing compliance agreements when appropriate.

(c) Program and budget for adequate compliance with cultural resources management legislation that applies to resources under their control.

(d) Designate an individual to serve as their Cultural Resource Manager to oversee and coordinate the OU's compliance with all requirements described in section 24-4 above. This person will seek out the advice of and defer to decisions rendered by the Department's FPO via the Deputy FPOs, should one exist within their OU.

(e) Implement, as appropriate, guidelines and procedures to ensure meaningful and timely tribal consultation.

(f) Identify all proposed undertakings, including grants to private entities, for which the Department is subject to Section 106 requirements.

(i) Plan, program, and budget for adequate compliance with cultural resources management legislation in project development.

(ii) Upon delegation, carry out responsibilities on behalf of the agency in compliance with the implementing regulations established in 36 CFR Part 800.

(iii) Coordinate as required with other OUs, consulting parties, and organizations to perform particular cultural resources compliance and management activities associated with their undertakings.

(iv) Respond to Congressional inquiries and requests for cultural resources information from Federal, state or private interests, including Preserve America and annual National Park Service Archaeological Data Call.

(v) Provide for the professional identification, evaluation, inventory, nomination, and protection of resources under their control that appear to be eligible for the National Register, and ensure that the appropriate data management systems, including spatial data systems, accurately reflect the historic status of such resources.

(vi) Follow all legally mandated procedures when historic properties under their control are to be transferred, leased, sold, demolished, or substantially altered.

(vii) Develop, implement, and integrate ICRMPs with other planning documents and routine procedures applicable to activity projects and programs.

(viii) Consult with the SHPO/THPO, Native American tribes, and other consulting parties, interested groups and individuals when undertakings have the potential to cause effects on historic properties, and when required enter into agreements regarding resolution of adverse effects.

(ix) Consult with Native American tribes prior to any Department action that may impact Native American interests as defined by applicable laws and regulations, including NAGPRA's planned excavation and inadvertent discovery provisions.

(x) Ensure that inadvertently discovered archaeological resources are protected at the site of discovery, ensuring that the chain of command is kept informed.

(xi) Use historic buildings when available and practical instead of new acquisition(s), construction, or leasing to satisfy mission requirements.

(xii) Process applications and issue ARPA permits authorizing professional excavation and removal of archaeological resources, as appropriate.

(xv) Provide for storage and professional curation of archaeological collections, including samples and associated records that might accrue in carrying out legal compliance actions.

24-5.4 Director, Maritime Heritage Program (NOAA) shall:

(a) Implement programs, policies and procedures in support of NOAA's statutory authority to protect and manage areas of the marine environment possessing historical qualities of significance under National Marine Sanctuaries Act.

(b) Negotiate MOAs and Program Alternatives that protect, preserve, and manage maritime heritage resources as historic properties or archaeological resources.

(c) Process applications for an issue research permits for the professional study and excavation of maritime archaeological resources.

(d) Take into account the effect of any Federal undertaking outside the United States that may directly or adversely affect a property that is on the World Heritage List or on the applicable country's equivalent of the National Register.

(e) Take into account applicable provisions of international agreements.

24-6 Training

Personnel with cultural resources compliance responsibilities shall receive cultural resources training appropriate to his or her job assignment. This training is particularly important for individuals outside the cultural resources management profession whose duties nevertheless affect the management of historic properties.

24-7 Reporting Requirements

24-7.1 Reporting to the Office of the Secretary

- None.

24-7.2 Reporting to External Federal, State, and local agencies

(a) Preserve America report (reference (h)).

(b) National Park Service Annual Federal Archeological data call.

PART III:

ENERGY/SUSTAINABILITY

CHAPTER 25:
SUSTAINABLE BUILDINGS

25-1 Scope

25-1.1 This Chapter provides compliance requirements relative to the sustainability of Department of Commerce facilities. The provisions of this Chapter apply to all Department OUs and facilities that operate owned facilities or private leases (independent of the General Services Administration (GSA)) larger than 5,000 gross square feet in any state of the United States, the District of Columbia, the Commonwealth of Puerto Rico, Guam, American Samoa, the United States Virgin Islands, the Northern Mariana Islands, and any other territory or possession over which the United States has jurisdiction.

25-1.2 **Related Chapters.** Other chapters that discuss topics pertinent to sustainable buildings include: Chapter 5, Environmental Management Systems; Chapter 13, Stormwater Management; Chapter 19, Solid Waste Management and Resource Recovery; Chapter 27, Energy Conservation; Chapter 28, Renewable Energy; Chapter 29, Facility Metering; Chapter 30, Water Conservation; and Chapter 31, Green Acquisition.

25-1.3 **References.**

(a) E.O. 13423, Strengthening Federal Environmental, Energy, and Transportation Management, dated January 24, 2007;

(b) The Council on Environmental Quality's "Instructions for Implementing Executive Order 13423, Strengthening Federal Environmental, Energy, and Transportation Management," dated March 29, 2007;

(c) 45 CFR § 1309.3, Head Start Facilities-Purchase, Major Renovations and Construction; Federal Leadership in High Performance and Sustainable Buildings Memorandum of Understanding, signed in February 2006 by the Department;

(d) High Performance and Sustainable Buildings Guidance prepared by the Interagency Sustainable Buildings Working Group, December 1, 2008.

(e) E.O. 13514, Federal Leadership in Environmental, Energy, and Economic Performance, dated October 5, 2009;

(f) The Department of Commerce Sustainable Buildings Implementation Plan;

(g) The Whole Building Design Guide, prepared by the National Institute of Building Sciences;

(h) Leadership in Energy and Environmental Design (LEED) rating systems, prepared by the U.S. Green Building Council; and

(i) 2009 Guidance for Real Property Inventory Reporting, prepared by the Federal Real Property Council, July 2009.

25-2 Legislation

25-2.2 Energy Independence and Security Act of 2007**.** EISA 2007 adopted the energy performance requirements, in terms of energy intensity reduction per square foot, of E.O. 13423. EISA 2007 also required the establishment of a Federal green building certification system by DOE and GSA. The Act requires the fossil fuel-generated energy consumption of new Federal buildings to decrease to zero by 2030. The Act requires Federal agencies to lease buildings that have earned an Energy Star label unless they meet a specified exemption. Finally, EISA 2007 requires 30 percent of hot water demand in new Federal buildings and major renovations to be met by solar hot water equipment, provided it is life-cycle cost-effective.

25-3 Terms and Definitions

25-3.1 Built-to-Suit Lease. An arrangement whereby a landowner offers to pay for construction on his or her land of a building specified by a potential tenant (the Department), and then leases the land and building to the tenant.

25-3.2 Capital Asset Building Inventory. A Federal agency's inventory of buildings that are larger than 5,000 gross square feet and either:

(a) Owned by the agency; or

(b) Leased by the agency, independently of GSA (references (a) and (b)).

Facilities leased from GSA are not included in the Capital Asset Building Inventory.

25-3.3 Federal High Performance Sustainable Buildings Checklist for Sustainable Existing Buildings. A checklist that assists Federal agencies and OU points of contact with assessing their existing building stock against the Guiding Principles for Sustainable Existing Buildings. The checklist is available through the Environmental Protection Agency's online Energy Star Portfolio Manager system at https://www.energystar.gov/istar/pmpam/. If you do not already have a Portfolio Manager account, please contact the Office of the Secretary's Office of Sustainable Energy and Environmental Programs to set up your account and view checklists for your buildings**.**

25-3.4 Federal High Performance Sustainable Buildings Checklist for Sustainable New Construction and Major Renovations. A checklist that assists Federal agencies with assessing their new construction and major renovations against the Guiding Principles for Sustainable New Construction and Major Renovations. The checklist is available through the Environmental Protection Agency's online Energy Star Portfolio Manager system at https://www.energystar.gov/istar/pmpam/. If you do not already have a Portfolio Manager account, please contact the Office of the Secretary's Office of Sustainable Energy and Environmental Programs to set up your account and view checklists for your buildings.

25-3.5 Five Guiding Principles for Sustainable New Construction and Major Renovations. A common set of sustainable principles for new construction and major renovations, including integrated design, energy performance, water conservation, indoor environmental quality, and low-impact materials set forth in reference (d).

25-3.6 Five Guiding Principles for Sustainable Existing Buildings. A common set of sustainable principles for existing buildings, including integrated design, energy performance, water conservation, indoor environmental quality, and low-impact materials set forth in reference (d).

25-3.7 Leadership in Energy and Environmental Design. An internationally recognized green building certification system developed by the U.S. Green Building Council that provides third-party verification that a building or community was designed and built using strategies aimed at improving performance across all the metrics that matter most: energy savings, water efficiency, CO_2 emissions reduction, improved indoor environmental quality, and stewardship of resources and sensitivity to their impacts.

25-3.8 LEED Silver rating. Certification of "silver" by any of the LEED rating systems.

25-3.9 Major Renovation. Major renovation means a structural change to the foundation, roof, floor, or exterior or load-bearing walls of a facility, or extension of an existing facility to increase its floor area. Major renovation also means extensive alteration of an existing facility, such as to significantly change its function and purpose, even if such renovation does not include any structural change to the facility. Major renovation also includes a renovation of any kind which has a cost exceeding the lesser of $200,000, adjusted annually to reflect the percentage change in the Consumer Price Index for All Urban Consumers (issued by the Bureau of Labor Statistics) beginning one year after June 2, 2003, or 25 percent of the total annual direct costs approved for the budget period in which the application is made. See reference (c) for more details.

25-3.10 Sustainable Building. A building qualifies as sustainable if it either (1) is compliant with the 5 Guiding Principles set forth in reference (d), or (2) a documented commitment to third-party certification was made (e.g., registering a project) for projects with a design contract that was awarded prior to October 1, 2008 **AND** the building has been third-party certified to meet the requirements of a multi-attribute green building standard or rating system developed by an American National Standards Institute accredited organization.

25-4 Requirements

25-4.1 New Construction. As required by references (a) and (f), all new construction that is larger than 5,000 gross square feet and either Department-owned or built-to-suit lease (reference (a)) must:

(a) Meet the Five Guiding Principles set forth in reference (d); and

(b) Meet at least 30 percent of their hot water demands with solar hot water equipment where life-cycle cost-effective.

25-4.2 Major Renovations. As required by references (a) and (f), all major renovations must:

(a) Meet the Five Guiding Principles set forth in reference (d); and

(b) Meet at least 30 percent of their hot water demands with solar hot water equipment where life-cycle cost-effective.

If a renovation will cost more than 50 percent of the existing facility's plant replacement value, the project will be considered new construction.

25-4.3 New Leases and Renegotiation of Existing Leases. As required by reference (b), to the greatest extent practicable for all leases entered into independently of GSA, OUs shall mandate a requirement that the building (1) qualify as sustainable (see 24-3.10 above) and (2) is Energy Star certified (see reference (k) for exemptions). For leases through GSA, OUs shall articulate in writing to GSA their preference that GSA comply with the same.

25-4.4 Existing Buildings. As required by references (a) and (f), by 2015, 15 percent of each OU's capital asset building inventory (in terms of number of buildings) shall qualify as sustainable (see 24-3.10 above), and OUs shall make annual progress towards 100 percent compliance. An OU's official Capital Asset Building Inventory is the inventory of buildings listed in the Federal Real Property Management system (FRPM). Note: if part of a facility qualifies as sustainable (i.e., a renovation is partially completed), the entire facility qualifies as sustainable in terms of number of buildings, whereas only the renovated square footage qualifies as sustainable in terms of square footage.

25-4.5 Many Federal agencies, including GSA, currently require new construction to achieve LEED Silver certification. While many of the LEED requirements are similar to the Five Guiding Principles, many are different and it is possible to achieve LEED Silver certification without meeting all of the Five Guiding Principles. It is therefore imperative that any new construction or major renovation project pursuing LEED certification cross-check their planned credits with the Five Guiding Principles to ensure that both sets of requirements will be satisfied.

25-4.6 For guidance on meeting the requirements of this chapter please consult references (g) and (h).

25-5 Responsibilities

25-5.1 The Office of the Secretary.

(a) **The Chief Financial Officer and Assistant Secretary for Administration shall:**

(i) Establish standards for new construction and renovation;

(ii) Establish policy and procedures for the leasing of all facilities; and

(iii) Solicit five-year facility capital investment plans from OUs.

25-5.2 The Office of Administrative Services.

(a) **The Director for Administrative Services shall** be responsible for serving as the Department's Senior Real Property Officer as per Section 4.02(c) of DOO 10-5.

(b) **The Associate Director for the Office of Real Property Programs (ORPP) shall:**

(i) Maintain and ensure the accuracy of the Department's facility real property records and database;

(ii) Annually submit the Department's Federal Real Property Portfolio data to the Federal Real Property Council; and

(iii) Review and assimilate these plans into the Department's multi-year portfolio management investment plan.

(c) **OSEEP shall:**

(i) Oversee, track, and report on sustainable buildings assessments conducted by the OUs;

(ii) Articulate Federal sustainable buildings goals to the OUs and report annual progress to OMB, DOE, and CEQ; and

(iii) Provide technical assistance and evaluation tools to the OUs.

25-5.3 OUs shall:

(a) Determine all facilities that are Department-owned, independently leased from a private party, and GSA leased where the Department independently pays for utilities, that are greater than 5,000 gross square feet;

(b) Ensure that sustainable building evaluations using the 5 Guiding Principles are conducted on all facilities in paragraph (a) above;

(c) Ensure that the results of sustainable building evaluations are entered in EPA's Portfolio Manager;

(d) Review and update the sustainability status of all owned or independently leased facilities in the FRPM on an annual basis (reference (i));

(e) Develop and submit a five-year action plan for making progress towards federally mandated building sustainability targets;

(f) Re-assess all non-sustainable facilities every five years; and

(g) Ensure that all new construction, major renovations, and new leases are 5 Guiding Principles compliant.

25-6 Reporting Requirements

25-6.1 Reporting to the Office of the Secretary.

(a) OUs shall annually update their sustainable buildings inventory through the FRPM system by November 15.

(b) OUs shall annually submit a narrative updating their strategy for achieving sustainable buildings targets to OSEEP for use in the SSPP by November 15.

(c) OUs shall update the EPA Portfolio Manager system with building sustainability data at least quarterly. The EPA Portfolio Manager system (https://www.energystar.gov/istar/pmpam/) is a free, online tool for tracking facility energy consumption, water consumption and compliance with the Five Guiding Principles for High Performance and Sustainable Buildings. Contact the Office of the Secretary's Office of Sustainable Energy and Environmental Programs to set up your Portfolio Manager account.

(d) OUs shall report the sustainability of all new buildings and existing building renovations to ORPP as needed.

(e) OUs shall submit either (1) at least one sustainable building project implemented that fiscal year or (2) notification of no sustainable building projects annually to OSEEP by October 31.

(f) By March 31 of each year, OUs shall submit to OSEEP a list of projects planned over the next five years that will contribute towards meeting the sustainable buildings targets. This should include information on planned new construction and major renovations as well as planned upgrades to existing buildings that will bring them into compliance with the Five Guiding Principles for Sustainable Buildings. This information will be incorporated into the annual update to the Department's Strategic Sustainability Performance Plan.

25-6.2 Reporting to External Agencies.

(a) OSEEP shall annually submit at least one sustainable building project into the High Performance Federal Building Database by December 1.

(b) ORPP shall collect and maintain sustainable building data elements in the FRPM system and submit it along with the other elements to the Federal Real Property Profile.

(c) OSEEP shall annually submit the Department's updated narrative strategy for achieving its sustainable buildings targets to OMB by January 7.

CHAPTER 26:
GREENHOUSE GAS EMISSIONS

26-1 Scope

26-1.1 This Chapter provides policy and compliance requirements relative to the emission of GHG by Department operations. The provisions of this Chapter, to some degree, apply to all Department OUs. Focus of this chapter is placed on the Department's GHG Inventory in accordance with E.O. 13514. Please reference Chapter 9, Air Quality, for regulatory requirements regarding GHG emissions treated as a pollutant (i.e., permitting requirements).

26-1.2 **Related Chapters.** Chapter 5, EMS; Chapter 9, Air Quality; Chapter 25, Sustainable Buildings; Chapter 27, Energy Conservation; Chapter 28, Renewable Energy; Chapter 29, Facility Metering; and Chapter 32, Electronic Stewardship.

26-1.3 **References.**

(a) E.O. 13514, Federal Leadership in Environmental, Energy, and Economic Performance, dated October 5, 2009;

(b) Department of Commerce Greenhouse Gas Inventory Management Plan; and

(c) Commerce Acquisition Manual, Chapter 1323.70.

26-2 Terms and Definitions

26-2.1 **Absolute Greenhouse Gas Emissions.** Total greenhouse gas emissions without normalization for activity levels and includes any allowable consideration of sequestration.

26-2.2 **Agency.** An executive agency as defined in section 105 of title 5, United States Code, excluding the Government Accountability Office.

26-2.3 **Excluded Vehicles and Equipment.** Any vehicle, vessel, aircraft, or non-road equipment owned or operated by an agency of the Federal Government that is used in:

(a) Combat support, combat service support, tactical or relief operations, or training for such operations;

(b) Federal law enforcement (including protective service and investigation);

(c) Emergency response (including fire and rescue); or

(d) Spaceflight vehicles (including associated ground-support equipment).

26-2.4 **Greenhouse Gases.** Carbon dioxide, methane, nitrous oxide, hydrofluorocarbons, perfluorocarbons, and sulfur hexafluoride.

26-2.5 **Scope 1.** Direct greenhouse gas emissions from sources that are owned or controlled by the Federal agency.

26-2.6 Scope 2. Direct greenhouse gas emissions resulting from the generation of electricity, heat, or steam purchased by a Federal agency.

26-2.7 Scope 3. Greenhouse gas emissions from sources not owned or directly controlled by a Federal agency but related to agency activities such as vendor supply chains, delivery services, and employee travel and commuting.

26-3 Requirements

26-3.1 Greenhouse Gas Management. E.O. 13514-Section 2 (reference (a)) requires each Federal agency to manage GHGs, including:

(a) Annually report to the CEQ Chair and OMB Director a comprehensive inventory of absolute GHG emissions across all three scopes for the previous fiscal year. Comprehensive inventories shall be submitted at the end of each January. A baseline has been established as FY 2008. (See Appendix C.)

(b) In regard to Scope 1 and 2 GHG emissions, agencies shall consider reductions associated with:

(i) Reducing agency building energy intensity;

(ii) Increasing agency renewable energy use and on-site projects;

(iii) Reducing agency use of fossil fuels by:

- Using low GHG emitting and alternative fuel vehicles;
- Optimizing vehicle numbers across agency fleets; and
- Reducing petroleum consumption in agency fleets of 20 or more vehicles by 2% annually through fiscal year 2020 relative to a fiscal year 2005 baseline.

(c) The Department's Scope 1 and 2 GHG emissions reduction target is 21 percent by fiscal year 2020.

(d) In regard to Scope 3 GHG emissions, agencies shall consider reductions associated with:

(i) Pursuing opportunities with vendors and contractors to address and incentivize GHG emission reductions (reference (c));

(ii) Implementing strategies and accommodations for transit, travel, training, and conferences that reduce carbon emissions associated with commuting and travel by agency staff;

(iii) Pursuing greenhouse gas emissions reductions associated with other Federal Government sustainability goals; and

(iv) Implementing innovative policies and practices that address agency-specific scope 3 GHG emissions.

(e) The Department's Scope 3 GHG emissions reduction target is 6 percent by fiscal year 2020

Note: See also Reference (b).

26-4 Responsibilities

26-4.1 Office of the Secretary.

(a) **The Department Senior Sustainability Officer shall** be responsible for reviewing and approving the annual Greenhouse Gas Inventory.

(b) The **Director for Administrative Services** will serve as the Alternate Senior Sustainability Officer and shall be responsible for reviewing and approving the annual Greenhouse Gas Inventory.

(c) **OSEEP shall:**

(i) Publish overall program guidance throughout the Department and to all OUs;

(ii) Brief the Department's leadership on inventory results and findings; and

(iii) Brief the Department's leadership on the sufficiency of the projected implementation plan.

(d) **The Department Energy Manager shall:**

(i) Train all OU and Departmental office Strategic Sustainability Plan Points of Contact;

(ii) Manage overall compilation of inventory and reporting process;

(iii) Solicit and assimilate OU implementation plans and timelines for project completion;

(iv) Assess and assimilate the Department's implementation plan for adequacy and identify deficiencies and recommendations;

(v) Develop inventory management system;

(vi) Manage documentation of data collection process;

(vii) Upload annual emissions data into Federal Energy Management Program tool;

(viii) Aggregate OU emissions data into annual consumption totals for each emissions source;

(ix) Internally review data submissions from OUs;

(x) Permanently store relevant documentation;

(xi) Identify and request Department emission baseline recalculations from CEQ and OMB; and

(xii) Monitor and disseminate new requirements received from CEQ and/or OMB.

(e) **The Department Environmental Program Manager shall** be responsible for internally reviewing data submissions from OUs on solid waste, wastewater, and fugitive emissions.

(f) **Office of Commerce Services.**

(i) **The Department Fleet Manager shall:**

- Collect and review OU mobile emissions data obtained through the Federal Automotive Statistical Tool; and

- Submit emissions data to the Department Energy Program Manager.

(ii) **Office of Real Property Programs shall** confirm gross square footage data submitted by OUs.

(c) **Office of Human Resource Management shall** be responsible for providing current Federal FTE count for the Department.

26-4.2 OUs shall:

(a) Manage collection and maintain OU domestic emissions data. OUs with facilities and fleets overseas can voluntarily track emission data, which should be on an OU level (i.e., all overseas facilities and fleets). It is up to OUs to set this policy;

(b) Document data collection process;

(c) Submit emissions data to the Department Energy Program Manager in a timely manner;

(d) Internally review data;

(e) Identify necessary OU emission baseline recalculations;

(f) Identify and implement GHG reduction projects;

(g) Articulate the projected impact of GHG reduction projects;

(h) Include GHG reduction projects in five year project implementation plans;

(i) Analyze and explain trends and/or missing targets; and

(j) Identify corrective actions.

26-5 Reporting Requirements

26-5.1 Annual Greenhouse Gas Inventory and Sustainability Data Report.

Inputs for GHG Inventory:

(see Appendix C**)**

26-5.2 Five Year Project Implementation Plan.

Inputs for Five Year Project Plan:

(a) Energy Reduction Projects

(b) Renewable Energy Projects

(c) Water Conservation Projects

(d) Sustainable Building Projects

(e) Metering Projects

(f) Pollution Prevention Projects

(g) Innovation (Sustainability Projects and Programs)

26-5.3 OMB Sustainability/Energy Scorecard. Updated semiannually (January and July) by OSEEP based on greenhouse gas and sustainability data submissions.

26-5.4 Strategic Sustainability Performance Plan Update. Updated annually (June) by OSEEP based on greenhouse gas inventory and sustainability data report and five year project implementation plan submissions.

CHAPTER 27:
ENERGY CONSERVATION

27-1 Scope

27-1.1 This Chapter provides Department of Commerce (Department) policy, identifies key statutory and regulatory requirements, and assigns responsibility for the planning and execution of energy conservation programs for compliance with current laws, regulations and E.O.s. The provisions of this Chapter apply to all Departmental OUs and facilities that directly pay utility bills.

27-1.2 **Related Chapters.** Chapter 5, EMS; Chapter 9, Air Quality; Chapter 25, Sustainable Buildings; Chapter 28, Renewable Energy; Chapter 29, Facility Metering; and Chapter 32, Electronic Stewardship. For energy conservation policy and requirements regarding fleet management refer to the Office of Administrative Services/Office of Commerce Services/Transportation Division.

27-2 Legislation

27-2.1 National Energy Conservation Policy Act (NECPA)**.** NECPA serves as the underlying authority for Federal energy management goals and requirements. Signed into law in 1978, it is regularly updated and amended by subsequent laws and regulations.

27-2.2 1984 Deficit Reduction Act**.** Amended NECPA by authorizing energy savings contracts of up to 25 years.

27-2.3 Energy Policy Act of 1992 **(EPAct92).** EPAct92 amended NECPA and established several energy management goals including adopting Energy Savings Performance Contracts that offered Federal agencies a novel means of making energy efficient improvements to aging buildings and facilities. Additionally, EPAct92 required Agencies to report annually on energy consumption by their buildings, operations, and vehicles.

27-2.4 E.O. 13221, Energy Efficient Standby Power Devices, dated August 2, 2001**.** E.O. 13221 required Federal Agencies to purchase products, where practicable, that used no more than one watt of energy when in standby power consuming mode.

27-2.5 Energy Policy Act of 2005 **(EPAct05).** EPAct05 established a number of energy management goals for Federal facilities and fleets including the mandate to install advanced metering to reduce electricity use in Federal buildings, a 30% reduction in energy consumption in new Federal buildings, and a requirement to increase the amount of renewable energy purchased by the Federal government. It also amended portions of NECPA.

27-2.6 E.O. 13423, Strengthening Federal Environmental, Energy, and Transportation Management, dated January 24, 2007**.** E.O. 13423 revoked earlier E.O.s affecting Federal energy and environmental management programs. The E.O. directed all Federal agencies to improve energy efficiency and reduce greenhouse gas emissions through reduction in energy intensity, specific energy reduction targets for new construction and major renovations, promoted the use of renewable energy, and set goals for reduction of greenhouse gas emissions.

27-2.7 Energy Independence and Security Act of 2007**.** EISA established energy management goals and requirements including a 30% energy reduction by 2015, energy efficiency

performance standards, and directed the Federal government to establish energy life-cycle cost effectiveness of major equipment replacements and renovations. EISA also amended portions of the NECPA.

27-2.8 E.O. 13514, Federal Leadership in Environmental, Energy, and Economic Performance, dated October 5, 2009**.** This E.O. sets sustainability goals for Federal agencies and focuses on making improvements in their environmental, energy and economic performance. The E.O. requires Federal agencies to set a 2020 greenhouse gas emissions reduction target within 90 days; increase energy efficiency; reduce fleet petroleum consumption; conserve water; reduce waste; support sustainable communities; and leverage Federal purchasing power to promote environmentally-responsible products and technologies.

27-3 Terms and Definitions

27-3.1 Building Energy Audit. A comprehensive review of all items related to energy and energy consumption in a building, including as-built plans and specifications, energy records, operating and maintenance logs, visual inspections of all energized equipment, the building envelope, windows, doors and other components and measurements, in order to determine how energy is being consumed. Building Energy Audits identify energy conservation measures or steps that can be taken to reduce energy costs and make the building more energy efficient. Building Energy Audits rank the identified measures or steps according to a recommended order of implementation.

27-3.2 Cogeneration Facilities. A facility which produces electric energy, and steam or other forms of useful energy (such as heat) which are used for industrial, commercial, heating, or cooling purposes.

27-3.3 Construction. Refers to new construction or substantial rehabilitation of existing structures.

27-3.4 Energy Conservation Measures. Refers to measures that are applied to a Federal building that improve energy efficiency and are life cycle cost effective and that involve energy conservation, cogeneration facilities, renewable energy sources, improvements in operations and maintenance efficiencies, or retrofit activities.

27-3.5 Energy Intensity. The ratio of energy consumption to a measure of the demand for services (e.g., number of buildings, total floorspace, floorspace-hours, number of employees, or constant dollar value of Gross Domestic Product for services).

27-3.6 Energy Savings Performance Contract (ESPC). A contract for an energy retrofit where a contractor funds the cost for the complete retrofit in return for receiving, over a negotiated period of time, a portion of the energy cost savings realized by the Government through accomplishment of the energy retrofit. The contract period may not exceed 25 years, and the contractor must guarantee the savings. ESPCs are permanently authorized.

27-3.7 Energy Survey. A procedure used to determine the energy and cost savings likely to result from the use of appropriate energy-related maintenance and operating procedures and modifications, including the purchase and installation of particular energy-related equipment and the use of renewable energy sources. A survey is generally a less in-depth procedure than a Building Energy Audit.

27-3.8 Facility Manager. An individual who manages a Federal facility, and is responsible for ensuring that the building is operating in compliance with all applicable regulations and codes.

27-3.9 Federal Building. Any building, structure, or facility, or part thereof, including the associated energy consuming support systems, which is constructed, renovated, leased, or purchased in whole or in part for use by the Federal Government and which consumes energy; such term also means a collection of such buildings, structures, or facilities and the energy consuming support systems for such collection.

27-3.10 Life Cycle Cost. Refers to the total costs of owning, operating, and maintaining a building over its useful life (including such costs as fuel, energy, labor, and replacement components) determined on the basis of a systematic evaluation and comparison of alternative building systems, except that in the case of leased buildings, the life cycle costs shall be calculated over the effective remaining term of the lease.

27-3.11 Retrofit. The installation of an alternative building energy system in an existing Federal building.

27-3.12 Standby Power Consumption. A product's minimum power consumption while plugged in (sometimes called the “off mode” consumption).

27-3.13 Sustainable Design. A holistic way of looking at building design and development that takes into account the total cradle-to-grave costs of owning/operating a building. Sustainable design principles are used to meet the needs of the present without compromising the quality of life of future generations, and to ensure environmental stewardship and energy efficiency.

27-3.14 Trained Energy Manager. A person who has demonstrated proficiency, or who has completed a course of study in the areas of fundamentals of building energy systems, building energy codes and applicable professional standards, energy accounting and analysis, life-cycle cost methodology, fuel supply and pricing, and instrumentation for energy surveys and audits.

27-3.15 Utility Energy Savings Contract. A contract for an energy retrofit where a utility company funds the cost for the complete retrofit in return for receiving, over a negotiated period of time, a portion of the energy cost savings realized by the Government through accomplishment of the energy retrofit. The contract period may not exceed ten years; the savings are not guaranteed. This is similar to, but not identical to, an ESPC.

27-4 Requirements

27.4.1 Facility Energy Intensity Reduction.

(a) EISA 2007 ratifies energy reduction goals for Federal facilities, mandating the following energy intensity reductions per fiscal year relative to a 2003 baseline:

Fiscal Year	Percentage Reduction
2006	2
2007	4
2008	9
2009	12
2010	15
2011	18
2012	21
2013	24
2014	27
2015	30

(b) EISA also requires the following energy policy changes and energy management requirements:

(i) Requires the use of energy-efficient lighting fixtures and bulbs in Federal buildings.

(ii) Requires each Federal agency to ensure that major replacements of installed equipment, renovation, or expansion of existing space employ the most energy-efficient designs, systems, equipment, and controls that are life-cycle cost effective.

(iii) Prohibits Federal agencies, effective December 19, 2010, from leasing buildings that have not earned an ENERGY STAR label. Exemptions are provided if:

- No space is available in a labeled building that meets the functional requirements of an agency, including location needs;

- The agency proposes to remain in a building that it has occupied previously;

- The agency proposes to lease a building (or space within a building) of historical, architectural, or cultural significance (defined as being listed or eligible for listing on the National Register of Historic Places); and

- The lease is for no more than 10,000 gross square feet of space.

27-4.2 Advanced Metering and Measurement. Multiple laws and regulations set advanced metering and measurement requirements, including EPAct05 and EISA. See Chapter 29 on Facility Metering.

27-4.3 Designation of an Energy Manager. EISA establishes a framework for facility project management and benchmarking. An energy manager must be designated for each of these covered facilities. Each facility energy manager will be responsible for:

(a) Completing comprehensive energy and water evaluations of 25% of covered facilities each year, so that an evaluation of each facility is completed at least once every four years.

(b) Following up on implemented measures, including fully commissioning equipment, putting operation and maintenance (O&M) plans in place, and measuring and verifying energy and water savings.

(c) Using a DOE Web application to certify and track compliance for energy and water evaluations, project implementation and follow up measures, and estimated cost and savings. The Web application will be available to Congress, other Federal agencies, and the public, with some specific data exempted from disclosure for national security purposes.

(d) Entering energy use data for each metered building into a benchmarking system, such as the ENERGY STAR® Portfolio Manager.

(e) Not later than October 1, 2016, each agency shall provide for equivalent metering of natural gas and steam.

27-4.4 New Facility Construction and Major Renovations. Multiple laws and regulations outline requirements for energy efficiency and conservation measures in the construction of new facilities and major renovations, including:

(a) E.O. 13514:Implement high performance sustainable Federal building design (see also Chapter 25, Sustainable Buildings), construction, operation and

management, maintenance, and deconstruction by:

(i) Ensuring all new Federal buildings, entering the design phase in 2020 or later, are designed to achieve zero net energy by 2030.

(ii) Pursuing cost-effective, innovative strategies (e.g., highly-reflective and vegetated roofs) to minimize consumption of energy, water, and materials.

(iii) When adding assets to agency building inventories, identifying opportunities to:

- Consolidate and eliminate existing assets.
- Optimize the performance of portfolio property.
- Reduce associated environmental impacts.

(iv) Ensuring rehabilitation of Federally-owned historic buildings utilizes best practices and technologies in retrofitting to promote long-term viability of the building.

(v) Advance regional and local integrated planning by ensuring that planning for new Federal facilities and leases consider sites that are pedestrian friendly, near existing employment centers, and accessible to public transport; and emphasize existing central cities and, in rural communities, existing or planned town centers.

(b) EISA:

(i) Section 323 requires that GSA, in transmitting to Congress a prospectus of a proposed facility, must include “an estimate of the future energy performance of the building or space and a specific description of the use of energy efficient and renewable energy systems, including photovoltaic systems, in carrying out the project.”

(ii) Section 433 directs DOE to issue revised Federal building energy efficiency performance standards within one year of its enactment. The revised standards specify that buildings must be designed to reduce fossil fuel-generated energy consumption by the following percentages as compared to a similar building in fiscal year 2003:

Percentage	Year
55	2010
65	2015
80	2020
90	2025
100	2030

(iii) Section 433 also requires that sustainable design principles be applied to the siting, design, and construction of buildings subject to the standards. Section 434 requires that each Federal agency ensure that major replacements of installed equipment (such as heating and cooling systems) or renovation or expansion of existing space employ the most energy-efficient designs, systems, equipment, and controls that are life-cycle cost effective.

(c) EPAct05, Sec. 109: EPAct05 establishes Federal Building Performance Standards, and states that if life-cycle cost-effective, Federal buildings design should:

(i) Achieve energy consumption levels that are at least 30% below the levels established in the version of ASHRAE Standard or the International Energy Conservation Code as appropriate;

(ii) Implement water conservation technologies that are life-cycle cost-effective if water is being used to achieve energy efficiency;

(iii) Establish performance standards to be used in the design of new Federal commercial and multifamily high-rise buildings; and

(iv) Establish procedures for determining the life-cycle cost-effectiveness of energy conservation measures and for setting priorities for energy conservation measures in retrofits of existing Federal buildings.

27-4.5 Energy Efficiency in Standby Power Devices. E.O. 13221, *Energy Efficient Standby Power Devices*, calls for Federal agencies to purchase products that use less than one watt of energy when is standby mode or if one watt is not practicable, minimal standby power. Please see Chapter 32, Electronic Stewardship, for more information, or the Commerce Acquisition Manual, Chapter 1323.70.

27-5 Responsibilities

27-5.1 The Office of the Secretary. OSEEP shall:

(a) Develop data calls which accurately reflect reporting requirements;

(b) Distribute data calls in a timely manner;

(c) Provide guidance to Departmental Offices and OUs on requirements;

(d) Solicit and assimilate data;

(e) Review data for accuracy;

(f) Submit data as required in a timely manner; and

(g) Permanently store relevant data.

27-5.2 OUs shall:

(a) Develop and manage the OU's energy management program, including:

(i) Managing collection and maintain OU data;

(ii) Remaining current on Departmental energy efficiency requirements;

(iii) Processing greenhouse gas and sustainability data collected from suboffices;

(iv) Internally reviewing data;

(v) Submitting accurate, timely data to the Department Energy Program Manager;

(vi) Tracking OU's progress towards Departmental goals;

(vii) Maintaining five year energy project implementation plans to demonstrate future progress towards Departmental goals; and

(viii) Identifying necessary OU baseline recalculations.

(b) OU's shall assign an energy manager to maintain compliance with the evaluation and reporting of any EISA Section 432 "Covered Facilities" within the OU.

27-5.3 OUs with facilities shall:

(a) Provide accurate, timely data in accordance with reporting requirements; and

(b) Remain current on facility energy efficiency requirements.

(c) It is recommended that all facility utility data be input and tracked on a monthly basis through the Environmental Protection Agency's Energy Star Portfolio Manager database.

27-6 Reporting Requirements

27-6.1 Annual Greenhouse Gas and Sustainability Data Report. Energy data shall be submitted in accordance with the Department's Greenhouse Gas Inventory Management Plan

27-6.2 Five Year Project Implementation Plan. In conjunction with data submission for the Annual Greenhouse Gas and Sustainability Data Report each OU shall develop, maintain and submit to the Department, a comprehensive energy project implementation plan covering a span of no less than five years. This plan shall demonstrate progress towards Departmental energy intensity reduction goals.

27-6.3 OMB Sustainability/Energy Scorecard. Information/updates regarding OU energy efficiency related projects will be due to the Department on a semi-annual basis, typically January and June of each year.

27-6.4 Strategic Sustainability Performance Plan. Information/updates required for the Departmental SSPP (typically updated annually in June) will be obtained from the OU's Five Year Project Implementation Plan.

27-6.5 EISA "Covered Facilities" Audit Update. All facilities within an OU designated by the Department as an EISA Section 432 "Covered Facility" must receive a comprehensive energy and water audit at least once every four years. Audit completion and implementation/status of energy conservation measures must be reported annually (typically in June) via the Department of Energy's EISA Section 432 Compliance Tracking System (CTS).

CHAPTER 28:
RENEWABLE ENERGY

28-1 Scope

28-1.1 This chapter provides policy, guidance and compliance requirements relative to the procurement, onsite production and use of renewable energy at Department of Commerce facilities. The provisions of this chapter apply to all Department owned facilities and delegated leased facilities in which utility bills are paid for directly.

28-1.2 Related Chapters. Chapter 5, EMS; Chapter 27, Energy Conservation; and Chapter 29, Facility Metering.

28-1.3 References.

(a) EPAct05 Section 203;

(b) E.O. 13423, Strengthening Federal Environmental, Energy, and Transportation Management, dated January 24, 2007; and

(c) E.O. 13514; Federal Leadership in Environmental, Energy, and Economic Performance; dated October 5, 2009.

28-2 Legislation

28-2.1 Energy Policy Act of 2005. EPAct05 (reference (a)) directs the Federal government to increase its renewable energy use, with a goal of using renewable energy for the following percentages of total Federal electricity consumption:

(a) 3 percent or more in FY 2007 through FY 2009;

(b) 5 percent or more in FY 2010 through FY 2012; and

(c) 7.5 percent or more by FY 2013

EPAct provides for a bonus to Federal agencies by allowing them to double count renewable energy if it is produced on-site and used at a Federal facility, produced on Federal lands and used at a Federal facility, or produced on Native American land and used at a Federal facility.

28-2.2 Energy Independence and Security Act of 2007**.** EISA established energy management goals and requirements while also amending portions of the NECPA. It was signed into law on December 19, 2007. Section 523 requires 30% of the hot water demand in new Federal buildings and major renovations to be met with solar hot water equipment, provided it is lifecycle cost-effective. EISA also makes it easier for Federal agencies to finance renewable energy projects through ESPCs through the following:

(a) Project funding flexibility is increased by allowing agencies to combine appropriated funds and private financing.

(b) Contract can be up to 25 years in length with no limit on total obligation amounts.

(c) The definition of ESPC is expanded to include the use of excess electrical or thermal energy generated from on-site renewable sources.

28-3 Terms and Definitions

28-3.1 Federal Building. Any building, structure, or facility, or part thereof, including the associated energy consuming support systems, which is constructed, renovated, leased, or purchased in whole or in part for use by the Federal government and which consumes energy; such term also means a collection of such buildings, structures, or facilities and the energy consuming support systems for such collection.

28-3.2 Renewable Energy. Renewable energy (RE), is electric energy generated from solar, wind, biomass, landfill gas, ocean (including tidal, wave, current, and thermal), geothermal, municipal solid waste, or new hydroelectric generation capacity achieved from increased efficiency or additions of new capacity at existing hydroelectric plant. Counting of renewable energy is as follows:

(a) **Renewable Energy Sources of Electricity Qualified to Count toward the EPAct05 Requirement:** Electric energy from all of the renewable energy sources that satisfy the definitions and qualifications explained in sections 28-3.5 through 28-3.17 may be counted towards the EPAct05 requirement.

(b) **New Renewable Energy Sources Qualified to Count towards the E.O. 13423 Requirement:** Electric energy from all of the renewable energy sources that satisfy the definitions and qualifications explained in sections 28-3.2 through 28-3.14 of this chapter may be counted towards the E.O. 13423 requirement (reference (b) and continued in reference (c)). OUs may also count qualified non-electric energy from new renewable energy sources of the types detailed in sections 28-3.5 through 28-3.14. Examples include but are not limited to thermal energy from solar ventilation pre-heat systems, solar heating and cooling systems, solar water heating, ground source heat pumps, biomass heating and cooling, thermal uses of geothermal and ocean resources. Examples of mechanical energy include pumps driven by wind power and mechanical applications of qualified hydro resources. Lighting examples include day lighting technologies.

(c) **New Renewable Energy Sources:** In order for a renewable energy source, either electric or non-electric, to qualify as a new renewable energy source for the purpose of meeting the E.O. 13423 requirement (reference (b)), the renewable energy source must be placed into service after January 1, 1999.

28-3.3 Conversion to Electric Energy Equivalent. Conversion of non-electric energy to an electric equivalent will be based on methods described in DOE's reporting guidance for the Annual Report on Federal Government Energy Management.

28-3.4 Biomass. Under the definition in section 203 of EPAct05, the term "biomass" means any lignin waste material that is segregated from other waste materials and is determined to be

non-hazardous by the Administrator of the Environmental Protection Agency, and any solid, non-hazardous cellulosic material that is derived from the following:

(a) Any of the following forest-related resources: mill residues, precommercial thinnings, slash, and brush, or nonmerchantable material;

(b) Solid wood waste materials, including waste pallets, crates, dunnage, manufacturing and construction wood wastes (other than pressure-treated, chemically treated, or painted wood wastes), and landscape or right-of-way tree trimmings, but not including municipal solid waste (garbage), gas derived from the bio-degradation of solid waste, or paper that is commonly recycled;

(c) Agricultural wastes, including orchard tree crops, vineyard, grain, legumes, sugar, and other crop by-products or residues, and livestock waste nutrients; or

(d) A plant that is grown exclusively as a fuel for the production of electricity.

28-3.5 Waste to Energy. Waste to Energy (also known as Energy from Waste) is the process of creating energy in the form of electricity or heat from the incineration of waste source. The process is a form of energy recovery. Most produce electricity directly through combustion, or produce a combustible fuel commodity, such as methane, methanol, ethanol or synthetic fuels.

28-3.6 Landfill Gas. Landfill gas is the methane generated as waste decomposes. Wastewater treatment digester gas and other gas derived from the bio-degradation of waste also qualify under this category.

28-3.7 Geothermal Energy. Thermal energy generated and stored in the Earth, derived from sources such as hot circulating ground water.

28-3.8 Solar Energy. Solar energy for production of electrical energy includes but is not limited to photovoltaics and concentrating solar power.

28-3.9 Ocean Energy. Ocean energy includes but is not limited to electric energy from tidal, wave, current, and ocean thermal energy conversion.

28-3.10 Hydropower. For the purpose of the EPAct05 requirement, hydropower energy qualifies as renewable energy if it is from new hydroelectric generation capacity achieved from increased efficiency or addition of new capacity at an existing hydroelectric project. Hydroelectric generation capacity is "new" if it was placed in service after January 1, 1999, consistent with the definition of "new" in E.O. 13423.

28-3.11 Hydrokinetic. Hydrokinetic energy technology extracts energy from moving water without relying on dams to create hydrostatic energy potential. Hydrokinetic energy is also known as 'run of river'. Hydrokinetic energy used as electricity qualifies as renewable energy for meeting the EPAct05 and E.O. 13423 requirement.

28-3.12 Wind Energy. Wind Energy is the conversion of wind into a useful form of energy, such as using: wind turbines to make electricity, windmills for mechanical power, or windpumps for water pumping or drainage.

28-3.13 Renewable Energy Certificates (RECs) from Qualifying Sources. RECs also known as green tags, green energy certificates, renewable energy credits, or tradable renewable certificates represent the technology and environmental (non-energy) attributes of energy generated from renewable sources. Renewable energy credits for electricity are usually sold in 1 megawatt-hour (MWh) units. A certificate can be sold separately from the mega-watt hour of generic electricity with which it is associated. This flexibility enables customers to offset a percentage of their annual energy use with certificates generated elsewhere. RECs from renewable sources of electricity defined in this section may be used to meet the EPAct05 goal and E.O. 13423 goals. RECs from "new" renewable sources of electricity may be used to meet the requirement of E.O. 13423.

RECs from non-electric sources of renewable energy may also be used to meet the E.O. 13423 requirement concerning new sources of renewable energy. Their contribution will be reported under the E.O. 13423 requirement, but they cannot be used to meet the EPAct05 requirement.

28-3.14 Non-energy Attributes. Non-energy attributes of renewable energy include, but are not limited to, the following:

(a) Any avoided emissions of pollutants to the air, soil, or water such as sulfur dioxide (SO_2), nitrogen oxides (NO_x), carbon monoxide (CO), and mercury;

(b) Any other pollutant that is now or may in the future be regulated under the pollution control laws of the United States; and

(c) Avoided emissions of carbon dioxide (CO_2) and any other greenhouse gas, along with the RECs reporting rights to these avoided emissions**.**

28-4 Requirements

28-4.1 Overview of Renewable Energy Sources and Conversion Factors. EPAct05 and E.O. 13423 (reference (b)) requirements will be based on the "total amount of electric energy the Federal government consumes during any fiscal year." This applies to all facilities, whether domestic or international, and includes both those subject to EPAct05 goals and those which are excluded. For purposes of this guidance and reporting energy use under section 543 of NECPA and E.O. 13423, small on-site, renewable energy generation projects that do not incur fuel costs, are un-metered, and are located on the customer side of a facility's energy meter impact purchased energy in the same manner as an energy conservation project. Therefore they will not be included in the total Btu per gross square foot calculations used for energy efficiency goals.

28-4.2 New Renewable Energy Requirement of E.O. 13423. OUs shall report the use of electricity from qualified renewable energy sources placed in service on or *before* January 1, 1999 to meet the following percentages of their total electricity use: 1.5% from 2007 to 2009, 2.5% from 2009 to 2013, and 3.75% from 2013 onward. They can meet the requirement for new sources by:

(a) Using electricity from qualified new renewable sources of electricity built after January 1, 1999; and/or

(b) Using non-electric energy from qualified new renewable sources built after January 1, 1999;

28-4.3 The E.O. 13423 Requirement and the Impacts on the EPAct05 Goal. Reference (b) requires that agencies use new renewable energy sources equal to half of the EPAct05 renewable energy requirement. The table below shows the differences between the two requirements. While EPAct05 only allows electricity from renewable energy sources, E.O. 13423 allows agencies to use new non-electric renewable energy sources to meet the requirement for new renewable energy. However, these non-electric renewable energy sources cannot be used to meet the EPAct05 requirement.

For example, using only electricity from renewable energy sources an OU can meet the E.O. 13423 and EPAct05 requirement in 2008 with 1.5% of its electricity from new renewable energy sources of electricity and 1.5% from old renewable energy sources of electricity, for total renewable energy use of 3%. At the other extreme, in 2008 an OU could use new non-electric renewable energy sources equivalent to 1.5% of its electricity use to satisfy the E.O. 13423 requirement, and then use only old renewable energy sources of electricity to meet 3% of its electricity use to satisfy the EPAct05 requirement, for a total of an equivalent of 4.5% of its electricity use from renewable energy. In between these extremes OUs can use any combination of new non electric and electric renewable energy sources necessary to meet the E.O. 13423 requirement.

These goals represent minimums only; OUs must establish higher internal goals. Once an OU has met E.O. 13423's requirement for new source renewable energy and EPAct05 requirement for total renewable energy, OUs should report any amount of new or old renewable electricity consumption that exceeds the goal.

Table 28-1: Comparison of E.O. 13423 and EPAct05 Renewable Energy Goals

	2007 2009	**2009 2012**	**2013 onward**	**Can include new non electrical?**	**New or old source?**
E.O. 13423 *new* renewable energy sources *minimum* requirements	1.5%	2.5%	3.75%	Yes	No, exclusively new
EPAct05 total minimum renewable energy requirements	3%	5%	7.5%	No	Yes

28-4.4 Consumption Requirement. Section 203 of EPAct05 specifies that renewable energy must be consumed to be credited toward the requirement. (42 U.S.C. § 15852(a))

Non-electric renewable energy used to meet the E.O. 13423 requirement for new renewable energy must also be consumed, therefore non-electric energy from renewable sources must meet the same qualifications as electricity from renewable energy described in the following paragraphs.

28-4.5 Double Counting. RECs that count toward the EPAct05 and E.O. 13423 requirements cannot be double counted except under the bonus specified in EPAct05 section 203, subsection (c). (42 U.S.C. § 15852(c)) The statutory "bonus" is discussed in section 28-4.6 below. It is important to protect the credibility of RECs in the general market where they are traded, and double counting could jeopardize that credibility.

Double counting occurs when:

(a) More than one party at the same time claims the renewable energy attributes from renewable energy generation (as either RECs or as renewable energy), i.e., the renewable energy is "double sold" to other customers; or

(b) The renewable energy counted toward the OU's goal is also used to meet a renewable portfolio standard or other Federal, state, or local regulatory requirement, except for the exemptions provided to projects initiated prior to final publication of this guidance; or

(c) Non-energy attributes such as emissions credits/allowances or other environmental attributes are further disaggregated from the renewable attributes by the renewable energy/REC supplier and sold separately.

28-4.6 Bonus under Section 203 of EPAct05. This establishes a double credit bonus for Federal agencies if renewable electricity is produced on-site at a Federal facility, on Federal lands, or on Native American lands**.** The bonus allowed by section 203(c) of EPAct05 is not considered double counting. The bonus will be implemented by accounting for it in agency reporting. This bonus is specified by law, addresses only accounting internal to the Federal government, and should not negatively impact the general REC market.

The bonus is not available to non-electric renewable energy sources used by agencies to meet the E.O. 13423 requirement for use of renewable energy generated from new sources.

28-4.7 Including Non-energy Attributes in Renewable Energy and RECs. For renewable energy or RECs to count under the EPAct05 requirement or the E.O. 13423 requirement, both the renewable attributes and the non-energy attributes must be retained by the OU, retired, or precluded from transfer to a third party.

28-4.8 On-site Renewable Energy Projects, Government-Owned Projects and Distributed Generation. E.O. 13423 section 2(b)(ii) requires that to the extent feasible, agencies implement renewable generation projects on agency property for agency use. The instructions for E.O. 13423 include guidance on increasing use of renewable energy in ESPCs and UESCs including bundling measures with short and long-term paybacks to create cost-effective contracts to expand on-site renewable energy projects. Where life-cycle cost effective, each OU shall implement distributed generation systems in new construction or retrofit projects, including renewable systems such as solar electric, solar lighting, geo (or ground coupled) thermal, small wind turbines, as well as other generation systems such as fuel cell, cogeneration, or highly efficient alternatives. In addition, OUs are encouraged to use distributed generation systems when a substantial contribution is made toward enhancing energy reliability or security.

28-4.9 REC Retention Requirements. It is expected that Federal renewable energy use under EPAct05 and E.O. 13423 will result in renewable energy use beyond the existing state renewable portfolio standard goals. Any RECs sold or relinquished to meet state goals or corporate renewable energy goals that are not replaced with other RECs do not contribute to the goals established by EPAct05 and E.O. 13423. This is to prevent Federal agencies from claiming credit for renewable energy attributes that are also claimed by other parties such as states or corporations (see Section 28-4.5). Therefore OUs are required to retain ownership of the RECs from projects in order to count them towards the EPAct05 or E.O. 13423 requirements. These requirements also apply to all sources of RECs, including non-electric renewable energy sources.

Renewable energy from projects built on-site at a Federal facility or owned by a Federal agency but installed on non-Federal land or waterways may qualify to be counted toward the EPAct05 or E.O. 13423 requirements where:

(a) The renewable energy is produced and used on-site (i.e., the renewable energy produced by the project is on the facility side of the meter and the power/energy is not sold to others), or the renewable energy is produced by a renewable energy project owned by a Federal agency but installed on private land or waterways (for example, off-grid installations that power remote sensing equipment or buoys); and

(b) The renewable energy and non-energy attributes are not sold or otherwise allowed to be transferred from the site.

Retention of a REC that explicitly states that the Federal agency retains or precludes transfer to other parties of all renewable energy and non-energy attributes of the project is the best evidence of meeting this standard.

Existing projects where the agency can show that it uses the energy produced but where there is no agreement or contract that addresses the disposition of the RECs and non-energy attributes of the project shall receive full credit so long as the RECs and/or non-energy attributes are not explicitly sold or transferred in the future. See Section 28-4.6 for a discussion on how bonuses for these on-site projects are credited and the treatment of RECs from these projects. For non-electric on-site projects, for example thermal projects where there is no market for RECs, a document or clause stating that the Federal agency retains or precludes transfer to other parties of all renewable energy and non-energy attributes of any renewable energy produced by on-site projects is recommended.

28-4.10 REC Trading. The requirement to retain RECs does not preclude trading or swapping RECs. Agencies may arrange for the sale of RECs from on-site renewable projects and arrange for the proceeds to be used to acquire RECs from other locations and/or renewable resources. Agencies may also arrange for direct swaps of RECs with other renewable energy projects. This "REC Swap" option is designed to encourage innovative projects and to improve project cost-effectiveness, while retaining the concept that a specific REC is not double counted, except as specified in EPAct05 Section 203 (c).

28-4.11 REC Swaps Allowed at Agency Level. Swaps may be arranged at the reporting agency level, but must be documented. Swaps will not be allowed between reporting agencies, although agencies may arrange purchases of RECs from each other. This allows an agency to apply RECs purchased from other sources to cover the renewable energy production from any on-site project in the agency even if the RECs from the project were not retained, and to claim any bonus credit available because the project is on Federal or Indian land. For the EPAct05 requirement the RECs an agency receives in a swap or trade must come from qualified renewable energy sources of electricity.

28-4.12 REC Swaps and Non-Electric Renewable Energy Sources. To meet the new renewable energy provisions of the E.O. 13423 requirement agencies may swap RECs from non-electric renewable energy sources. However, non-electric renewable energy sources produced on Federal or Indian lands cannot receive a bonus even if they are swapped or traded for RECs from a renewable source of electricity. RECs for renewable sources of non-electric energy must come from projects placed in service after January 1, 1999, to qualify for the new renewable energy provisions of the E.O. 13423 requirement, and to be reported as progress toward meeting the E.O.13423 requirement.

28-4.13 REC Swap Example for Electric Renewable Energy Sources. Under the EPAct05 requirement if an agency has a project that produces 100 MWh of qualified renewable energy on its lands but sold the RECs for the project, it would not receive credit for the 100 MWh produced or the 100 MWh of bonuses for siting the project on Federal lands. However, the agency can purchase 100 MWhs of RECs from other sources of renewable electricity to swap for the RECs it sold. The agency could then count the 100 MWh produced by the project and covered by the purchased RECs and claim the 100 MWh bonus, for a total of 200 MWh, including the RECs. This energy would also count toward the E.O. 13423 requirement.

28-4.14 Swap Example for Non-Electric Renewable Energy Sources. Under the E.O. 13423 requirement, if an agency has a project that produces BTUs, mechanical energy or light that is the equivalent of 100 MWh of qualified renewable energy from a new source of non-electric energy placed in service after January 1, 1999, but sold the RECs for the project, it would not receive credit for the 100 MWh equivalent in meeting the new renewable energy provisions of the E.O. 13423 requirement. However, the agency can purchase 100 MWhs of RECs from other new renewable sources of electric, mechanical or thermal energy placed in service after January 1, 1999 to swap for the RECs it sold. However, because the original project on Federal lands was a renewable source of non-electric energy, it cannot qualify for any bonus. The most the agency can claim toward meeting the new renewable energy requirement under the E.O. 13423 requirement is 100 MWh. This provision allows agencies to swap high-value RECs from an agency project for less expensive RECs to help reduce project costs. If the thermal project was placed in service on or before January 1, 1999, it cannot contribute to the E.O. 13423 requirement at all.

28-4.15 On-Site Projects No Longer Restricted by January 1, 1990 Start Date. E.O. 13423 revoked E.O. 13123 and therefore revoked its accompanying guidance which required that all renewable energy claimed for the Federal renewable energy goal must come from projects built after January 1, 1990. All on-site renewable energy projects that produce electricity can count toward the EPAct05 requirement regardless of their installation date, provided the agency meets the requirements in section 3.1.1 of the Federal Renewable Energy Requirement Guidance for EPAct05 and E.O. 13423and section 2 (b) of E.O. 13423 that directs agencies to meet half of their statutory goal with new renewable resources placed in service after January 1, 1999. See section 3.4 of the Federal Renewable Energy Requirement Guidance for EPAct05 and E.O. 13423for a discussion of how this relates to the bonus for installation on Federal or Indian lands.

For renewable sources of non-electric energy used to meet the E.O. 13423 requirement, only projects placed in service after January 1, 1999 can be counted.

28-4.16 Purchases of Renewable Energy/RECs. For purposes of the EPAct05 and E.O. 13423 requirements, purchases of RECs are treated the same as renewable energy purchases. This is an established, standard practice within the private sector. This also means that a REC must be from a qualified renewable source of electricity to count toward the EPAct05 goal. RECs from qualified renewable sources of non-electric energy can only be used to meet the E.O. 13423 requirement.

(a) **Purchases Qualified for Credit.** Purchased renewable energy and RECs may only be counted against the EPAct05 or E.O. 13423 requirements when the renewable and non-energy attributes are retained by the OU, retired, or precluded from transfer to a third party. Therefore, OU purchases of renewable energy/RECs should include contract language that explicitly states that the OU retains or precludes transfer to other parties of all renewable energy and non-energy attributes of any renewable energy/RECs that they purchase.

Guidance and sample language regarding this requirement will be updated periodically as industry practice and market conditions change over time and will be available on the FEMP website at legislation.html.

(b) **Purchases Not Qualified for Credit.** That portion of renewable energy/RECs that is used by another party (including electric service providers who claim ownership of renewable energy attributes to meet renewable portfolio standards), or transferred or sold by the Federal agency to a third party, cannot be counted toward the EPAct05 or E.O. 13423 requirement.

OUs may not count renewable energy or REC purchases from resources that are included in the utility's normal generation mix. OUs may not count renewable energy or REC purchases that have been paid for by captive utility ratepayers unless the revenue from the further sale of the renewable energy or RECs is returned to those ratepayers or used for new renewable energy development.

Note that a REC supplier may retire RECs on the Federal government's behalf in those states with REC tracking systems that allow RECs to be retired by the supplier on behalf of the purchaser.

(c) **"Vintage" Requirements.** RECs purchased for use in a given contract year must meet REC "vintage" requirements, i.e., the energy they represent must be generated during the same defined contract year. They may also be generated six (6) months immediately preceding each contract year of the period of performance, or three (3) months immediately following each contract year of the period of performance. This is consistent with recommended practice for the EPA Green Power Partnerships.

Guidance and sample language regarding this requirement will be updated periodically as industry practice and market conditions change over time and will be available on the Federal Energy Management Program (FEMP) website.

(d) **Third-Party Verification.** RFPs shall include provisions that address the issues discussed in this guidance, and suppliers should certify that their product meets the requirements of this guidance. RFPs shall also include a "Third Party Verification" requirement as described below:

All Federal agency renewable energy/REC RFPs must include Third Party Verification audit requirements for the purchase. The purpose of this requirement is to prevent fraud, to ensure that Federal renewable energy/REC purchases are not double-counted, to ensure that the Federal government receives the renewable energy and non-energy benefits associated with their renewable energy/REC purchases, to ensure that vintage and other requirements of this guidance are met, and to help standardize industry best practices.

Guidance and sample language regarding this requirement will be updated periodically as industry practice and market conditions change over time.

(e) **Purchases from Federal and Tribal Lands.** See Section 3.4 of the Federal Renewable Energy Requirement Guidance for EPAct05 and E.O. 13423

for a discussion on how purchases from Federal land and tribal lands receive a bonus under EPAct05.

28-4.17 Bonuses for Qualifying Renewable Energy. In accord with section 203(c) of EPAct05, a bonus equivalent to doubling the amount of renewable energy used or purchased is available if any of the following conditions are met:

- The renewable energy is produced and used on-site at a Federal facility;
- The renewable energy is produced on Federal lands and used at a Federal facility;
- The renewable energy is produced on Indian land as defined in title XXVI of the Energy Policy Act of 1992 (25 U.S.C. 3501 et seq.) and used at a Federal facility; or
- The electricity produced on-site at a Federal facility is sold to a third party, but the power purchase contract explicitly states that the Federal agency retains ownership of the related RECs and non-energy attributes. Moreover, the energy buyer is precluded from representing that such purchased energy is "renewable" for any purpose (e.g., to meet a state renewable portfolio standard, in public disclosure statements, press releases, or bill inserts, etc). All renewable energy and non-energy attributes must be retained by the site.
- The bonus is only available to qualified renewable energy sources that produce electricity on Federal or Indian lands. Non-electric energy from renewable sources is not eligible for the bonus.

(a) **Bonus Transferability between Agencies.** If one Federal agency transfers the renewable energy and the associated RECs produced on its land to another Federal agency, the purchasing agency may receive double credit for each kWh purchased. The agencies may also negotiate other divisions of the RECs and bonus credits between the agencies, as long as the total does not exceed the amount of renewable energy generated plus the bonus and the division is clearly documented.

(b) **Bonus and REC Transfers to Parties outside the Federal Government.** If an agency transfers the RECs for a project that otherwise qualifies for the bonus to a party outside the Federal government, it also gives up its right to count that amount of renewable energy for its goal. It also gives up the right to claim the bonus for the energy and renewable attributes associated with the RECs it sells unless RECs purchased from other sources are used to cover the renewable energy production from the on-site project.

(c) **Bonus Limited to New Renewable Energy Sources.** The intent of the bonus is to encourage the development of on-site renewable energy projects. Therefore, this guidance honors that intent by limiting the bonus to new renewable energy projects. To qualify for the bonus, projects and purchases must come from new renewable energy sources placed in service after January 1, 1999. They must also meet the other requirements specified in this guidance. Projects placed in service on or before January 1, 1999 will not receive any bonus.

(d) **Bonus Available to Refurbished Facilities.** A project originally placed in service on or before January 1, 1999 but that is rebuilt, refurbished or modified significantly – involving greater than 80% of the original equipment or changes that equal 80% or more of the original costs of the facility – will be considered new for purposes of the bonus calculation under EPAct05 and the new renewable energy requirement under E.O. 13423.

(e) **Bonus Provisions for Projects that Convert Renewable Fuels to Electricity.** Projects placed in service after January 1, 1999 that convert renewable fuels into useful electric energy will be considered on-site projects that can qualify for the bonus if the requirements a), b) and c) from Section 203(c) of the EPAct05, (42 U.S.C. 15825(c)). Item d) are met.

28-4.18 Encouragement for Long-Term Contracts. Agencies are encouraged to enter into long-term contracts (10 years or longer) for the purchase of renewable energy if the contract directly supports the development of new renewable energy resources.

Where not prohibited by law, OUs are encouraged to enter into long-term power purchase contracts for the supply of renewable energy that meet the requirements below. Such a contract should be for a term of 10 years or longer and substantially contribute to the development, financing, construction, and operation of a new renewable project. In this situation, "substantially" means more than 10 percent of a project or the equivalent of purchasing production of 3 MW of new renewable capacity

28-4.19 Counting Renewable Energy Purchase Goals for Reducing Energy Intensity. During FY 2007, agencies will continue to receive credit toward their energy reduction goal from purchases of qualified electric and non-electric renewable energy sources. From FY 2008 through FY 2011, the credit will gradually be reduced to zero as shown in the table below.

Purchases of renewable energy or RECs may only contribute up to 60 percent of the annual energy reduction goal for FY 2008, and gradually be reduced to zero by 2012.

Long-term REC purchases of 10 years or more of renewable energy that contribute to the development of new renewable energy resources may only contribute up to 80 percent of the annual energy reduction goal for FY 2008 and gradually be reduced to zero in 2012, as shown in the table below.

Table 28-2: Timeline Use of Renewable Energy towards Reducing Energy Intensity

	Energy Reduction Goal	**Maximum Contribution of Renewable Energy and REC Purchases toward Energy Goal**	**Maximum Contribution of Long-Term Renewable Energy and REC Purchases toward Energy Goal***
2003	Base Year	RECs and purchases not applied in Base Year	RECs and purchases not applied in Base Year
2007	4%	No limit	Not applicable
2008	9%	5.4%	7.2%
2009	12%	4.8%	7.2%
2010	15%	3.0%	6.0%
2011	18%	1.8%	3.6%
2012	21%	0.0%	0.0%

*The combined total of both regular and long-term renewable purchases may not contribute more than the percentages shown in column 4 above

Agencies will continue to receive appropriate credit for reducing greenhouse gas emissions for all the renewable energy they use.

The phase out for counting renewable energy and REC purchases toward energy intensity goals does not impact how agencies count these purchases toward renewable energy goals.

28-5 Responsibilities

28-5.1 The Office of the Secretary. OSEEP shall:

(a) Establish policy and guidance for the Department;

(b) Provide technical assistance in this program area to all OUs.

28-5.2 OUs shall:

(a) Identify and implement renewable energy project opportunities;

(b) Manage, track and report renewable energy goals; and

(c) Develop corrective action plans when renewable energy goals are not met.

28-6 Reporting Requirements

28-6.1 Reporting to the Office of the Secretary.

(a) OUs shall assimilate, verify and report their fiscal year's renewable energy

consumption to the Office of the Secretary as part of the annual greenhouse gas and sustainability data call.

(b) OUs shall report interim renewable energy data points to the Office of the Secretary upon request.

(c) OUs shall identify and report all planned renewable energy projects for the next five years on a rolling, annual basis.

28-6.2 Reporting to External Agencies. The Office of the Secretary's Office of Administrative Services shall report the department's renewable energy consumption to OMB and OFEE as part of the biannual OMB scorecard update and the annual SSPP update.

CHAPTER 29:
FACILITY METERING

29-1 Scope

29-1.1 This Chapter provides policy, guidance and compliance requirements relative to the planning and installation of basic and/or advanced metering at Department of Commerce facilities. The provisions of this Chapter apply to all Department OUs and facilities that are owned by the Department, or pay utilities bills or report energy usage.

29-1.2 Related Chapters. Chapter 5, EMS; Chapter 26, Greenhouse Gas Emissions; Chapter 27, Energy Conservation; Chapter 28, Renewable Energy; and Chapter 30, Water Conservation.

29-1.3 References.

(a) EPAct05 Section 103;

(b) Department of Commerce Metering Plan;

(c) Department of Commerce Natural Gas and Steam Metering Plan, dated June 2010; and

(d) Department of Energy Guidance for Electric Metering in Federal Buildings, 2006. DOE/EE-312.

29-2 Legislation

29-2.1 EPAct05 Section 103 (reference (a)) includes the following requirements surrounding energy use measurement and accounting**:** All Federal agencies must use by October 1, 2012, to the maximum extent practicable, advanced meters or advanced metering devices that provide data at least daily and that measure at least hourly consumption of electricity.

29-2.2 Energy Independence & Security Act of 2007**.** Section 434(b) amends Section 543(e)(1) of NECPA by inserting the following:

"Not later than October 1, 2016, each agency shall provide for equivalent metering of natural gas and steam, in accordance with guidelines established by the Secretary."

29-3 Terms and Definitions

29-3.1 Advanced Meters. Advanced meters are those that have the capability to measure and record interval data (at least hourly for electricity), and communicate the data to a remote location in a format that can be easily integrated into an advanced metering system. EPAct05 Section 103 requires at least daily data collection capability.

29-3.2 Advanced metering systems. A system that collects time-differentiated energy usage data from advanced meters via a network system on either an on-request or defined schedule basis. The system is capable of providing usage information on at least a daily basis and can support desired features and functionality related to energy use management, procurement, and operations.

29-3.3 Appropriate Buildings. An "appropriate building" is any building or structure that is not considered excluded or exempted from energy reduction goals, i.e., radio transmitters, radars and other similar systems.

29-3.4 Automatic Meter Reading. A system where aggregated kWh usage, and in some cases demand, is retrieved via automated means such as a drive-by vehicle, or walk-by hand-held system.

29-3.5 Covered Facilities. As provided in EISA (42 U.S.C. § 8253(f)(2)(B)), the term "covered facility" means "Federal facilities, including central utility plants and distribution systems and other energy intensive operations, that constitute at least 75 percent of facility energy use at each agency."

29-3.6 Critical Peak Pricing. A type of dynamic pricing whereby the majority of kWh usage is priced on a time-of-use basis, but where certain hours on certain days where the system is experiencing high peak demand are subject to higher hourly energy prices that reflect market conditions for peak generation and delivery during peak demand periods. These critical period prices may be known to electricity customers under conditions such as "day-ahead" or "hour ahead" and are typically employed a limited number of times per year.

29-3.7 Demand Response. Demand response refers to the reduction of customer energy usage at times of peak usage in order to help address system reliability, reflect market conditions and pricing, and support infrastructure optimization or deferral. Demand response programs may include dynamic pricing/tariffs, price-responsive demand bidding, contractually obligated and voluntary curtailment, and direct load control/ cycling.

29-3.8 Direct Load Control. A system or program that allows utilities, other load serving entities, or demand response service providers to control user load via 1) directly cycling discretionary load of certain end uses, 2) directly turning off such loads or 3) implementing custom load control strategies that reduce peak usage.

29-3.9 Dynamic Pricing. Retail prices for energy consumed that offer different prices during different time periods and reflect the fact that power generation costs and wholesale power purchase costs vary during different time periods. Types include Time-of-Use Pricing, Critical Peak Pricing and Real-Time Pricing.

29-3.10 Economic Demand Response Programs. Programs which encourage demand reductions via price signals to energy users that reflect the higher costs of electricity production and

delivery at times of system peak.

29-3.11 Emergency Demand Response Programs. Programs which are dispatched by system operators when system operating reserves drop to levels such that load reductions are needed to maintain short-term system reliability.

29-3.12 Facilities. Any building, installation, structure, or other property (including any applicable fixtures) owned or operated by, or constructed or manufactured and leased to, the Federal Government. This includes-

- A group of facilities at a single location or multiple locations managed as an integrated operation; and

- Contractor-operated facilities owned by the Federal Government.

The statute excludes from this definition any land or site for which the cost of utilities is not directly paid by the Federal Government.

29-3.13 Interval Meter. A meter that measures and records kWh usage on either predetermined or remotely configurable time intervals, where the intervals are in increments such as minutes or hours.

29-3.14 Real-Time Pricing. Energy prices that are set for a specific time period on an advance or forward basis and that may change according to price changes in the generation spot market. Prices paid for energy consumed during these periods are typically established and known to consumers a day ahead ("day ahead pricing") or an hour ahead ("hour-ahead pricing") in advance of such consumption, allowing them to vary their demand and usage in response to such prices and manage their energy costs by shifting usage to a lower cost period, or reducing consumption overall.

29-3.15 Retrofitted Meter. A standard meter that has had an advanced metering device added to it.

29-3.16 Smart Meter. A different term used to refer to an advanced meter.

29-3.17 Standard Meters. Electromechanical or solid state meters that cumulatively measure, record and store aggregated kWh data that is periodically retrieved for use in customer billing or energy management. Meters that are not advanced meters are standard meters.

29-3.18 Time-of-Use Pricing. Energy prices that are set for a specific time period on an advance or forward basis, typically not changing more often than twice a year (summer and winter season). Prices paid for energy consumed during these periods are pre-established and known to consumers in advance of such consumption, allowing them to vary their demand and usage in response to such prices and manage their energy costs by shifting usage to a lower cost period, or reducing consumption overall. The time periods are pre-established, typically include from two to no more than four periods per day, and do not vary in start or stop times.

29-4 Requirements

29-4.1 The Primary Metering Requirements established in Section 103 of EPAct, and EISA Section 434(b), Energy Use Management and Accountability, are summarized by these key points:

(a) By October 1, 2012, all Federal buildings must be metered for electricity usage subject to determination of practicability.

(b) Not later than October 1, 2016, each agency shall provide for equivalent metering of natural gas and steam, in accordance with guidelines established by the Secretary.

(c) Installed meters will support the efficient use of energy and reduction in cost of electricity, natural gas and steam use.

(d) Advance metering that provides interval data on at least a daily basis will be used subject to practicability.

(e) Metered data must be made available to Energy Managers.

(f) All facilities within an OU designated by the Department as an EISA Section 432 "Covered Facility" must receive a comprehensive energy and water audit at least once every four years. Number of metered buildings is an integral part of this audit. Audit completion and implementation/status of energy conservation measures must be reported annually (typically in June) via the Department of Energy's EISA Section 432 CTS.

Metering of water use is not currently mandated for Federal buildings. However, efficiency requirements outlined in E.O. 13423 for potable water and E.O. 13514 for industrial, landscaping and agricultural applications have elevated the importance of monitoring and effectively tracking water intensive applications in an effort to identify and implement water reduction actions. Therefore, installing meters at all facilities where potable water is purchased as a commodity by 2016 is strongly encouraged when determined to be life-cycle cost-effective, such that the anticipated or estimated savings to investment ratio (SIR) exceeds 1. Until such time as water meters are installed, or in the event that water meters are determined to be uneconomical, OUs shall estimate both potable and non-potable water consumption and document assumptions and estimation techniques.

29-4.2 Benchmarking Requirements. In order to be useful, data gathered through metering must be monitored and analyzed. Each OU or facility manager, as appropriate, should develop a data management plan for analyzing and using the data being collected.

EISA requires energy managers to enter energy use data for each metered building that is (or is a part of) a covered facility into a building energy use benchmarking system, such as the Energy Star Portfolio Manager tool (Portfolio Manager) (42 U.S.C. 8253(f)(8)(A). In addition, energy managers shall post and update the benchmarking data each year in the web-based tracking system developed by the Secretary of Energy to track compliance with Section 432 of EISA (see 42 U.S.C. 8253(f)(8)(C)).

The Department fully supports, and encourages, the use of the Environmental Protection Agency's Energy Star Portfolio Manager for this purpose. This is a free database capable of tracking energy and water usage. Data can be uploaded in spreadsheet form.

29-4.3 Special Considerations. In developing a metering program, OUs must consider a variety of site-specific factors:

(a) **Leased versus owned or delegated.** Many, if not all, OUs occupy buildings that are owned by others, or delegated, with varying levels of responsibility for payment of energy bills. The decision on whether to install metering in leased buildings must be based on several factors, including but not limited to:

(i) Is the OU responsible for payment of electric bills?

(ii) Is the term of the lease sufficient to justify the cost of advanced metering installation?

(iii) Who has control over the operation of the facility?

(iv) Is the landlord amenable to installing meters?

(v) Can the lease be modified to clarify metering responsibilities?

(b) **O&M contracts.** Many Federal facilities are operated by contractors, and the trend is moving further in that direction. These contracts should be examined to determine how they can be modified to require contractors to incorporate metering technology into the building operating systems, and to hold them accountable for building energy performance as well.

(c) **New versus existing construction.** Many agencies already require meters to be installed in all new construction and major renovation, and this practice should be replicated across the Federal government and within the Department. Many existing buildings are already metered, but should be examined along with the entire stock to determine whether it would be cost- effective to upgrade to advanced metering systems wherever practicable.

(d) **Metering of other utilities.** While EPAct specifically refers to advanced metering for the purpose of reducing electricity usage and cost in Federal facilities, DOE strongly encourages the use of advanced metering technologies for other purchased utilities as well, since they make up a substantial portion of energy consumption.

(e) **Building-level versus system-level.** Advanced metering must be considered not only at the whole-building level, but as far down into the subsystem level as practicable.

29-5 Responsibilities

29-5.1 The Office of the Secretary.

(a) **OSEEP shall:**

(i) Provide policy and guidance of the metering of all facilities.

(ii) Collect and report metering statistics through the Department and its OUs.

(b) **OSBM shall** ensure compliance within the HCHB.

29-5.2 OUs shall:

(a) Use references (b, c, and d) to develop and manage a comprehensive facility metering management program, including:

(i) Identifying and tracking which facilities must be metered for which utilities to meet requirements in a timely manner as articulated in the preceding sections of this chapter.

(ii) Tracking which facilities are metered, and with what types of meters, for each utility. Assimilate and submit data on facility metering as required or requested.

(iii) Maintain five year metering project implementation plans to demonstrate future progress towards Departmental goals

(b) OU's shall assign an energy manager to maintain compliance with the evaluation and reporting of any EISA Section 432 "Covered Facilities" within the OU.

29-6 Reporting Requirements

29-6.1 Reporting to the Office of the Secretary.

(a) **Greenhouse Gas Inventory, Data Report and Strategic Sustainability Performance Plan Update.**

Metering data shall be submitted in accordance with the Department's annual energy and environmental data call as requested and/or required. Information/updates required for the Departmental SSPP (typically updated annually in June) will be obtained from the OU's Five Year Project Implementation Plan. See Chapter 3 for details on these reports. The following data will be requested separately for steam, electricity, and natural gas:

(i) Cumulative number of appropriate buildings for metering;

(ii) Cumulative number of appropriate facilities metered with advanced meters; and

(iii) Cumulative number of appropriate facilities metered with standard meters

The above data will be requested for the previous fiscal year, and projections will also be requested for the next three fiscal years.

(b) **Five Year Project Implementation Plan.** In conjunction with data submission for the annual energy and environmental data call, each OU shall develop, maintain and submit to the Department, a comprehensive metering project implementation plan covering a span of no less than five years. This plan shall demonstrate progress towards Departmental metering goals.

29-6.2 Reporting to External Agencies.

OSEEP will report the Department's progress in meeting the legislative and E.O. goals above via the:

(a) Annual Greenhouse Gas and Sustainability Data Report to the U.S. Department of Energy;

(b) OMB Sustainability/Energy Scorecard to the President's Office of Management and Budget; and

(c) The EISA "covered facilities" audit update to the U.S. Department of Energy.

CHAPTER 30:
WATER CONSERVATION

30-1 Scope

30-1.1 This chapter provides policy, guidance, and reporting requirements relative to the conservation of potable and non-potable water at Department of Commerce facilities. The provisions of this chapter apply to all Departmental Offices and OUs.

30-1.2 **Related Chapters.** Chapter 3, Awards; Chapter 5, EMS; Chapter 13, Stormwater Management; and Chapter 25, Sustainable Buildings.

30-1.3 **References.**

(a) E.O. 13423, Strengthening Federal Environmental, Energy, and Transportation Management, dated January 24, 2007; and

(b) E.O. 13514, Federal Leadership in Environmental, Energy, and Economic Performance, dated October 5, 2009.

30-2 Legislation

30-2.1 National Energy Conservation Policy Act of 1978**.** As amended, NECPA requires Federal agencies, to the maximum extent practicable, to install water conservation measures with payback periods of less than 10 years in Federal buildings owned by the U.S. government.

30-2.2 Energy Policy Act of 2005**.** Section 109 of the EPAct05 requires Federal agencies to implement water conservation technologies that are life-cycle cost-effective if water is being used to achieve energy efficiency.

30-2.3 Energy Independence and Security Act of 2007**.** EISA, Section 432, requires each Federal agency to identify "covered facilities" that constitute at least 75% of the agency's facility energy use. An energy manager must be designated for each of these covered facilities. Each facility energy manager must complete a comprehensive energy and water evaluation at least once every four years. Facilities must implement appropriate audit recommendations and follow up to measure and verify water savings. Section 438 establishes strict stormwater runoff requirements for Federal development and redevelopment projects (see Chapter 13, Stormwater).

30-3 Terms and Definitions

30-3.1 **Agricultural Water Consumption.** Water used for irrigation and other uses related to the production of agricultural products including, but not limited to, food and goods through farming and forestry, water use related to animal and livestock operations, and agricultural research and development. Some examples of agricultural water use include, but are not limited to, crop irrigation, greenhouse operations, aquaculture and animal feeding operations. Water reused for agricultural processes or obtained from an alternative water source is not classified as agricultural water consumption. In the event where agricultural water is also classified as potable, see reference (b).

30-3.2 Alternative Water. Water that is not obtained from a surface water source, ground water source, or purchased reclaimed water from a third party. It can include rainwater or stormwater harvested on site, sump pump water harvesting, gray water, air cooling condensate, reject water from water purification systems, water reclaimed on site, or water derived from other water reuse strategies.

30-3.3 Covered Facilities. Federal facilities, including central utility plants and distribution systems and other energy intensive operations, which constitute at least 75 percent of facility energy use at each agency.

30-3.4 Facilities. Any building, installation, structure, or other property (including any applicable fixtures) owned or operated by, or constructed or manufactured and leased to, the Federal Government. This includes-:

- A group of facilities at a single location or multiple locations managed as an integrated operation; and
- Contractor-operated facilities owned by the Federal Government.

The statute excludes from this definition any land or site for which the cost of utilities is not directly paid by the Federal Government.

30-3.5 Freshwater Source. A water source (surface or ground water) that has a total dissolved solids concentration of less than 1,000 milligrams per liter.

30-3.6 Gross square footage Or Square Footage is defined as the area reported for a building or other facility subject to both the energy and water requirements as defined in reference (a). The value used to calculate the water consumption intensity will rely on the value reported for the energy use of that facility. The results can be used to assess the progress being made to reduce water use within each agency. Each agency's total facility square footage for water use will be the same as the value reported for total facility square footage for energy use.

30-3.7 ILA Water this guidance will use the term as an abbreviation when industrial, landscaping and agricultural water consumption is being discussed

30-3.8 Industrial Water Consumption is defined as water used for the purposes of aiding in processes such as cooling, washing, and manufacturing. Industrial water often is supplied on-site, withdrawn from local freshwater sources, but industrial water can also be purchased from publicly supplied sources. Some examples of industrial water consumption include, but are not limited to, vehicle wash facilities, make-up water for cooling towers, and process steam production. For the purposes of this guidance, non-potable water use related to space cooling of facilities is classified as industrial water use. Water reused in industrial processes or obtained from an alternative water source is not considered to be industrial water consumption for the purposes of this guidance.

30-3.9 Landscaping Water Consumption is defined as the controlled application of water to outdoor spaces to supplement water requirements not satisfied by rainfall. Examples of landscaping water consumption include, but are not limited to, irrigation of turf or landscaped beds, recreational fields, and ornamental ponds and fountains. Water reused in landscaping or water that is obtained from an alternative water source is not classified as landscaping water consumption. In the event where landscaping water is also classified as potable, see section 4 of Guidance for Water Goals in E.O. 13514, Federal Leadership in Environmental, Energy, and Economic Performance.

30-3.10 **Low Impact Development** is an approach to land development (or re-development) that works with nature to manage stormwater as close to its source as possible. LID is a site design strategy with a goal of maintaining or replicating the predevelopment hydrologic regime through the use of design techniques to create a functionally equivalent hydrologic landscape.

30-3.11 **Potable Water** is defined as water used in Federal facilities which is of sufficient quality for human consumption that is obtained from public water systems or from natural freshwater sources such as lakes, streams, and aquifers which are classified, permitted, and approved for human consumption. Some examples of potable water uses include, but are not limited to, drinking, bathing, toilet flushing, laundry, cleaning, food services, landscape irrigation, and process applications such as cooling towers, boilers, and fire suppression systems.

30-3.12 **Potable Water Use Intensity** is defined as annual potable water use divided by total gross square footage of facility space (gal/ft2). The facility gross square footage is the same value used for energy use intensity reduction goals.

30-3.13 **Non-Potable Water** is defined as water that is obtained from any source that is not of sufficient quality for human consumption, has not been properly treated, or has not been permitted and approved for human consumption. Non-potable water includes untreated raw water from lakes, aquifers or rivers. Non-potable water also includes waste water reclaimed and treated such that it meets standards for industrial processes such as cooling towers and boilers, landscape irrigation, agricultural irrigation, fire protection systems, and toilet flushing, but has not been treated such that it meets standards for human consumption.

30-3.14 **Non-Consumptive Water Use** as related to the industrial, landscaping, and agricultural water use goal in E.O. 13514, this term is defined as water that is diverted from its freshwater source and is returned to the point of diversion in the same quantity and quality as the original diversion. The term "same quantity" means that the volume of water diverted from the water source is the equivalent volume of water that is returned to the water source. The term "same quality" means that the water discharged is in compliance with effluent limitations contained in applicable discharge permits and that the designated use and the associated water quality criteria for the water source are maintained. For the purposes of this definition, non-consumptive water use is only related to those processes where water consumption cannot be reduced by efficiency improvements alone. Examples are provided in section 4 of Guidance for Water Goals in E.O. 13514, *Federal Leadership in Environmental, Energy, and Economic Performance*.

Note that if water is lost via evaporation in the process, the amount of water that is evaporated is considered consumptive use, but the water returned to the original source is considered non-consumptive.

30-4 Requirements

Federal laws and regulations require Federal agencies to reduce water use and improve water efficiency. The following section outlines these Federal requirements by topic, including:

30-4.1 E.O. 13423 requires Federal agencies to reduce water consumption intensity (gallons per square foot) 2% annually through the end of fiscal year (FY) 2015, or 16% by the end of FY 2015 from a 2007 baseline. This requirement is to be achieved incrementally by fiscal year beginning in 2008.

Fiscal Year	Percentage Reduction
2008	2
2009	4
2010	6
2011	8
2012	10
2013	12
2014	14
2015	16

E.O. 13423 Mandated Facility Water Intensity Reductions by Fiscal Year

E.O. 13423 also directs Federal facilities to conduct annual water audits of at least 10% of facility square footage and to conduct audits at least every 10 years. The Executive Order instructions also state that Federal agencies should purchase water efficient products and services, including WaterSense labeled products, and use contractors who are certified through a WaterSense labeled program where applicable. More information can be found at the EPA's WaterSense website.

E.O. 13423 supersedes the requirements in E.O. 13123, namely the development of water management plans and the implementation of FEMP Water Efficiency BMPs.

30-4.2 Energy Independence and Security Act of 2007**.** EISA amends Section 543 of NECPA and establishes a framework for facility project management and benchmarking. Under the new requirement, agencies must identify all "covered facilities" that constitute at least 75% of the agency's facility energy and water use. An energy manager must be designated for each of these covered facilities. Each facility energy manager is to be responsible for:

(a) Completing comprehensive energy and water evaluations (including re-/retrocommissioning) of 25% of covered facilities each year so that an evaluation of each such facility is completed at least once every four years;

(b) Implementing identified energy and water efficiency measures. Bundling individual measures of varying paybacks into combined projects is permitted; and

(c) Following up on implemented measures, including fully commissioning equipment, putting in place O&M plans, and measuring and verifying energy and water savings.

Under Section 438 of EISA, Federal agencies have new requirements to reduce stormwater runoff from Federal development and redevelopment projects to protect water resources. See Chapter 13, Stormwater, for further information.

30-4.3 E.O. 13514**.** E.O. 13514 expands the water efficiency requirements of E.O. 13423 and EISA. E.O. 13514 does not supersede either regulation. E.O. 13514 requires that Federal agencies improve water efficiency and management by:

(a) Reducing potable water consumption intensity 2% annually through FY 2020, or 26% by the end of FY 2020, relative to a FY 2007 baseline. This is an expansion

of the water requirements within E.O. 13423;

(b) Reducing agency industrial, landscaping, and agricultural water consumption 2% annually, or 20% by the end of FY 2020, relative to a FY 2010 baseline;

(c) Identifying, promoting, and implementing water reuse strategies—consistent with state law—that reduce potable water consumption; and

(d) E.O. 13514 adds a new reduction requirement that requires agencies to achieve a 2% volumetric reduction of industrial, landscaping, and agricultural water use based on a FY 2010 baseline. The intent is to expand the water reduction of Federal agencies to include other areas of freshwater consumption beyond potable water. All Federal agencies must reduce total water volume in this use category annually through FY 2020. This is a significant change as, prior to E.O. 13514, Federal agencies were only required to reduce potable water. Federal agencies must now track, report, and reduce other sources of water that are consumed in industrial, landscaping, and agricultural applications. The Federal Water Working Group is currently developing guidance to aid Federal agencies with implementing E.O. 13514 water efficiency requirements, including defining ILA water use, the exemption process, and water reuse strategies.

As agencies work to meet the requirements associated with E.O. 13514, they must ensure that actions do not conflict with their obligation to continue to meet all applicable statutes, regulations, and codes at the Federal (e.g. CWA, SDWA), state, and local levels.

30-4.4 Exclusions.

(a) Exclusions from Potable Water Reporting. The Department is not responsible for reporting consumption of water at facilities operating under fully serviced leases where the water bill is paid as part of the rent.

(b) Exclusions from Non-Potable Water Reporting.

(i) Non-potable water used for mission-critical research;

(ii) Non-potable water used for habitat protection and habitat restoration, i.e., where the water is taken up directly by plants and animals;

(iii) Non-consumptive uses, defined as uses where the water is used but not consumed, e.g. where water is diverted from a source such as a river, flows through a fish hatchery, for example, and is returned to the river in the same quantity and quality in which it was removed; and

(iv) Non-potable water obtained from water reuse strategies including rainwater or stormwater harvested on site, sump pump water diverted from a site, gray water, air cooling condensate, reject water from water purification systems, water reclaimed on site, and other water reuse strategies.

30-5 Responsibilities

30-5.1 Office of the Secretary.

(a) **OSEEP shall:**

(i) Publish and maintain policy and program guidance for a Department wide comprehensive water conservation program; and

(ii) Review OU water consumption data, analyze their 5 year plans, and provide an assessment of OU progress against goals to the Facilities Management Council and/or Department Management Council.

(b) **OSBM shall** ensure compliance within the HCHB.

30-5.2 OUs shall:

(a) Reduce potable water consumption intensity by at least 2% annually and 26% by FY2020 relative to an FY2007 baseline;

(b) Reduce non-potable water consumption by at least 2% annually and 20% by FY2020 relative to an FY2010 baseline;

(c) Meter, track, report and reduce potable water consumption at all facilities in which water is paid for directly (i.e., not fully serviced leases);

(d) Use the EPA Energy Star Portfolio Manager (Portfolio Manager) database to maintain a facility profile and report potable water consumption. Actual utility data shall be entered on a monthly and/or quarterly basis, within 15 days of receipt of a quarterly utility bill or meter reading;

(e) Conduct comprehensive water evaluations as per EISA 2007 requirements at appropriate "covered facilities" at least once every four years, reporting implementation of water conservation measures through the Department of Energy's compliance tracking system, and tracking water consumption with the use of the EPA's Portfolio Manager database;

(f) Identify and implement life-cycle cost-effective water conservation projects at facilities that pay their water bill directly. When OUs consider replacing fixtures and other water consuming devices, they shall purchase U.S. Department of Energy FEMP-designated or U.S. Environmental Protection Agency WaterSense-labeled products, where life-cycle cost-effective;

(g) Install meters at all facilities where potable water is purchased as a commodity by 2016. Installing water meters where life-cycle cost-effective, such that the anticipated or estimated savings to investment ratio (SIR) exceeds 1. Until such time as water meters are installed, or in the event that water meters are determined to be uneconomical, OUs shall estimate both potable and non-potable water consumption and document assumptions and estimation techniques; and

(h) Use meters with advanced data management capabilities, when water meters are installed or replaced.

30-6 Reporting Requirements

30-6.1 Annual Greenhouse Gas and Sustainability Data Report. Water consumption related data shall be submitted in accordance with the Department's Greenhouse Gas Inventory Management Plan.

30-6.2 Five Year Project Implementation Plan. In conjunction with data submission for the Annual Greenhouse Gas and Sustainability Data Report each OU shall develop, maintain and submit to the Department, a comprehensive water project implementation plan covering a span of no less than five years. This plan shall demonstrate progress towards Departmental water intensity reduction goals.

30-6.3 OMB Sustainability/Energy Scorecard. Information/updates regarding OU water efficiency related projects will be due to the Department on a semi-annual basis, typically January and June of each year.

30-6.4 Strategic Sustainability Performance Plan. Information/updates required for the Departmental SSPP (typically updated annually in June) will be obtained from the OU's Five Year Project Implementation Plan.

30-6.5 EISA 2007 "Covered Facilities" Audit Update. All facilities within an OU designated by the Department as an EISA Section 432 "Covered Facility" must receive a comprehensive energy and water audit at least once every four years. Audit completion and implementation/status of energy and water conservation measures must be reported annually (typically in June) via the Department of Energy's EISA Section 432 CTS.

CHAPTER 31:
GREEN ACQUISITION

31-1 Scope

31-1.1 This chapter provides guidance for all Department OUs and facilities on "green" procurement, including:

(a) Recycled-content / recovered-content materials;

(b) Biobased products;

(c) Energy efficient products;

(d) Electronic Product Environmental Assessment Tool (EPEAT) products;

(e) Water efficient products;

(f) Alternative fuel vehicles, alternative fuels, and hybrid vehicles;

(g) Non-ozone-depleting products;

(h) Environmentally preferable products and services; and

(i) Waste prevention and recycling.

31-1.2 **Related Chapters.** Chapter 5, EMS; and Chapter 32, Electronic Stewardship.

31-1.3 **References.**

(a) Part 1323.70 of the Commerce Acquisition Manual (CAM);

(b) Part 1313.301 of the CAM; and

(c) The Environmental Awareness Stewardship Briefing.

31-2 Legislation

– Please refer to Part 1323.70 and 1313.301 of the CAM for relevant legislation (reference (a) and (b)).

31-3 Terms and Definitions

31-3.1 Environmental Designee. Each OU has been assigned an Environmental Designee to guide staff with green purchasing decisions. A list of Environmental Designees is available at http://www.osec.doc.gov/oas/environmental/purchasing.htm.

31-4 Requirements

31-4.1 All staff shall purchase green products in accordance with the requirements and procedures listed in the CAM when:

(a) Such products are cost-effective;

(b) Such products meet the technical requirements of the government; and

(c) Such products are available in the required time to meet the government's need.

31-5 Responsibilities

31-5.1 The Office of the Secretary.

(a) The **Senior Procurement Executive shall:**

(i) Report on progress towards green acquisition targets to the SSO;

(ii) Provide senior acquisition leadership for implementing the Department's Green Procurement Program;

(iii) Ensure that green procurement requirements are addressed in Department acquisition policy and guidance;

(iv) Encourage acquisition strategies that consider and promote the use of green products and services;

(v) Establish requirements for training of acquisition personnel in green procurement;

(vi) Ensure that Senior OU Procurement Officials conduct compliance monitoring of their green procurement data and oversee corrective actions; and

(vii) Work with the Senior Agency Official and Office of Administrative Services staff to review and analyze green procurement indicators.

31-5.2 OUs shall:

(a) Report to the Office of the Secretary's Office of Acquisition Management (OAM) on green purchasing in accordance with OAM guidance;

(b) Comply with Departmental green purchasing policy as set out in the CAM;

(c) Assign an Environmental Designee, either within the OU or from the Office of the Secretary, who shall be responsible for:

(i) Promoting green awareness and the Green Procurement Program;

(ii) Advising Requesting Officials, Contracting Officer Representatives, and Contracting Officers on sources for environmentally preferable products and services;

(iii) Providing support in areas such as environmentally preferable specifications, statements of work, and current catalogs for green products and services;

(iv) Reviewing and concurring in Requests for Procurement Exceptions; and

(v) Recommending employees and teams for recognition and awards.

31-5.3 Other responsibilities are defined in the Part 1323.70 of the CAM.

31-6 Training Requirements

Brief training is provided on green acquisition through the CLC Environmental Stewardship Awareness briefing (reference (c)).

31-7 Reporting Requirements

31-7.1 OUs shall report on green purchasing to OAM in accordance with OAM guidance.

31-7.2 OAM shall assimilate and consolidate green acquisition data received from the OUs. The Senior Procurement Executive shall provide this data to the Office of Administrative Services and the Department's Senior Sustainability Officer for inclusion in the Department's annual Strategic Sustainability Performance Plan update. OAM shall also provide green procurement data as needed in response to data calls from OMB and others.

CHAPTER 32:
ELECTRONIC STEWARDSHIP

32-1 Scope

32-1.1 This Chapter provides policy and compliance requirements for electronic stewardship at Department of Commerce facilities. The provisions of this Chapter apply to all Department OUs and facilities within the United States and abroad to the extent practicable.

32-1.2 Related Chapters. Chapter 5, EMS; Chapter 17, Hazardous Waste Management; Chapter 26, Greenhouse Gas Emissions; Chapter 27, Energy Conservation; and Chapter 29, Facility Metering.

32-1.3 References.

(a) E.O. 13423, Strengthening Federal Environmental, Energy, and Transportation Management, dated January 24, 2007;

(b) E.O. 13514, Federal Leadership in Environmental, Energy, and Economic Performance, dated October 5, 2009;

(c) Section 1323.70 of the CAM;

(d) Department of Commerce Personal Property Management Manual; and

(e) Federal Data Center Consolidation Initiative.

32-2 Legislation

32-2.1 Energy Independence and Security Act of 2007**.** This law encourages Federal agencies to minimize standby energy usage in the purchase of electronic equipment and requires Federal procurement to focus on Energy Star and FEMP-designated products.

32-3 Terms and Definitions

- None

32-4 Policy and Requirements

32-4.1 Purchasing. Department personnel shall purchase and lease energy-efficient (Energy Star or FEMP-designated) electronic equipment, electronic equipment meeting FEMP low standby power specifications, and EPEAT-registered computers in accordance with guidance from the Department's Office of Acquisition Management, as set forth in the CAM (reference (c)) and in compliance with references (a) and (b).

32-4.2 Power Management. Department personnel shall minimize energy consumption from electronic equipment where feasible, in accordance with guidance from the Department's Office of the Chief Information Officer. Power management settings should be enabled on all computers, printers, and other electronic devices that feature these settings unless a waiver is granted by the Chief Information Officer. Contact the Office of the Chief Information Officer for further guidance.

32-4.3 Extending Useful Life. Department personnel shall maximize the useful life of their electronic equipment in accordance with guidance from the Office of the Chief Information Officer and the Department Personal Property Management Manual (reference (d)).

32-4.4 Duplexing. Department personnel shall implement duplex (a.k.a. double-sided) printing wherever feasible in accordance with guidance from the Office of the Chief Information Officer. Printers and computers shall be set to automatically print double-sided to the extent practicable.

32-4.5 Disposal of Electronic Equipment. GSA procedures shall be followed for disposal of electronic equipment as per the Department of Commerce Personal Property Management Manual (reference (f)). Every effort shall be made to reuse or donate electronic equipment. If reuse is not feasible, then electronic equipment should be recycled through an environmentally responsible recycler.

32-4.6 Data Centers. OUs shall take steps to improve the energy efficiency of, increase metering of, and consolidate data centers in accordance with guidance from the Office of the Chief Information Officer (reference (e)).

32-5 Responsibilities

32-5.1 The Office of the Secretary.

(a) **Office of Administrative Services. OSEEP shall** coordinate data calls and reporting for the bi-annual President's OMB Sustainability scorecard and the annual SSPP update on behalf of the Department's SSO.

(b) **The Department's Chief Information Officer shall:**

(i) Establish Department policy, targets, and programs for power management of computers and other IT equipment, computer and printer life-cycle extension, duplexing, data center metering, and data center energy efficiency;

(ii) Lead the above programs;

(iii) Coordinate with OU Chief Information Officers to implement these programs;

(iv) Report progress on the above programs to the Department's SSO; and

(v) Collaborate with OU and Departmental facility managers on data center metering projects.

(c) **The Department's Senior Procurement Executive shall:**

(i) Establish Department policy for purchasing electronic equipment;

(ii) Coordinate with OU Senior Procurement Officials to implement electronics purchasing policies;

(iii) Track compliance with Departmental policy; and

(iv) Report on purchasing of electronic equipment to the Department's SSO.

(d) **The Office of Commerce Services shall:**

(i) Establish Departmental policy for the disposal of electronic equipment;

(ii) Track compliance with Departmental policy on equipment disposal;

(iii) Report on disposal of electronic equipment to the Department's Senior Sustainability Officer.

32-5.2 OUs shall:

(a) Implement the electronic stewardship and data center energy efficiency programs outlined in 32-4 above in accordance with guidance from relevant Departmental offices; and

(b) Collaborate with the Office of the Chief Information Officer (OCIO) on metering of data centers.

32-6 Reporting Requirements

32-6.1 Reporting to the Office of the Secretary.

(a) Departmental Offices and OUs shall report on purchasing of electronic equipment to OAM in accordance with OAM guidance (reference (c)).

(b) Departmental Offices and OUs shall report on implementation of power management, extending useful life, duplexing, and data center consolidation to

the OCIO in accordance with OCIO guidance.

(c) Departmental Offices and OUs shall report on disposal of electronic equipment to OAS in accordance with OAS guidance.

32-6.2 Reporting to External Government Agencies. The Office of Acquisition Management, the OCIO, and the Office of Commerce Services shall provide input to the Office of Sustainable Energy and Environmental Programs and the Department's Senior Sustainability Officer for inclusion in the Department's bi-annual OMB Scorecard update and annual Strategic Sustainability Performance Plan update. These officials shall also report as needed in response to data calls from OMB and others.

32-7 Training Requirements

- None

APPENDIX A:
STRATEGIC SUSTAINABILITY PERFORMANCE PLAN TEMPLATE

This template is provided for OU informational purposes only. It is the responsibility of the Office of the Secretary's Office of Sustainable Energy and Environmental Programs to populate the template with relevant data. To the greatest extent possible, all data to complete this requirement will be obtained through the Annual Greenhouse Gas Inventory and Sustainability Data Report and the OU Five Year Energy Project Implementation Plan. OSEEP works with every OU on an individual basis and tailors the reporting requirements based on a particular OUs' set of reporting circumstances. This data call occurs in the fall of each year.

Updates to the Sustainability Plan Template and Process

Overview (New Section)

- Agencies will prepare an Executive Summary that will include a summary of past performance/progress towards the goals of E.O. 13514. The Executive Summary will also discuss plans for meeting the goals of E.O. 13514 in FY13. The Executive Summary will be released along with the Strategic Sustainability Performance Plan (Sustainability Plan or Plan) and will provide agencies an opportunity for transparency regarding sustainability targets and progress toward those targets.

- The agency policy statement, which must be updated annually, will be incorporated into the Overview section. Previously the policy statement was in Section 1.

Section1

- (New) Section 1 will be prepopulated with previously submitted agency background information. Agencies should update Section 1 information as appropriate and need not revise this section if the information has not changed and responds to the relevant question.

- *Table 1: Agency Size and Scope* has been updated and prepopulated to reflect data that agencies currently report elsewhere.

- Agencies must complete *Table 2: Critical Planning Coordination* annually. This table will not be prepopulated.

Section 2

- (New) Return on Investment information previously reported under each goal area has been consolidated into Part II of Section 2.

- (New) The *Planning* tables have been renamed to *Planning/Status* tables and are prepopulated with both agency targets and actual agency data from FY11 when that data is already available. Agencies should complete the tables and also select from specific options regarding 1) data assurance, 2) FY11 targets status, and 3) current FY12 progress towards the targets.

- (New) Agency target data for FY11 and previous years will be prepopulated into *Planning/Status* tables where available. Agencies should complete any missing data and update other data as

appropriate. The prepopulated data sources include:

1. Agency targets from the 2011 Plan;
2. Annual energy/water/GHG inventory data and EISA Compliance Tracking System (CTS); data on covered facilities reported to FEMP;
3. Fleet data reported to FAST;
4. FRPP data element 25;
5. OMB Sustainability/Energy Scorecard status updates from January.

- (New) Goal planning is now distinct from goal progress reporting. Agencies will describe their strategies for meeting the targets of each goal in a specified table that includes strategy descriptors such as timeframe and scale.
- (New) In each goal area, challenges/justification, best practices/highlights, and agency planned strategies will be reported in a more structured table format. Agencies may designate if a challenge or strategy applies to other related goals. Agencies should only describe a specific challenge, strategy, etc. in one goal.
- (New) Goal 1 is now Greenhouse Gas Reduction and Maintenance of Agency Comprehensive Greenhouse Gas Inventory. Goal 2 is now Buildings, ESPC Initiative Schedule, and Regional & Local Planning. Goal 3 is now Fleet Management.
- (New) Agencies will report on facility activities and opportunities to incorporate the Principles for Sustainable Federal Locations under Goal 2.
- (New) Agencies will report on their ESPC initiative implementation schedule under Goal 2.
- (New) There is a section for the agency to respond to questions about its climate change adaptation planning process (the Climate Change Adaptation Plan should be attached in Appendix 2).
- (New) In certain goal areas there are multiple choice questions designed to monitor agency progress.

Section 3 (Removed)

- Section 3: Agency Self-Evaluation has been incorporated into Section 1, Section 2 and Appendix 4 and so there is no longer a Section 3.

Appendix 1: Circular A-11 has been updated with new dates and submissions were due February 28.

(New)Appendix 2: Climate Change Adaptation Plan: Agencies will attach their Climate Change Adaptation Plans in Appendix 2.

(New)Appendix 3: Fleet Management Plan: Agencies will attach their revised Fleet Management Plans in Appendix 3.

(New) Appendix 4: Optional Feedback Questions: Appendix 4 includes optional questions regarding implementation of sustainable practices in the Federal Government. Agency responses will allow CEQ to more effectively assist agencies in meeting the E.O. goals.

(New) Appendix 5: Scorecard Agency Questions: Appendix 5 includes questions for Scorecard agencies to answer related to their July Scorecard submission.

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Overview

The Policy Statement and Executive Summary should be updated annually and coordinated with the appropriate agency offices and organizations. E.O. 13514 Section 7(b)(iii) states that agency Senior Sustainability Officers shall be responsible for preparing and implementing the approved Plan in coordination with appropriate agency offices and organizations within the agency including the General Counsel, Chief Information Officer, Chief Acquisition Officer, Chief Financial Officer, and Senior Real Property Officers, and in coordination with other Agency plans, policies, and activities.

Policy Statement

Each agency shall annually prepare, in no more than one page, a policy statement representing the agency's formal commitment to pursuing and achieving sustainability targets and goals. The policy statement should include the agency's commitment to compliance with environmental and energy statutes, regulations and Executive Orders. For the June 2012 submission, each agency's policy statement should also include a commitment to better understand and address climate change adaptation. The Executive Summary will provide an opportunity to highlight significant successes and challenges and discuss additional topics, so the Policy Statement need not address these elements. The Policy Statement should be signed by the Senior Sustainability Officer (SSO).

Executive Summary

Each agency shall annually prepare an Executive Summary that includes the agency's achievements in the past year with respect to overall targets and goals as established by environmental and energy statutes, regulations and Executive Orders, as well as applicable agency goals. Agencies should concisely identify programs and initiatives that are remarkable in terms of successes and/or challenges and provide a description of lessons learned. Non-scorecard agencies may find it appropriate to address specific projects; however, this area is not intended to be an itemized list of projects.

The Executive Summary (Summary) should also identify the agency's vision for the upcoming fiscal year, including recent Administration priorities and significant efforts, such as implementing the Climate Change Adaptation Plan, the Fleet Management Plan, and the Energy Savings Performance Contract Plan. The Summary should explain plans to meet targets in areas where the agency is not currently on track for 2012 or did not meet the 2011 target. In addition, the Summary should discuss how the Plan achieves sustainability as a whole and the synergies and tradeoffs between strategies for different goals.

The purpose of the Executive Summary is to provide a brief and concise overview of the agency's progress towards sustainability goals and outline future plans to maintain progress and address setbacks or deficiencies. The Executive Summary will be available publicly and provides an opportunity for transparency regarding agency progress and plans.

Section 1: Organization and Scope

Agencies should update this section as needed. While most elements will be prepopulated with previously submitted data, there are key changes in the section this year. Agencies should update previously submitted data as necessary.

Sustainability and the Agency Mission

This section is prepopulated with information from the agency's 2011 Sustainability Plan. Update this section as needed particularly to address policy changes since the previous submission.
This section should provide a clear and concise statement highlighting the relationship between sustainability and the agency mission(s). Agencies should highlight how achieving sustainability targets and goals will support the agency in carrying out its mission. The discussion should identify any mission related synergies[1] and/or challenges with achieving the goals identified in the agency Sustainability Plan. In addition, agencies should provide a brief description of policy changes the agency is considering to address identified barriers, such as regulatory or legislative issues, to achieving sustainability goals.

Table 1: Agency Size and Scope

To be updated annually as necessary: Provide a summary that describes the agency's size and scope of operations. This table will be prepopulated with FY11 data reported to FEMP and GSA where available, and, if not, the previous year's Sustainability Plan information will be included in the FY11 column.

Table Color Codes:

Yellow: Agency enters
Green: Prepopulated with data from the agency's 2011 Sustainability Plan if available; agencies update if needed
Blue: Prepopulated with data from FEMP if available
Orange: Prepopulated from FY11 plan and agencies do not need to update.
Purple: Prepopulated with data from FRPP if available
Pink: Prepopulated with data from FAST if available

[1] An example of synergy is how sustainability helps an agency achieve or protect its mission. For example, installing a large renewable energy project will contribute to energy reliability at a location that operates continuously.

Agency Size and Scope	FY10	FY11	Comments
Total # Employees as Reported in the President's Budget			
(New) Estimated # Onsite M&O Contractors in Government-owned Contractor-operated (GOCO) Facilities			
Total Acres Land Managed			
Total # Facilities Owned			
Total # Facilities Leased (GSA lease)			
Total # Facilities Leased (Non-GSA)			
Total Facility Gross Square Feet (GSF)			
(New) Facility Gross Square Feet (GSF) Subject to Energy Intensity (Btu/GSF) Reduction Goal			
(New) Facility Gross Square Feet (GSF) Excluded from Energy Intensity (Btu/GSF) Reduction Goal			
Operates in # of Locations Throughout U.S.			
Operates in # of Locations Outside of U.S.			
Total # Fleet Vehicles Owned			
Total # Fleet Vehicles Leased			
Total # Exempted-Fleet Vehicles (Tactical, Emergency, Etc.)			
Total Discretionary Budget as Enacted for the Fiscal Year ($MIL)			
Total # New Contracts Awarded as Reported in FPDS[2]			
Total Amount Contracts Awarded as Reported in FPDS ($MIL)[2]			
(New) Total Amount Spent on Facility Energy Consumption ($MIL)			
(New) Total Amount Spent on Mobility and Other Non-Facility Energy Consumption ($MIL)			
Total Energy Intensity of Goal-Subject Buildings (Btu/GSF)			
Total Gallons of Potable Water Consumed per GSF			
(New) Industrial, Landscaping and Agricultural Water (Non-Potable) (Thous. Gal)			

Greenhouse Gas Reduction Targets

This section is prepopulated with the agency's 2020 GHG reduction targets for scope 1 & 2 and scope 3, as stated in the agency's 2011 Sustainability Plan.

If the agency has made any changes to the 2008 baseline, inventory, or subsequent annual GHG reporting that has any impact on the GHG targets previously approved, it should be explained in this section. Otherwise, the section should remain as prepopulated.

Plan Implementation

Update this section as needed. Provide links to publicly available agency policies/guidance documents/memos related to these efforts.

[2] Do not include contracts for weapons systems.

This section should illustrate the agency's process for successful and effective implementation of actions to achieve the goals and targets established in E.O. 13514 and other applicable E.O.s and statutes. The discussion should cover the following topics:

1. **Leadership & Accountability**[3]: Agencies should identify responsible offices/staff involved in the development, implementation, evaluation, and revision of the Sustainability Plan and address how the agency will be ensuring accountability for successful implementation. Agencies should include any process for revising plans as appropriate based on monitoring efforts including the agency's formal evaluation of operations to identify opportunities for improving overall results. Where agencies use formal systems such as environmental management systems, to meet the goals of E.O. 13514, that information should be included in the discussion.
2. **Coordination and Communication**: Agencies should briefly describe existing and planned procedures and processes to inform agency program managers, at the headquarters, regional, and field level of their role in agency sustainability goals and targets. Agencies should also describe any existing or planned formal procedures for external communication and feedback regarding the Sustainability Plan (other than public release of the Plan).
3. **Agency Integration**: Agencies should discuss any existing or planned procedures to ensure appropriate monitoring, implementation, review and revision of relevant plans and policies. Agencies should discuss resource needs and ensure that adequate resources, including staffing, are available to implement the sustainability initiatives.

Table 2: Critical Planning Coordination

This table must be updated annually. The information will not be prepopulated.

The purpose of Table 2 is to demonstrate the relationship between the agency Sustainability Plan and other relevant planning and reporting efforts. This table highlights opportunities for integrating sustainability requirements into existing planning documents and vice versa. Agencies should use this table as a guide for ensuring that sustainability goals and targets are recognized and supported in the appropriate agency planning processes. Agencies should respond with 'Yes, 'No', or 'N/A' in the box to indicate whether the EO goal is relevant to **and has been integrated into** the listed report/plan. Use 'Yes' for integrated, 'No' for not yet integrated, and 'N/A' for not applicable.

Originating Report / Plan	Scope 1&2 GHG Reduction	Scope 3 GHG Reduction	Develop and Maintain Agency Comprehensive GHG Inventory	High-Performance Sustainable Design / Green Buildings	Regional and Local Planning	(New) Fleet Management	Water Use Efficiency and Management	Pollution Prevention and Waste Elimination	Sustainable Acquisition	Electronic Stewardship and Data Centers	Agency Specific Innovation
"Sample Plan"	*Yes*	*N/A*	*N/A*	*N/A*	*N/A*	*Yes*	*N/A*	*N/A*	*N/A*	*Yes*	*No*
GPRA Strategic Plan											
Agency Capital Plan											

[3] E.O. 13423 requires agencies to include specific measures in agency performance evaluations of senior agency officials and relevant agency staff (such as SSOs, environmental and energy managers, fleet managers, real property and facility managers, contracting officials, etc.).

A-11 300s											
Annual GHG Inventory and Energy Data Report											
EISA Covered Facility Evaluations/Project Reporting/Benchmarking											
Budget											
Asset Management Plan / 3 Year Timeline											
Circular A-11 Exhibit 53s											
OMB Scorecards											
DOE's Annual Federal Fleet Report to Congress and the President[4]											
Data Center Consolidation Plan											
Environmental Management System[5]											
Climate Change Adaptation Plan											
(New) Fleet Management Plan											
Other (reports, policies, plans, etc.)[6]											

IV. Evaluating Return on Investment

This section is prepopulated with information from the agency's 2011 Sustainability Plan. Update this section as needed. Agencies must update the discussion with specific projects from FY11 where relevant.

Agency sustainability projects and initiatives should be prioritized based on the lifecycle return on investment to the agency while taking into account economic, environmental, social, and mission related costs and benefits. Agencies should use this section to briefly describe how they take into account both monetary and non-monetary factors when prioritizing projects and initiatives.[7] This section should include a discussion on specific challenges associated with consideration of lifecycle costs, return on investment (ROI), and how the agency accounts for economic, environmental, social and mission factors

[4] EPAct.

[5] Agencies that have a Compliance Management Plan rather than an Environmental Management System should modify the table accordingly.

[6] Sustainable Building Implementation Plans, Sustainable Procurement (also known as Green or Affirmative Procurement, or Green Purchasing), Electronic Stewardship Plans, Chemical Reduction Plans, Pollution Prevention Plans, Compliance Management Plans, etc.

[7] E.O. 13423 requires agencies to consider lifecycle cost analysis and savings in planning and making determinations about investments in all capital assets, services, and procurements to lower total lifecycle costs, achieve sustainable design principles, reduce energy and water consumption, and reduce environmental impact/footprint of government operations. In some cases, evaluation of lifecycle costs may result higher up-front costs with lower maintenance costs over the total lifecycle.

in the planning and budgeting process.[8] Agencies should include a relevant discussion on various cost and benefit analyses including:

1. Economic Lifecycle Cost / Return on Investment
2. Social Costs & Benefits
3. Environmental Costs & Benefits
4. Mission-Specific Costs & Benefits
5. Operations & Maintenance and Deferred Investments
6. Climate Change Risks
7. Other, as defined by agency[9]

Agencies should consult OMB Circulars A-4, Regulatory Impact Analysis (RIA) and A-94, and Guidelines and Discount Rates for Benefit-Cost Analysis of Federal Programs when developing the methods and plans for Section IV.

V. Transparency and Open Government

This section is prepopulated with information from the agency's 2011 Sustainability Plan. Update this section as needed to reflect efforts over the past year.

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[8] This section recognizes that agencies may include a range of factors when evaluating projects. Included below are explanations for various types of analysis tools that agencies may be using when evaluating the costs and benefits of projects. This is only a partial list, as agencies may use other factors in evaluating projects.

Agencies may use this area to discuss the prioritization of programs, initiatives, and efforts based on non-economic or less-quantifiable factors. This is an area to discuss how an agency is weighing factors outside the boundaries of the agency but within the boundaries of the United States. This might include, but is not limited to, prioritizing:

- Renewable energy investments in areas with energy security and reliability issues;
- Consideration of environmental justice issues;
- Water conservation efforts near high drought areas to ensure available water supply;
- Energy conservation efforts in areas with higher pollution levels.

Social Costs & Benefits - How is the agency taking into account other social factors in the prioritization of programs, initiatives, and efforts within the Plan? This might include measureable and non-measureable factors such recreational value, public perception, etc.

Environmental Costs & Benefits - Discuss how environmental considerations are integrated into the agency's planning and budgeting processes. Describe how the agency incorporates consideration of environmental compliance and stewardship requirements into prioritization of key programs, initiatives, and efforts. This may include, but is not limited to, the following: statutory requirements under the Clean Air Act, Endangered Species Act, Clean Water Act, Resource Conservation and Recovery Act, National Environmental Policy Act, and the National Historic Preservation Act.

Mission-Specific Costs & Benefits - What impact does this have on prioritization of key programs, initiatives, and efforts in this plan? How is the agency integrating the goals with this plan to existing mission requirements? How does the agency prioritize investments based on mission critical factors?

Real Property Deferred Maintenance - Describe how the agency plans and prioritizes operations and maintenance funding decisions, recognizing its deferred maintenance backlog. Does the agency calculate a ROI when prioritizing operations and maintenance projects? If yes, how does the agency calculate the ROI? What strategies will the agency pursue to reduce their deferred maintenance backlog? What impact will anticipated GHG reductions have on the agency's unneeded facilities and those with large deferred maintenance backlogs?

[9] Agencies are encouraged to list how they use other cost and benefits analysis tools to evaluate other factors such as security, societal benefit, and deferred maintenance.

This discussion should briefly describe how the agency has communicated its progress and results in implementing the goals of E.O. 13514 both within the agency and to the public (outside of the public Sustainability Plan release). The discussion should include examples of how the agency has distributed or published the information (i.e., hard copy, internet, website, etc.) and what specific information the agency has made public and intends to make public in the future.

Section 2: Performance Review and Annual Update

In this section agencies will report on performance and progress during the previous year and provide detailed plans for the upcoming fiscal year and beyond. There are three parts to this section:

I. Goal Performance Review and Planning

II. ROI Reporting

III. Climate Change Adaptation Planning

Goal Performance Review and Planning**:**

> Agencies should annually update their progress for the previous year and describe plans for the next 24 months. Instead of a single narrative, for each goal agencies will answer individual questions about organization, structured questions about progress, and describe specific characteristics for strategies.

ORGANIZATION	Considerations	For each goal a list of considerations based on the E.O. and related guidance documents is provided. Agencies should reflect on these considerations when planning for strategies to achieve EO goals and targets. **Each consideration may not be applicable to each agency**. **Agencies do not need to address all considerations.** The considerations may also be useful for agencies when considering challenges, best practices and highlights.
	Goal Description	Identify the agency target(s) for each goal.[10] **Update annually as needed.**
	Agency Lead	Briefly identify a designated senior official and/or group that will be primarily responsible for overseeing implementation of this goal area. Agencies may choose to identify more than one responsible entity or group. **Update annually as needed.**
	Staff Resources	Indicate if the goal is to be pursued by full-time, dedicated employees, by a number of people with the goal as part of their position description, or as collateral duty. **Update annually as needed.**
PERFORMA	(New) Baseline	Some goals have baseline data. Where data is already available from reliable sources this information is prepopulated but should be verified by each agency. If any changes are necessary, please note them in the comments column. Note: Any changes to the GHG baselines must be in conformance with the Guidance on Greenhouse Gas Accounting and Reporting.
	Planning/ Status Table	These tables reflect the goal targets projected for each year and the current agency status. For goals with E.O.-specified annual targets, an agency may also enter a "plan" that reflects a different target in the intermediate years and indicate how the agency will

[10] For goal areas where legislation (EO 13514, EO 13423, EISA, EPAct, etc) specifies a target, agencies should set goals no less than the mandated Federal targets. Agencies may go beyond federally established targets, but should clearly indicate any "stretch" targets as such. For goal areas such as GHG where agencies are responsible for setting their own targets, agencies should use the target submitted to and approved by CEQ and OMB.

N C E		achieve its 2020 goals. If the "plan" is less than the specified target, agencies must explain why in the *Challenges/Justification* section. a. Agency targets and "plans" will be prepopulated based on 2011 submissions. FY10 and FY11 targets should not be changed unless they are inaccurate. Agencies may update non E.O.-specified targets and "plans" if necessary. Any changes to the GHG 2020 targets must be in conformance with the Guidance on Greenhouse Gas Accounting and Reporting. Any changes to non EO-specified (particularly FY12) targets or "plans" should be explained in the comments column. b. (New) FY11 data is reported in each table in the "Actual" rows. Actual data will be prepopulated if available. Any changes to this data should be explained in the comments column. c. (New) Data verification – This column should be completed as appropriate based on the method of data collection and assurance. The drop-down options are: Measured and verified, Measured, Projected based on FY10 data, Extrapolated based on sampling protocols, Estimated, No info available, Other (describe in comments), N/A. If 'Other' is selected, agencies must explain in the comments column. d. (New) FY11 Target Status – Agencies should select from the pull-down menu the proper response regarding whether the agency met its FY11 target (Yes), did not meet its target (No), if the agency does not have the information (No info available), or if this is not applicable (N/A). Note that this should correlate to the "target" for all goals, even those that have a "target" and a "plan" that differ. e. (New) FY12 Target Status – Agencies should estimate progress towards the FY12 target and if the agency is on track to meet its FY12 target. The options are: On track, Not on track, Unsure/no mid-year data available, N/A. This should correlate to the "target" for all goals, even those that have both a "target" and a "plan".
	(New) Progress Questions	These are questions specific to certain goals. Agencies may clarify responses to these questions in the *Challenges/Justification* section below if needed.
	Challenges/ Justification	Where an agency did not meet a FY11 target, or is not on track to meet a target for FY12, this section should be used to briefly explain challenges the agency faced. In addition, this section should be used to explain any responses to the progress questions that might need further clarification or any other challenges the agency faced during the previous fiscal year. If applicable, describe how the agency overcame those challenges. (New) For each challenge, agencies should designate which other related goals (if any) for the challenge.
	Best Practices/ Highlights	Discussion in this section should focus on strategies or activities that an agency would likely recommend to another agency or particular projects the agency would like to showcase. Describe any practices or specific projects or initiatives that were particularly successful in helping to meet agency goals. Applicability to other goals should be mentioned as appropriate. If available, include cost savings and measured progress toward a target.
P L A N	(New) Strategies	Agencies should describe in the table provided the strategies that will be used in the near term to achieve E.O. and agency goals. The strategies should address as appropriate the *considerations* listed for each goal at the beginning of the goal section. **Agencies' strategies do not need to address each consideration.** If the agency did not meet targets in the previous fiscal year, and/or is not on track to meet current targets, strategies to address that situation must be identified. Where an

agency is currently meeting targets and is on track to continue that success, ongoing efforts should be briefly identified and described. Where an agency is planning new initiatives and/or is expanding current strategies to address the targets, this space should be used to briefly describe those efforts.

Where appropriate, agencies should reference existing plans and policies addressing E.O. and agency goals that are current and in force in their strategies. Agencies need not reproduce the policies or plans. The discussion in this part should focus on near-term (next 24 months) strategies to make progress towards agency targets and goals.
For each strategy discussed, agencies should provide the following information:

- Description: Describe the goal of the strategy and the actions to be taken to achieve that goal.
- Strategy Type:
  a. Infrastructure/Settings change (e.g. install new LED lights, change lighting settings, install insulation, set-up composting bins)
  b. Review/Analysis (e.g. water audit, contract review, track utility data, policy review)
  c. Training/Education/Awareness (e.g. sustainability awareness training, green purchasing training for CORs, employee education campaign on turning off the lights, dashboard on energy consumption accessible to employees, incentive program for employees such as sustainability awards)
  d. Plan (e.g. create a plan for stormwater management, create a plan for promoting bicycling)
  e. Other
- Scale: Describe the scale of the strategy to be implemented. Options are: facility level, local (specific locations such as a certain city or installation), regional (several locations in an established region), component organization (bureau, service or command) and national (across the agency). If there is a ramp-up period, identify the planned final scale.
- Timeframe: Identify when the strategy will be implemented. Options are: FY12 –FY13, FY13-FY13, FY13-outyear, Out-year, and Ongoing (most implementation has occurred previously and the action is continuing).
- Success metrics for FY12 and FY13: Describe briefly the metrics or milestones that will be used to determine successful implementation of the strategy (e.g. 5,000 MTCO2e reduction, 95% ILA water metered, 10 low-flow fixtures installed) Metrics are not required, but encouraged, for out-year strategies.
- Related goals: Choose (if applicable) up to two related goals (using most relevant). Agencies should describe strategies under the goal with a primary relationship. If the strategy is related to goals other than the current goal area, please select the appropriate goals. Options include: Goal 1, Goal 2, Goal 3, Goal 4, Goal 5, Goal 6, Goal 7, Goal 8, and Climate Change Adaptation.

Agencies should be mindful of the following questions when preparing their Sustainability Plan:

- Is the Sustainability Plan consistent with the FY2013 President's Budget?
- Does the Sustainability Plan integrate all statutory and Executive Order requirements into a single implementation framework for advancing sustainability goals along with

		existing mission and management goals, making the best use of existing and available resources? • Does the Sustainability Plan include methods for obtaining data needed to measure progress, evaluate results, and improve performance?

GOAL 1: Greenhouse Gas Reduction and Maintenance of Agency Comprehensive Greenhouse Gas Inventory

Considerations

1. Agency progress and performance to date.
2. Scope 1&2 Greenhouse Gas Reduction
    - Many actions to address scope 1&2 reductions are more closely related to Goal 2 and Goal 3 and should be discussed under those goals. As appropriate, use the planning space below to discuss strategies for scope 1&2 emissions that are not better discussed in other goal discussion (e.g. fugitive emissions).
3. Scope 3 Greenhouse Gas Reduction
    - Federal Employee travel (business and commuting).
    - Contracted solid waste and wastewater disposal.
    - Transmission and distribution losses from purchased energy.
    - Strategies to reduce scope 3 emissions that are voluntarily reported such as supply chain emissions or land use.
4. GHG Inventory Maintenance and Management
    - Data accuracy (both scope 1&2 and scope 3): Discuss any planned agency activity or policy implementation to improve data accuracy and overall data collection and analysis methods related to scope 1&2 emissions and/or scope 3 GHG emissions.
    - Data verification methods.
5. Other, as defined by agency such as using available management tools, participating in pilots, etc.[11]

Goal Description **[Text Box]**

Agency Lead **[Text Box]**

Staff Resources **[Text Box]**

Table Color Codes:
Yellow: Agency enters
Green: Prepopulated with data from the agency's 2011 Sustainability Plan if available
Blue: Prepopulated with data from FEMP if available

Baseline

[11] Agencies should include any other innovative strategies and methods that they are using to reduce GHG emissions. These may include, but are not limited to, strategies such as:
Reduction of process energy loads, non-covered fleet mobility fuel use, and other energy use currently not subject to energy reduction goals.
Behavioral and culture change initiatives

Description	Baseline Year	Baseline Value	Comments
Total scope 1&2 GHG emissions (comprehensive) MTCO2e[12]	2008		
Total scope 1&2 GHG emissions (subject to agency scope 1&2 GHG reduction target) MTCO2e [12]	2008		
Total scope 3 GHG emissions (comprehensive) MTCO2e[12]	2008		
Total scope 3 GHG emissions (subject to agency scope 3 GHG reduction target) MTCO2e[12]	2008		

Planning/Status Table

GHG Emissions	FY10	FY11	FY12	FY13	FY14	FY15	FY16	…	FY20	FY11 Data Verification	FY11 Target Status	FY12 Target Status	Comments
Total scope 1&2 GHG emissions (comprehensive) (MTCO2e) **ACTUAL**			N/A	N/A	N/A	N/A	N/A		N/A	[menu]	N/A	N/A	
Total scope 1&2 GHG emissions (subject to agency scope 1&2 GHG reduction target) (MTCO2e) **TARGET**[12]										N/A	N/A	N/A	
Total scope 1&2 GHG emissions (subject to agency scope 1&2 GHG reduction target) (MTCO2e) **ACTUAL**			N/A	N/A	N/A	N/A	N/A		N/A	[menu]	[menu]	[menu]	
Overall agency scope 1&2 GHG reduction (reduced from FY08 base year) (%) **TARGET**[12]										N/A	N/A	N/A	
Overall agency scope 1&2 GHG reduction (reduced from FY08 base year) (%) **ACTUAL**			N/A	N/A	N/A	N/A	N/A		N/A	[menu]	[menu]	[menu]	
Total scope 3 GHG emissions (comprehensive) (MTCO2e) **ACTUAL**			N/A	N/A	N/A	N/A	N/A		N/A	[menu]	N/A	N/A	
Total scope 3 GHG emissions (subject to agency scope 3 GHG reduction target) (MTCO2e) **TARGET**[12]										N/A	N/A	N/A	
Total scope 3 GHG emissions (subject to agency scope 3 GHG reduction target) (MTCO2e) **ACTUAL**			N/A	N/A	N/A	N/A	N/A		N/A	[menu]	[menu]	[menu]	N/A
Overall agency scope 3 GHG progress (reduced from FY08 base year) (%) **TARGET**[12]										N/A	N/A	N/A	
Overall agency scope 3 GHG progress (reduced from FY08 base year) (%) **ACTUAL**			N/A	N/A	N/A	N/A	N/A		N/A	[menu]	[menu]	[menu]	
Other, as defined by agency **TARGET**										N/A	N/A	N/A	
Other, as defined by agency **ACTUAL**			N/A	N/A	N/A	N/A	N/A		N/A	[menu]	[menu]	[menu]	

Progress Questions

1. Use the table below to describe where agency Scope 1&2 GHG emissions reductions came from in

[12] Any changes to the original baselines and 2020 targets must be in conformance with the Guidance on Greenhouse Gas Accounting and Reporting.

FY11. For each category, choose the best answer to describe the relative significance in reducing the agency's emissions. The options are Primary (~>40% of reduction), Secondary (~20-40% of reduction), Minor (~1-20% or reduction), and None/Insignificant (~0-1% of reduction).

For all primary and secondary categories, also indicate whether the agency had a category specific GHG reduction target, whether formal strategies were implemented related to achieving that target, and the results. If the emissions from a specific category increased perceptibly (as in more than 1% of the reduction target), choose "Increase". This refers to the changes in FY11 (so what happened from 10/1/10 to 9/30/11, where reductions came from), and not what has happened since 2008.

Emissions Reduction: Scope 1&2

Strategy Category	**FY11 Contribution** (Primary, Secondary, Minor, None/Insignificant, Increase, N/A)	**GHG Category Target in Place** (Y,N,N/A)	**Formal Strategies Implemented Related to Target** (Y, N, N/A)	**Results** (Met/Exceeded target, Did not meet target, Not tracked, Other, N/A)	**Comments**
Facility Energy Intensity	[menu]	[menu]	[menu]	[menu]	
Renewable Energy	[menu]	[menu]	[menu]	[menu]	
Space Management	[menu]	[menu]	[menu]	[menu]	
Fleet Petroleum Use	[menu]	[menu]	[menu]	[menu]	
Fleet Alternative Fuel Use	[menu]	[menu]	[menu]	[menu]	
Optimizing Fleet Size	[menu]	[menu]	[menu]	[menu]	
Fugitive Emissions	[menu]	[menu]	[menu]	[menu]	
Landfills, Wastewater Treatment	[menu]	[menu]	[menu]	[menu]	
Other (describe in comments)	[menu]	[menu]	[menu]	[menu]	
Other (describe in comments)	[menu]	[menu]	[menu]	[menu]	

2. Emissions Reduction: Scope 3

For which of the following activities does the agency...	**Federal employee commuting**	**Federal employee business air travel**	**Federal employee business ground travel**	**Contracted solid waste disposal**	**Contracted wastewater disposal**	**Other (describe in comments)**	**Comments**
...have an identified and **specific target** for actions to satisfy scope 3 emissions reduction goals?	[Yes, No, N/A]	[Yes, No, N/A]	[Yes, No, N/A]	[Yes, No, N/A]	[Yes, No, N/A]	[Yes, No, N/A]	
...have identified and **specific strategies** for achieving scope 3 emissions reductions?	[Yes, No, N/A]	[Yes, No, N/A]	[Yes, No, N/A]	[Yes, No, N/A]	[Yes, No, N/A]	[Yes, No, N/A]	
...have identified and **specific metrics** to measure progress towards the scope 3 target?	[Yes, No, N/A]	[Yes, No, N/A]	[Yes, No, N/A]	[Yes, No, N/A]	[Yes, No, N/A]	[Yes, No, N/A]	
...show **measured progress** towards scope 3 emissions reductions?	[Yes, No, N/A]	[Yes, No, N/A]	[Yes, No, N/A]	[Yes, No, N/A]	[Yes, No, N/A]	[Yes, No, N/A]	

Challenges/Justification

Instructions: Note that these instructions are the same for all goals.
In the table provided, describe any Challenges or Justifications related to this goal. Where an agency did not meet a FY11 target, or is not on track to meet a target for FY12, this section should be used to briefly explain challenges the agency faced. In addition, this section should be used to explain any responses to the progress questions that might need further clarification or any other challenges the agency faced during the previous fiscal year. If applicable, describe how the agency overcame those challenges. If any response is related to multiple goals, describe it in the goal that is most closely related. For each, fill in the table with an ID number (start with 1), title, and description. Also choose the goal(s) other than the current goal to which it is most closely related. If the response is related to more than three goals, choose the top three. If it is related to fewer, choose "N/A" as needed.

ID	Title	Description	First Related Goal (if applicable)	Second Related Goal (if applicable)	Third Related Goal (if applicable)
			[menu]	[menu]	[menu]

Best Practices/Highlights

Instructions: Note that these instructions are the same for all goals.
In the table provided, describe any Best Practices or Highlights related to this goal. Discussion in this section should focus on strategies or activities that an agency would likely recommend to another agency or particular projects the agency would like to showcase. Describe any practices or any specific projects or initiatives that were particularly successful in helping to meet agency goals. Applicability to other goals should be mentioned as appropriate. If available, include cost savings and measured progress toward a target. In the table provided, describe any Best Practices or Highlights related to this goal. If any responses are related to multiple goals, describe them in the goal that is most closely related. If any responses are related to multiple goals, describe them in the goal that is most closely related. For each, fill in the table with an ID number (start with 1), title, and description.

ID	Title	Description

Planning

Strategies: Note that these instructions are the same for all goals.

In the table provided, describe the strategies that the agency will implement in the next 24 months to achieve this goal's targets and address the considerations listed above.

Fill in the information related to each strategy (as applicable). For each, fill in the table with an ID number (start with 1), provide a brief description, and complete the table by selecting the appropriate response and providing metrics and any necessary comments.

ID	Description	Strategy Type	Timeframe	Scale	Success Metrics: FY12	Success Metrics: FY13	First Related Goal	Second Related Goal	Comments
		[menu]	[menu]	[menu]			[menu]	[menu]	

GOAL 2: Buildings, ESPC Initiative Schedule, and Regional & Local Planning

For the ESPC initiative schedule, there is no progress reporting. Agencies must report on their schedule in the *Planning* component.

Considerations

Scope 1&2 Emissions Reductions (applicable to buildings)

- Agency progress and performance to date.
- Reduce facility energy intensity.

- Increase renewable electricity installation & use.
- Reduce per capita energy consumption through space management policies.
- EISA Section 432 requirements to evaluate (audit and commission) designated facilities; assign energy managers, benchmark, and implement projects.

- Building improvement programs including metering and commissioning initiatives.

High-Performance Sustainable Design / Green Buildings

- Agency progress and performance to date.
- Beginning in FY20, all new Federal buildings are to be designed to achieve zero-net energy by FY30

- Comply with the "Guiding Principles for Federal Leadership in High Performance and Sustainable Buildings (Guiding Principles)" in all new construction, major renovation, or repair and alteration of Federal buildings.
- Assess and demonstrate that at least 15% of the agency's existing government-owned buildings, agency direct-leased buildings, delegated authority leased buildings, and FRPP-reported leased buildings[13] meet Guiding Principles by FY15 [5,000 GSF threshold for existing buildings and building leases].
- Annual progress toward 100% conformance with Guiding Principles for entire building inventory by 2015 and thereafter.

- Demonstrate use of cost-effective and innovative building strategies to minimize energy, water, and materials consumption.
- Optimize performance of the agency's real property portfolio – dispose and consolidate excess and underutilized property, co-locate field offices, and consolidate across metropolitan and regional locations in accordance with the Presidential Memorandum on Disposing of Unneeded Federal Real Estate.
- Offset new space or property acquisitions with corresponding disposals or lease terminations to restrict net growth in the agency's real estate inventory.
- Utilize technologies to increase telework/hoteling opportunities (over the internet or electronically)
- Conserve, rehabilitate, and reuse historic Federal properties.

[13] Agencies must assess and report sustainability measures for all facilities under their management, especially those for which they provide utilities or pay a lessor to provide utilities. This includes owned buildings, direct leases, and FRPP-reported leased buildings.

Regional and Local Planning

- Agency progress and performance to date.
- **(New)** Integrate the Principles for Sustainable Federal Location Decision into agency site selection and lease procurement procedures.
- **(New)** Integrate the Principles into written agency procedures for defining their facility requirements and formulation or related funding requests.
- Update agency policy and guidance to ensure that all Environmental Impact Statements (EIS's) and Environmental Assessments (EA's) required under the National Environmental Policy Act (NEPA) for proposed new or expanded Federal facilities identify and analyze impacts associated with energy (including alternative energy sources) and climate change.
- Integrate methods and practices necessary to achieve the goals of this Plan into agency master planning documents (i.e., high-performance, sustainable building goals, pollution prevention and waste reduction goals, water use reduction goals, sustainable acquisition goals, electronic stewardship and data center consolidation, etc.).
- Agency participation in critical local and regional efforts and initiatives (i.e., Executive Order on Chesapeake Bay Protection and Restoration, Executive Order on Stewardship of the Ocean, Our Coasts, and the Great Lakes, etc.).

Goal Description **[Text Box]**

Agency Lead **[Text Box]**

Staff Resources **[Text Box]**

Table Color Codes:
Yellow: Agency enters
Green: Prepopulated with data from the agency's 2011 Sustainability Plan if available
Blue: Prepopulated with data from FEMP if available
Purple: Prepopulated with data from FRPP if available

Baseline

Description	Baseline Year	Baseline Value	Comments
Energy intensity (Btu/GSF)	2003		

Planning/Status Table

Buildings	FY10	FY11	FY12	FY13	FY14	FY15	FY16	...	FY20	FY11 Data Verification	FY11 Target Status	FY12 Target Status	Comments
Energy intensity reduction (% reduced from FY03 base year) **TARGET**	15	18	21	24	27	30				N/A	N/A	N/A	
Energy intensity reduction (% reduced from FY03 base year) **PLAN**										N/A	N/A	N/A	

Buildings	FY10	FY11	FY12	FY13	FY14	FY15	FY16	...	FY20	FY11 Data Verification	FY11 Target Status	FY12 Target Status	Comments
Energy intensity reduction (% reduced from FY03 base year) **ACTUAL**			N/A	N/A	N/A	N/A	N/A		N/A	[menu]	[menu]	[menu]	
Renewable electricity (% of electricity from renewable sources) **TARGET**	5	5	5	7.5	7.5	7.5	7.5		7.5	N/A	N/A	N/A	
Renewable electricity (% of electricity from renewable sources) **PLAN**										N/A	N/A	N/A	
Renewable electricity (% of electricity from renewable sources) **ACTUAL**			N/A	N/A	N/A	N/A	N/A		N/A	[menu]	[menu]	[menu]	
% of renewable energy that is "new."[14]			N/A	N/A	N/A	N/A	N/A		N/A	N/A	N/A	N/A	
Owned buildings meeting Guiding Principles[15] (%) **TARGET**										N/A	N/A	N/A	
Owned buildings meeting Guiding Principles[15] (%) **ACTUAL**			N/A	N/A	N/A	N/A	N/A		N/A	[menu]	[menu]	[menu]	
FRPP-reported leased buildings meeting Guiding Principles[15] (%) **TARGET**										N/A	N/A	N/A	
FRPP-reported leased buildings meeting Guiding Principles[15] (%) **ACTUAL**			N/A	N/A	N/A	N/A	N/A		N/A	[menu]	[menu]	[menu]	
Total buildings meeting Guiding Principles[15] (%) **TARGET**										N/A	N/A	N/A	
Total buildings meeting Guiding Principles[15] (%) **ACTUAL**			N/A	N/A	N/A	N/A	N/A		N/A	[menu]	[menu]	[menu]	
(New) % of EISA covered facilities[16] that have an energy manager[17]			N/A	N/A	N/A	N/A	N/A		N/A	N/A	N/A	N/A	
(New) % of EISA covered facilities evaluated through June[18]		N/A		N/A	N/A	N/A	N/A		N/A	N/A	N/A	N/A	
(New) % of appropriate buildings metered for electricity[19]			N/A	N/A	N/A	N/A	N/A		N/A	N/A	N/A	N/A	
(New) % of metered buildings that are (or are part of) EISA covered facilities that have been benchmarked through June[20]		N/A		N/A	N/A	N/A	N/A		N/A	N/A	N/A	N/A	
Other, as defined by agency **TARGET**										N/A	N/A	N/A	
Other, as defined by agency **ACTUAL**			N/A	N/A	N/A	N/A	N/A		N/A	[menu]	[menu]	[menu]	

Progress Questions:

(New) **Sustainable Federal Locations**

The E.O. and the Facilities direct agencies to consider the impacts of their siting decisions not only on agency operations and employees, but also on the communities that host those facilities.

1. Agencies should link to or attach the agency memo or policy document that integrates the Principles

14 If <50%, describe in the planning section below the strategies the agency will use to meet the 50% new requirement from EO 13423.

15 Buildings >5000 sf ft.

16 Covered facilities under 42 U.S.C. 8253(f).

17 If <100%, describe in planning section how the agency will attain compliance.

18 If <100%, describe in the planning section how the agency will attain compliance.

19 If <90%, describe in the planning section how the agency will attain 100% compliance by end of FY2012.

20 All separately metered buildings within covered facilities are required to be benchmarked.

for Sustainable Federal Location Decisions into the agency's site selection and lease procurement procedures. If the agency has not yet prepared the necessary documents, indicate the status of the effort in the text box provided.

2. Agencies should link to or attach the agency procedures document that integrates the Principles into the agency's processes for defining facility requirements and formulation of related funding requests. If the agency has not yet prepared the necessary documents, indicate the status of the effort in the text box provided.

3. In i, ii, and iii below, list recent and planned significant agency facility (or facilities areas, which are defined as multiple facilities in adjacent proximity) changes such as moves, expansions, consolidations, etc. For the purposes of this report, significant changes are changes that affect more than 500 employees. Where facility changes impact less than 500 employees but are otherwise deemed significant by the agency, those agencies are encouraged to provide the information on those projects.

i. *Agency Experience* **(Sept 2011-June 2012)**Identify in the table below significant agency facility changes that occurred at a minimum 6 months prior to June 2012 (December 2011 to June 2012) (significant changes are changes that affect more than 500 employees). Agencies may also include changes prior to December 2011. If the Principles for Sustainable Federal Location Decisions were applied to the location decision, discuss the successes, challenges, and impacts on workplace requirements and location decisions and how any issues were resolved.

ID	Facility Name[22]	Facility Location[21] (Zip Code)[22]	Facility Function (HQ, customer service, etc.)	Facility Size (sq ft.)	Facility Size (# of Employees)	Change Type	Date of Change [MM/YY]	Successes, Challenges, and Impacts to Workplace Requirements
						[menu]		

ii. *Near-term Planning* **(FY12-FY13)** List all significant facility or facilities areas changes (not previously listed) that are planned or anticipated to be implemented in the remainder of the current fiscal year and following fiscal year.

ID	Facility Name[22]	Facility Location[21] (Zip Code)[22]	Facility Function (HQ, customer service, etc.)	Facility Size (sq ft.)	Facility Size (# of Employees)	Change Type	Date Planned [MM/YY]
						[menu]	

iii. *Medium-term Planning* **(FY14-FY16)** Identify significant agency facility or facilities areas changes that are anticipated to occur in the next 2-4 years.

ID	Facility Name[22]	Facility Location[21] (Zip Code)[22]	Change Type	Year Planned

[21] This should designate the final location of consolidations, moves or expansions.

[22] Facility name and location will not be in the public report.

ID	Facility Name[22]	Facility Location[21] (Zip Code)[22]	Change Type	Year Planned
			[menu]	

Error: Reference source not found [Table]

***Best Practices/Highlights* [Table]**

Planning

(New) **ESPC Implementation Schedule**

Agencies should use the Performance Contracting Tracking Schedule Template sent out by FEMP and shown below. Each of these tables can be copied from Excel into MAX.

Performance Contracting Commitment Table

Total Agency Commitment ($)	
Total Estimated Project Value[23] ($)	

ESPC Implementation Schedule Tables

Planning Phase (complete prior to March 30, 2012)			
Action	**Due Date**	**Complete**	**Lead**
		(Yes/No)	(Name)
Identify sites and project investment			
Engage FEMP Financing Specialist			
Identify team and educate on roles			
Identify internal approvals or issues			
Develop full implementation schedule			

Project Implementation Phase Table Part 1:

Project Implementation Phase Part 1														
								Agency Develops Acquisition Plan/NOO		**Agency Releases NOO**		**Agency Selects ESCO**		
ID #	**Facility Name**	**Project Champion**	**Agency Designated Covered Facility ID (for CTS Submittal)**	**Agency Designated Project ID (for CTS Submittal)**	**Facility Zip Code**	**Estimated Project Value**	**Contract Vehicle**	Due Date	Actual	Due Date	Actual	Due Date	Actual
1							DOE	3/30/12		3/31/12		4/30/12	
2							DOE	3/30/12		3/31/12		4/30/12	
3							DOE	3/30/12		3/31/12		4/30/12	

[23] This value should represent the combined Estimated Project Value for all projects. (In the Excel tracker this is cell G30)

4								DOE	3/30/12		3/31/12		4/30/12			

Contract Vehicle Options: DOE, ACOE, UESC, Other

Project Implementation Phase Table Part 2:

Project Implementation Phase Part 2																
	ESCO Develops PA		**Agency Reviews PA**		**Agency Releases NOITA**		**ESCO Conducts and Submits IGA**		**Agency Reviews IGA and Submits Comments to ESCO**		**ESCO Submits Final Proposal**		**Agency Reviews Final Proposal**		**Negotiation/ Award**	
ID #	Due Date	Actual	Due Date	Actual	Due Date	Actual	Due Date	Actual	Due Date	Actual	Due Date	Actual	Due Date	Actual	Due Date	Actual
1	6/29/12		7/14/12		7/29/12		10/27/12		11/26/12		12/26/12		1/25/13		2/24/13	
2	6/29/12		7/14/12		7/29/12		10/27/12		11/26/12		12/26/12		1/25/13		2/24/13	
3	6/29/12		7/14/12		7/29/12		10/27/12		11/26/12		12/26/12		1/25/13		2/24/13	
4	6/29/12		7/14/12		7/29/12		10/27/12		11/26/12		12/26/12		1/25/13		2/24/13	

ESPC Plan Comments: Use this area for any narrative information that is needed to explain the plan detailed in the tables above.

(New) **Sustainable Federal Locations: Siting Plan [Text Box]**

For each change listed in the near term planning table describe the principles that the agency plans to apply and then explain for each change how it will be applied, the challenges to doing so, and ways to address those challenges. Finally, discuss the impacts to Scope 3employee commuting. Address each change in a separate paragraph with the facility ID as the title.

Strategies [Table]

GOAL 3: Fleet Management

Considerations

- Agency progress and performance to date.
- Reduce petroleum use in fleet vehicles.
- Increase use of low emission and high fuel economy vehicles.
- Increase use of alternative fuels in fleet alternative fuel vehicles (AFVs) including Flex-Fuel Vehicles (FFVs). Acquire AFVs annually, as required.
- Optimize use of vehicles and right-size fleet.
- Guidance for Federal Fleet Management referenced in Section 12 of E.O. 13514.
- Federal Fleet Performance Presidential Memorandum*(PM).*
- Ensure compliance with Executive fleet vehicles elements of the PM and 41 C.F.R. 102-34.50.
- Streamline existing shuttle bus routes including consolidation with other agencies.
- Development of alternative fuel infrastructure and procurement of environmentally preferable motor vehicle products.
- Incorporation of the GSA recommendations for acquisition of alternative fueled vehicles and alternative fueling and charging stations to implement agency fleet optimization plans into the agency fleet management plans.
- Support for bicycle infrastructure.

Goal Description [Text Box]

Agency Lead [Text Box]

Staff Resources[Text Box]

Table Color Codes:
Yellow: Agency enters
Green: Prepopulated with data from the agency's 2011 Sustainability Plan if available
Blue: Prepopulated with data from FEMP if available
Pink: Prepopulated with data from FAST if available
Orange: Prepopulated from agency websites

Baseline

Description	Baseline Year	Baseline Value	Comments
Petroleum use (GGE)	2005		
Alternative fuel use (GGE)	2005		

Planning/Status Table

Fleet Management	FY10	FY11	FY12	FY13	FY14	FY15	FY16	…	FY20	FY11 Data Verification	FY11 Target Status	FY12 Target Status	Comments
Petroleum use reduction (% reduction from FY05 base year) **TARGET**	10	12	14	16	18	20	22		30	N/A	N/A	N/A	
Petroleum use reduction (% reduction from FY05 base year) **PLAN**										N/A	N/A	N/A	
Petroleum use reduction (% reduction from FY05 base year) **ACTUAL**			N/A	N/A	N/A	N/A	N/A		N/A	[menu]	[menu]	[menu]	
Alternative fuel use in fleet (% increase from FY05 base year) **TARGET**	61	77	95	114	136	159				N/A	N/A	N/A	
Alternative fuel use in fleet (% increase from FY05 base year) **PLAN**										N/A	N/A	N/A	
Alternative fuel use in fleet (% increase from FY05 base year) **ACTUAL**			N/A	N/A	N/A	N/A	N/A		N/A	[menu]	[menu]	[menu]	
(New) Total conventional fuel vehicles (#) **TARGET**	N/A	N/A								N/A	N/A	N/A	
Total conventional fuel vehicles (#) **ACTUAL**	N/A		N/A	N/A	N/A	N/A	N/A		N/A	[menu]	N/A	[menu]	
(New) Total alternative fuel vehicles (#) **TARGET**	N/A	N/A								N/A	N/A	N/A	
Total alternative fuel vehicles (#) **ACTUAL**	N/A		N/A	N/A	N/A	N/A	N/A		N/A	[menu]	N/A	[menu]	
(New) Reduction in Executive fleet vehicles larger than a midsize sedan or that do not comply with the alternative fueled	N/A	N/A								N/A	N/A	N/A	

Fleet Management	FY10	FY11	FY12	FY13	FY14	FY15	FY16	…	FY20	FY11 Data Verification	FY11 Target Status	FY12 Target Status	Comments
vehicle requirements through June **(#) TARGET**													
(New) # Executive fleet vehicles larger than a midsize sedan or that do not comply with alternative fueled vehicle requirements as posted on agency website **ACTUAL**	N/A		N/A	N/A	N/A	N/A	N/A		N/A	[menu]	N/A	[menu]	
Other, as defined by agency **TARGET**										N/A	N/A	N/A	
Other, as defined by agency **ACTUAL**			N/A	N/A	N/A	N/A	N/A		N/A	[menu]	[menu]	[menu]	

Progress Questions

1. Does the agency have an anti-idling policy for fleet vehicles? (Yes/No/N/A) If publicly available, provide a link to the policy.

Challenges/Justification[Table]

Best Practices/Highlights [*Table]*

Planning

Fleet Management Plan

Attach the agency's Fleet Management Plan to Appendix 3.

Strategies

Agencies should not include strategies that are already in the Fleet Management Plan.

GOAL 4: Water Use Efficiency and Management

Considerations

- Agency progress and performance to date.
- Reduce potable water use intensity by at least 26% by FY20.
- Reduce industrial, landscaping, and agricultural water use by at least 20% by FY20.
- Identify and implement water reuse strategies.
- Achieve objectives established by the EPA in Stormwater Guidance for Federal Facilities.[24]

Goal Description [Text Box]

Agency Lead [Text Box]

Staff Resources[Text Box]

[24] EISA Section 438 (42 U.S.C. 17094).

Table Color Codes:
Yellow: Agency enters
Green: Prepopulated with data from the agency's 2011 Sustainability Plan if available
Blue: Prepopulated with data from FEMP if available

Baseline

Baseline	**Baseline Year**	**Baseline Value**	**Comments**
Potable water use (Gal/SF)	2007		
Industrial, landscaping, and agricultural water use (Thous. Gal)	2010		

Planning/Status Table

Water Use Efficiency and Management	FY10	FY11	FY12	FY13	FY14	FY15	FY16	...	FY20	FY11 Data Verification	FY11 Target Status	FY12 Target Status	Comments
Potable water reduction (% reduction from FY07 base year) **TARGET**	6	8	10	12	14	16	18		26	N/A	N/A	N/A	
Potable water reduction (% reduction from FY07 base year) **PLAN**										N/A	N/A	N/A	
Potable water reduction (% reduction from FY07 base year) **ACTUAL**			N/A	N/A	N/A	N/A	N/A		N/A	[menu]	[menu]	[menu]	
Industrial, landscaping and agricultural water reduction (% reduction from FY10 base year) **TARGET**	N/A	2	4	6	8	10	12		20	N/A	N/A	N/A	
Industrial, landscaping and agricultural water reduction (% reduction from FY10 base year) **PLAN**	N/A									N/A	N/A	N/A	
Industrial, landscaping and agricultural water reduction (% reduction from FY10 base year) **ACTUAL**	N/A		N/A	N/A	N/A	N/A	N/A		N/A	[menu]	[menu]	[menu]	
Other, as defined by agency **TARGET**										N/A	N/A	N/A	
Other, as defined by agency **ACTUAL**			N/A	N/A	N/A	N/A	N/A		N/A	[menu]	[menu]	[menu]	

Progress Questions

1. Estimated % of agency owned or controlled buildings that currently have meters for measuring potable water use.

a. 0-10% b. 11-50% c. 51-90% d. 91-100% e. Not tracked f. N/A

2. Is a formal policy in place to meet the requirements of the Stormwater Guidance for Federal Facilities? Choose the most applicable answer below and if the policy is publicly available, provide a link in the column provided.
    a. No Policy
    b. In planning phase

c. Have policy in approval process

d. Policy has been implemented

e. System in place to alert appropriate staff when policy is triggered

Challenges/Justification [Table]

Best Practices/Highlights [Table]

Planning

Strategies[Table]

GOAL 5: Pollution Prevention and Waste Reduction

Considerations

- Agency progress and performance to date.
- Minimize the generation of waste and pollutants through source reduction.
- Reduce municipal solid waste sent to landfills; increase diversion of compostable and organic materials from the waste stream; and divert at least 50% non-hazardous solid waste by FY15, excluding construction and demolition (C&D) debris.
- Divert at least 50% C&D materials and debris by FY15; include methods used to monitor and track progress.
- Reduce overall amount of printing paper use and ensure remaining use is at least 30% postconsumer fiber.
- Report in accordance with EPCRA[25]; increase agency use of alternative chemicals and processes; reduce and minimize the acquisition, use, and disposal of hazardous chemicals and materials; include where appropriate how implementation will assist the agency in achieving FY20 GHG reduction targets [See Goal 1 above].
- Implement integrated pest management and landscape management practices to reduce and eliminate the use of toxic and hazardous chemicals and materials.
- Implement CEQ Guidance on Sustainable Practices for Designed Landscapes.

Goal Description[Text Box]

Agency Lead [Text Box]

Staff Resources[Text Box]

Table Color Codes: Yellow: Agency enters Green: Prepopulated with data from the agency's 2011 Sustainability Plan if available

Planning/Status Table

[25] 42 U.S.C. 11001 et seq.

Pollution Prevention & Waste Reduction	FY10	FY11	FY12	FY13	FY14	FY15	FY16	…	FY20	FY11 Data Verification	FY11 Target Status	FY12 Target Status	Comments
(New) Total non-hazardous solid waste (non-C&D) (tons) **ACTUAL**			N/A	N/A	N/A	N/A	N/A		N/A	[menu]	N/A	N/A	
Non-hazardous solid waste diversion (Non-C&D) (%) **TARGET**										N/A	N/A	N/A	
Non-hazardous solid waste diversion (Non-C&D) (%) **ACTUAL**			N/A	N/A	N/A	N/A	N/A		N/A	[menu]	[menu]	[menu]	
(New) Total C&D material and debris (tons) **ACTUAL**			N/A	N/A	N/A	N/A	N/A		N/A	[menu]	N/A	N/A	
C&D material and debris diversion (%) **TARGET**										N/A	N/A	N/A	
C&D material and debris diversion (%) **ACTUAL**			N/A	N/A	N/A	N/A	N/A		N/A	[menu]	[menu]	[menu]	
Estimated total weight of materials managed through waste-to-energy[26] (tons) **TARGET**										N/A	N/A	N/A	
Estimated total weight of materials managed through waste-to-energy[26] (tons) **ACTUAL**			N/A	N/A	N/A	N/A	N/A		N/A	[menu]	[menu]	[menu]	
(New) Number of sites or facilities with on-site or off-site composting programs **TARGET**										N/A	N/A	N/A	
Number of sites or facilities with on-site or off-site composting programs **ACTUAL**			N/A	N/A	N/A	N/A	N/A		N/A	[menu]	[menu]	[menu]	
Estimated total weight of materials diverted to composting[27] (tons) **TARGET**										N/A	N/A	N/A	
Estimated total weight of materials diverted to composting[27] (tons) **ACTUAL**			N/A	N/A	N/A	N/A	N/A		N/A	[menu]	[menu]	[menu]	
(New) % of agency-operated offices/sites and offices located in multi-tenant buildings with a recycling program **TARGET**										N/A	N/A	N/A	
% of agency-operated offices/sites and offices located in multi-tenant buildings with a recycling program **ACTUAL**			N/A	N/A	N/A	N/A	N/A		N/A	[menu]	[menu]	[menu]	
Other, as defined by agency **TARGET**										N/A	N/A	N/A	
Other, as defined by agency **ACTUAL**			N/A	N/A	N/A	N/A	N/A		N/A	[menu]	[menu]	[menu]	

Progress Questions

1. Across the agency, estimated % of printing and writing paper purchased that is at least 30% postconsumer fiber.

a. < 75% b. 75-90% c. 91-100% d. Not tracked e. N/A

2. Estimated use of integrated pest management practices across the agency.

a. 0-10% b. 11-50% c. 51-90% d. 91-100% e. Not tracked f. N/A

3. Does the agency have a current policy to address management of toxic/hazardous chemicals? (Yes/No) If publicly available, provide a link to the policy or memo in the appropriate column.

[26] If agency uses on-site or off-site waste-to-energy.

[27] If agency has on-site or off-site composting programs.

4. How do the agency's landscaping policies respond to the CEQ Guidance on Sustainable Practices for Designed Landscapes? Choose the most applicable answer for the agency's response. If publicly available, link to any current relevant agency policy.

    a. No policy

    b. Agency staff have been alerted of the Guidance

    c. Guidance is formally referenced in agency documents

    d. Agency policy in planning phase

    e. Agency policy in approval process

    f. Agency policy issued and implemented

    g. Agency policy issued and system in place to alert appropriate staff about policy when implementing landscaping practices

Challenges/Justification [Table]

Best Practices/Highlights [Table]

Planning

Strategies [Table]

GOAL 6: Sustainable Acquisition

Considerations

- Agency progress and performance to date.
- Ensure 95% of new contract actions, including task and delivery orders under new contracts and existing contracts, require the supply or use of products and services that are energy efficient (Energy Star or FEMP-designated), low standby power, water efficient, biobased, environmentally preferable[28] (excluding EPEAT-registered products), non-ozone depleting, contain recycled content, or are non-toxic or less toxic alternatives.[29]
- Revisions to agency affirmative procurement program (APP) (also known as green purchasing plans or environmentally preferable purchasing plans), policies and programs to ensure that all mandated Federally designated products and services are included in all relevant acquisitions. Note any new guidance or policies affecting procurement or acquisition of products or services (e.g. Sustainable Landscaping, Water Efficiency, Presidential Memorandum on ESPCs, and Presidential Memorandum on fleet and Presidential Memorandum on Biobased procurement).
- Best Practices for Reviewing Contract Actions for Green Products Compliance and Q&A on

[28] EPEAT products are addressed in Goal 7: Electronic Stewardship and Data Centers.

[29] Purchases are mandated where such products and services meet agency performance requirements. Agencies should discuss how they currently capture and analyze data to track their performance regarding the 95% target for new contracted actions. Where agencies are unable to track specific actions, they should discuss plans to improve data collection and identify areas where specific challenges exist.

Reviewing Contract Actions.

Goal Description[Text Box]

Agency Lead [Text Box]

Staff Resources[Text Box]

Table Color Codes:
Yellow: Agency enters
Brown: Prepopulated with data from Scorecard if available

Planning/Status Table

Sustainable Acquisition New Contract Action Review	**3rd QTR FY11**	**4th QTR FY11**	**1st QTR FY12**	**2nd QTR FY12**	**3rd QTR FY12 (Planned)**	**4th QTR FY12 (Planned)**	**Comments**
Total # new agency contract actions[30]	?	?	?	?	?	?	
Total # new contract actions eligible for review	?	?	?	?	?	?	
Total # eligible contract actions reviewed (at least 5% of eligible contracts)	?	?	?	?	?	?	
# of contract actions including sustainability requirements	?	?	?	?	?	?	
% of reviewed contract actions that include sustainability requirements	?	?	?	?	?	?	

Describe how the contracts identified in the table above were selected for review. (For example, indicate if a monetary threshold was selected for review and amount; if FPDS and/or FedBizOpps was used; or types of contracts excluded and methodology for scrubbing and reviewing contracts; etc.)

Progress Questions

1. Provide the date of the most recent version of the agency's formal affirmative procurement program (APP) (also known as green purchasing plans or environmentally preferable purchasing plans). If publicly available, provide a link to the plan.

2. Does the agency APP or other agency policy or procedures include activities for workforce awareness and appropriate management techniques? (Yes/No) If yes, indicate which of the following are included:

    - Training is provided for agency staff involved in purchasing and acquisition (program

[30] Do not include contracts for weapons systems.

officials, requiring officials, contract specialists, contracting officers, COTRs, purchase card holders)

- Policies/procedures for ensuring incorporation of sustainable acquisition requirements into agency procurements (specifications reviews, FedBizOpps notifications, model contract language, etc.)
- Procedures for regularly monitoring, measuring, reporting, and reviewing progress against green purchasing/sustainable acquisition objectives
- Schedule for updating the green purchasing plan, policies, or procedures or a commitment to do so as needed.

Challenges/Justification [Table]

Best Practices/Highlights [Table]

Planning

Identify any specific area targeted for focus/improvement in carrying out sustainable acquisition efforts in FY13.

a. Construction, Renovation, or Repair
b. Laundry Services
c. Building Operations and Maintenance
d. Cafeteria Operations
e. Landscaping Services
f. Meetings and Conference Services
g. Pest Management
h. Building Interiors/Furniture
i. Electronic Equipment
j. Janitorial Services
k. USDA Biobased / Biopreferred Acquisition
l. Other (describe in comments)

Strategies[Table]

GOAL 7: Electronic Stewardship and Data Centers

Considerations

- Agency progress and performance to date.
- Ensure acquisition of EPEAT registered, ENERGY STAR qualified, and FEMP designated electronic office products when procuring electronics in eligible product categories.
- Establish and implement policy and guidance to ensure use of power management, duplex printing, and other energy efficient or environmentally preferred options and features on all eligible agency electronic products.
- Update agency policy to reflect environmentally sound practices for disposition of all agency excess or surplus electronic products.
- Ensure electronic assets are disposed of through sound disposition practices. Use of disposal, recycling and donations programs such as GSA Xcess, Unicor, GSA's Computer for Learning (CFL) or other non-profit organizations, and/or private recyclers certified under the Responsible

Recyclers (R2) guidance or equivalent certification.

Goal Description [Text Box]

Agency Lead [Text Box]

Staff Resources [Text Box]

Table Color Codes:
Yellow: Agency enters
Green: Prepopulated with data from the agency's 2011 Sustainability Plan if available
Brown: Prepopulated with scorecard data if available

Planning/Status Table

Electronic Stewardship & Data Centers	FY10	FY11	FY12	FY13	FY14	FY15	FY16	…	FY20	FY11 Data Verification	FY11 Target Status	FY12 Target Status	Comments
(New) % of covered electronics acquisitions that are FEMP-designated and ENERGY STAR qualified[31]**TARGET**										N/A	N/A	N/A	
% of covered electronics acquisitions that are FEMP-designated and ENERGY STAR qualified[31]**ACTUAL**			N/A	N/A	N/A	N/A	N/A		N/A	[menu]	[menu]	[menu]	
% of covered electronic product acquisitions that are EPEAT-registered **TARGET**										N/A	N/A	N/A	
% of covered electronic product acquisitions that are EPEAT-registered **ACTUAL**			N/A	N/A	N/A	N/A	N/A		N/A	[menu]	[menu]	[menu]	
% of eligible PC, laptops, and monitors with power management actively implemented and in use **TARGET**										N/A	N/A	N/A	
% of eligible PC, laptops, and monitors with power management actively implemented and in use **ACTUAL**			N/A	N/A	N/A	N/A	N/A		N/A	[menu]	[menu]	[menu]	
% of agency, eligible electronic printing products with duplexing features in use[32]**TARGET**										N/A	N/A	N/A	
% of agency, eligible electronic printing products with duplexing features in use[32]**ACTUAL** (estimate if needed)			N/A	N/A	N/A	N/A	N/A		N/A	[menu]	[menu]	[menu]	
% of electronic assets covered by sound disposition practices[33]**TARGET**										N/A	N/A	N/A	

[31] Device types are the electronic products listed under the Energy Star program or FEMP that the agency purchases or leases that are NOT covered by EPEAT. This count should include the percentage of products that met the standards at the time of purchasing during the reporting period (FY11). For the purposes of this metric, Energy Star products are not electronics such as lighting and appliances that are covered by the Sustainable Acquisition Goal. You can go to http://www.energystar.gov/ under "Computers and Electronics" section for the list of targeted products. The goals/targets within Goal 7 are more narrowly scoped to include servers, computers, monitors, peripherals, and other office equipment.

[32] Eligible electronic products include, but are not limited to, imaging equipment such copiers, faxes, printers, scanners, etc.

[33] Electronic assets are generally those electronics products owned and/or leased by the agency that need to be disposed of in accordance with acceptable end-of-life practices. Some examples of sound disposition practices include, but are not limited to, GSA Xcess (Note: The use of GSA Auctions, public sales, and abandonment and destruction provided by GSA is outside of the scope of GSA Xcess and does not ensure sound disposition.); recycling through Unicor; donation through GSA's Computer for Learning (CFL) or other non-profit organizations; and/or recycling through a private recycler certified under the Responsible Recyclers (R2) guidance or equivalent certification.

% of electronic assets covered by sound disposition practices[33] **ACTUAL**			N/A	N/A	N/A	N/A	N/A		N/A	[menu]	[menu]	[menu]	
% of agency data centers independently metered, advanced metered, or sub-metered to determine monthly (or more frequently) **TARGET**										N/A	N/A	N/A	
% of agency data centers independently metered, advanced metered, or sub-metered to determine monthly (or more frequently) **ACTUAL**			N/A	N/A	N/A	N/A	N/A		N/A	[menu]	[menu]	[menu]	
Reduction in the number of agency data centers **TARGET**										N/A	N/A	N/A	
Reduction in the number of agency data centers **ACTUAL**			N/A	N/A	N/A	N/A	N/A		N/A	[menu]	[menu]	[menu]	
% of agency data centers operating with an average CPU utilization greater than 65%[34] **TARGET**										N/A	N/A	N/A	
% of agency data centers operating with an average CPU utilization greater than 65%[34] **ACTUAL**			N/A	N/A	N/A	N/A	N/A		N/A	[menu]	[menu]	[menu]	
Maximum annual weighted average Power Utilization Effectiveness (PUE) for agency. (#) **TARGET**										N/A	N/A	N/A	
Maximum annual weighted average Power Utilization Effectiveness (PUE) for agency. (#) **ACTUAL**										[menu]	[menu]	[menu]	
Other, as defined by agency **TARGET**										N/A	N/A	N/A	
Other, as defined by agency **ACTUAL**			N/A	N/A	N/A	N/A	N/A		N/A	[menu]	[menu]	[menu]	

Challenges/Justification [Table]

Best Practices/Highlights [Table]

Planning

Strategies [Table]

Agencies should set a target as close to 100% as is reasonably achievable.

[34] In data centers with large variations in load this metric should be applied only to servers that are powered up. Servers that are powered down should not be counted.

GOAL 8: Agency Innovation & Government-Wide Support

This is an area for agencies to describe any innovative policies, methods or actions that they are using to meet agency goals and targets and to expand their sustainability efforts beyond current E.O. 13514 requirements and other environmental and energy statutes, regulations and Executive Orders. Agencies may highlight broad-based innovative practices, technologies, or techniques being used to achieve or exceed goals or targets. Agencies may also identify practices, technologies, or techniques (not identified in previous goals) that are helping the agency to achieve its goals and may be beneficial to other agencies.

This is also an area where agencies that lead interagency efforts (such as GSA, DOE, EPA, DOT, USDA, etc) should identify efforts and initiatives they provide to support to other agencies. Agencies may also identify tools developed by the agency and made available to others for tracking and implementation such as FAST, GHG Reporting Portal, Carbon Footprint Tool, Energy Star Portfolio Manager, etc. Other considerations that agencies may want to reference in this section include:

- Efforts to host interagency working groups to support sustainability efforts;
- The coordination, review, analysis and maintaining of Federal/Congressional reporting requirements;
- Development of tools or assistance to other agencies in meeting reporting requirements;
- Collaboration to share or transfer space with other agencies (e.g. share a laboratory, warehouse, or office space) or collaboration within a metropolitan area or region.

(New) ROI Reporting

> Agencies should identify any significant projects or initiatives included in the submission of the previous year's Sustainability Plan that have been deliberately cancelled, suspended or revised due to cost-effectiveness or other return on investment conclusions. This list should include projects or initiatives that were stopped or altered based on underperformance or a perceived lower return on investment than expected. Likewise, agencies should identify any projects that were expanded due to higher than expected return on investment. For each, agencies should give a brief description of the project and state what changes to the program were made (i.e., cancelled, revised, etc.).

Climate Change Adaptation Planning[35]

Climate Change Adaptation Policy Statement

Agency Climate Change Adaptation Policy Statements submitted as an appendix to the 2011 Sustainability Plan will be prepopulated in this part. If the policy statement was not attached to the 2011

[35] Provide the agency's Climate Change Adaptation Plan in Appendix 2. The Adaptation Plan should be developed in accordance with the guidance issued by the Chair of CEQ.

Sustainability Plan submission or has been revised, please attach the (updated) document.

Responsible Senior Official

Identify the agency designated senior official, office, or other entity responsible for implementation and evaluation of the Adaptation Plan.

Climate Change Science/Information Sources

Identify where key scientific and other information used in developing the Climate Change Adaptation Plan and/or vulnerability analyses was obtained. For each source, please specify:

Source	Type of Science/Information
Examples: publicly available sources, USGCRP, academic institution, developed by the agency, shared by a partner agency, accessed through regional interagency networks such as LCCs or RISAs, etc.	*Examples: physical science data, climate and/or other modeling, economic data, social science data, decision support tools, adaptation knowledge, stakeholder engagement approaches, vulnerability assessments, etc.*

Data and Information Needs
From the list below, identify the top three to five high priority (HP) data and information agency in further understanding and addressing climate change risks and opportunities to its mission, programs, and operations. Please be as specific as possible about the types of information that would be MOST useful rather than selecting all of the options.

Ranking (HP or Not)	Type of Data or Information Need
	Monitoring and data needs, including at local scales (including information about current and past weather and climate) Scenarios of possible climate futures and integration with existing management models
	Better predictive models of climate impacts in specific regions or scales
	Guidance on the use of downscaled global climate models and related data
	Improved understanding of specific Earth system processes
	Information about how global climate change models can be linked to local components of the agency's missions or operations
	Information about how to estimate and evaluate the costs and benefits of specific adaptation options (or the costs of inaction)

Collaboration and Communication Needs
From the list below, identify the top three to five high priority (HP) collaboration and communication needs that would assist in further understanding and addressing climate change risks and opportunities to agency mission, programs, and operations. Please be as specific as possible about the types of information that would be MOST useful rather than selecting all of the options.

Ranking (HP or Not)	**Type of Collaboration or Communication Need**
	Improved public education materials, curriculum, tools related to climate change (including impacts)
	Easy to understand indicators of change
	Better early warnings
	Non-technical tools to discuss climate models, their assumptions and projections, and their appropriate applications
	Decision-support tools to help address climate-related decision-making under uncertainty
	Centralized 'clearinghouse' for climate change information
	Information about best adaptation practices, including local case studies

Other Climate Change Science/Information Needs
List any climate change science and information needs that are not listed above. For each need, please indicate the following:

Type of Information	**Additional Detail**	**Scale**	**Application**
Examples: physical science, climate and/or other modeling, economics, social science, decision support tools, adaptation knowledge, stakeholder engagement approaches, etc.	Additional Detail on the Type of Information Needed	Global, national, regional, local	How this information would be used to inform adaptation planning

Appendix 1: Energy & Sustainability Resources/Investments (OMB Circular A-11)

Appendix 2: Climate Change Adaptation Plan

- Attach the agency Climate Change Adaptation Plan. The Adaptation Plan should be developed in accordance with the guidance issued by CEQ.
- Also attach any publicly-available climate change adaptation plans or related documents developed by agency components or offices.

Appendix 3: Fleet Management Plan

- Attach the agency Fleet Management Plan.

Appendix 4: Feedback Questions

These questions are designed to help CEQ identify strategies and tools to assist the agencies in implementing the Executive Order. **All questions are optional and response to these questions will not be included in agency Sustainability Plans released to the public**.

1. How frequently are agency operations formally evaluated to identify and quantify GHG emissions reduction opportunities? Choose the most applicable answer for both scope 1&2 emissions and scope 3 emissions.

a. Annually or more frequently b. Every few years c. Once/infrequently d. Never e. N/A

2. Has the agency considered reviewing the environmental attributes of existing agency vendors to determine the feasibility of considering those attributes, including GHG emissions, in purchasing and acquisition decisions? (Yes/No)

3. Emissions Reduction Opportunities Table

Indicate the greatest **opportunity** for emissions reductions and where the agency's emissions reductions are likely to come from in the near term and long term. The options are: Primary (~>40% of reduction target), Secondary (~20-40%), Minor (~1-20%), None/Insignificant (~0-1%) and Increase.

Emissions Reduction Opportunities: Scope 1&2

Strategy Category	Estimated Contribution to Reduction Near Term (FY12-13)	Estimated Contribution to Reduction Long Term (FY20)	Comments
Facility Energy Intensity	[menu]	[menu]	
Renewable Energy	[menu]	[menu]	
Space Management	[menu]	[menu]	
Fleet Petroleum Use	[menu]	[menu]	
Fleet Alternative Fuel Use	[menu]	[menu]	
Optimizing Fleet Size	[menu]	[menu]	
Fugitive Emissions	[menu]	[menu]	
Landfills, Wastewater Treatment	[menu]	[menu]	
Other (describe in comments)	[menu]	[menu]	
Other (describe in comments)	[menu]	[menu]	

Emissions Reduction Opportunities: Scope 3

Strategy Category	Estimated Contribution to Reduction Near Term (FY12-13)	Estimated Contribution to Reduction Long Term (FY20)	Comments
Federal employee commuting	[menu]	[menu]	
Federal employee business air travel	[menu]	[menu]	
Federal employee business ground travel	[menu]	[menu]	
Contracted solid waste disposal	[menu]	[menu]	
Contracted wastewater disposal	[menu]	[menu]	

Strategy Category	Estimated Contribution to Reduction Near Term (FY12-13)	Estimated Contribution to Reduction Long Term (FY20)	Comments
Other (describe in comments)	[menu]	[menu]	
Other (describe in comments)	[menu]	[menu]	

4. Rank the Guiding Principle elements in terms of difficulty to achieve for the agency's buildings. (Easiest to achieve (1) to most challenging to achieve (5); rank separately for both new and existing buildings.)

Guiding Principle Element	Ranking (new)	Ranking (existing)	Comments
1a: Integrated Design (new) / Integrated Assessment, Operation, and Management (existing)	[menu]	[menu]	
1b. Commissioning	[menu]	[menu]	
2a. Energy Efficiency	[menu]	[menu]	
2b. Onsite Renewable Energy	[menu]	[menu]	
2c. Measurement and Verification	[menu]	[menu]	
2d. Benchmarking	[menu]	[menu]	
3a. Indoor Water	[menu]	[menu]	
3b. Outdoor Water	[menu]	[menu]	
3c. Process Water	[menu]	[menu]	
3d. Water Efficient Products	[menu]	[menu]	
3e. Water Use Measurement (existing only)	N/A	[menu]	
4a. Ventilation and Thermal Comfort	[menu]	[menu]	
4b. Moisture Control	[menu]	[menu]	
4c. Daylighting (new) /Daylighting and Lighting Controls (existing)	[menu]	[menu]	
4d. Low-emitting Materials	[menu]	[menu]	
4e. Environmental Tobacco Smoke Control	[menu]	[menu]	
4f. Protect Indoor Air Quality During Construction (new)/ Integrated Pest Management (existing)	[menu]	[menu]	
5a. Recycled Content	[menu]	[menu]	
5b. Biobased Content	[menu]	[menu]	
5c. Environmentally Preferable Products	[menu]	[menu]	
5d. Waste and Materials Management	[menu]	[menu]	
5e. Ozone Depleting Compounds	[menu]	[menu]	

5. Estimate the % of the agency's buildings that are likely to have met at least 3 of the Guiding Principles. (Must meet all elements to qualify)

a. 0-6% b. 7-14% c. 15-30% d. >30% e. Not tracked f. N/A

6. To what extent is benchmarking or monitoring of building utility data utilized to identify energy conservation opportunities? If benchmarking or monitoring is used, describe the process the agency uses briefly in the comments column.

a. Used frequently b. Used infrequently c. Never d. N/A

7. How frequently is information from building benchmarking or monitoring referenced in the previous question analyzed? (This output may assess if meters are working properly, identify trends, evaluate implemented ECMs, etc.)

a. Daily b. Monthly c. Multiple times per year
d. Annually e. Rarely f. Never
g. N/A

8. For purchased energy from renewable sources, how many MWhs of renewable energy certificates are from projects developed in the following years? If these numbers are not tracked, write "Not tracked."

a. Prior to 1999 b. 1999-2001 c. 2002-2004
d. 2005-2007 e. 2008-2012 f. N/A

9. Does the agency have a formal Fleet Management System (FMS) that tracks the following? (Yes, No, N/A for all) If the agency does not have fleet vehicles, choose "N/A – no fleet vehicles" for the first line.
   a. Total maintenance (labor hours and parts)
   b. Fuel usage by fuel type
   c. Procurement of vehicles
   d. Utilization of vehicles in miles and hours as applicable

10. To what extent has the agency streamlined or revised existing shuttle bus routes to ensure most efficient use?
   a. No agency shuttle buses
   b. No routes revised or consolidated
   c. Some shuttle bus routes have been streamlined or consolidated within the agency
   d. Some shuttle bus routes have been streamlined including sharing with other agencies
   e. N/A

11. Estimated % of agency buildings that have facilities that support bicycle commuting and use including bike racks, showers, and lockers. If the facilities do not include all of the features listed above, briefly describe what the facilities do include in the space provided.

a. 0-10% b. 11-50% c. 51-90% d. 91-100% e. Not tracked f. N/A

12. Estimated % of opportunities (i.e. locations or situations) where Industrial, Landscaping or Agricultural (ILA) water use is metered or otherwise measured.

a. 0-10% b. 11-50% c. 51-90% d. 91-100% e. Not tracked f. N/A

13. Estimated % of agency GSF with potable water use measured and tracked in EISA CTS, Portfolio Manager or a similar system.

a. 0-10% b. 11-50% c. 51-90% d. 91-100% e. Not tracked f. N/A

14. Identify any strategies currently in place for water reuse including the scale of use across the agency.

a. Not used b. Local c. Regional d. National e. N/A

- Water Recycling
- Industrial Water Reuse
- Other (describe in comments)

15. How is agency waste tracked? (A. Non-hazardous non-construction, B. Construction and demolition debris)

a. Volume b. Weight c. Other (describe in comments) d. Not tracked e. N/A

16. Identify and prioritize the strategies currently used to reduce solid waste. (The top strategy listed has the largest estimated impact. Do not include strategies that are not being utilized.)

a. Composting b. Recycling/Donation c. Reuse d. Source Reduction e. Other (describe in comments) f. N/A

17. Is there a current agency paper use reduction plan or policy? (Yes/No) If yes, provide a link to the policy if it is publicly available. Estimate the success of any long-term (5 year) paper use reduction efforts at the agency. Please check off which of the strategies below were used.

Success:

a. Plan has been in place less than 5 years
b. Agency does not measure paper use
c. No remarkable change in paper use
d. Increased paper use
e. Achieved measurable paper reduction but have not reached goal

f. Achieved or exceeded paper reduction goal

Strategies:
i. Default duplex printing
ii. Default narrower margins
iii. Paperless (electronic) records
iv. Electronic documents (e.g. agendas, document sharing)
v. Other (define in comments)

18. Have specific chemicals been identified for reduced acquisition, use, and/or disposal? If so, estimate success in meeting agency reduction goals to-date. If "d" or "e", please briefly describe the strategies used in the comments column.

    a. No results

    b. Increase in chemical use

    c. Chemical use stayed same

    d. Achieved measured chemical use reduction

    e. Achieved chemical reduction goal

    f. Not applicable

19. Sustainable Acquisition Training: Answer the following questions for both Acquisition Personnel and Purchase Card Holders

	Acquisition Personnel	Purchase Card Holders
Did agency training in FY11 include the following components:	[Yes, No, N/A]	[Yes, No, N/A]
a. CPG/recycled content		
b. EPEAT-registered products		
c. ENERGY STAR products/energy efficient products		
d. FEMP-designated efficiency requirements		
e. Low standby power requirements		
f. USDA Biobased / Biopreferred products		
g. WaterSense or other water efficient products		
h. Environmentally preferable products		
i. SNAP/non-ozone depleting substances		
j. Nontoxic or less toxic alternatives (e.g. non-VOC paint)		

k. Alternative fuel vehicles/alternative fuels

l. Renewable energy

m. Sustainable landscaping

20. Identify any specific area targeted for improvement in carrying out acquisition greening efforts. [FY11 or FY12]

a. Construction, Renovation, or Repair
b. Laundry Services
c. Building Operations and Maintenance
d. Cafeteria Operations
e. Landscaping Services
f. Meetings and Conference Services
g. Pest Management
h. Building Interiors/Furniture
i. Electronic Equipment
j. Janitorial Services
k. USDA Biobased / Biopreferred Acquisition
l. Other (describe in comments)

21. If the agency has prototypes or sample language for any of the following elements for use in preparing contract requirements for sustainable acquisitions, select those elements in the following table. If the language can be shared with others, provide it in the comments column or note the availability.

a. USDA Biobased / Biopreferred products

b. CPG/recycled content

c. ENERGY STAR products/energy efficient products

d. Environmentally preferable products

e. WaterSense or other water efficient products

f. SNAP/non-ozone depleting substances

g. EPEAT-registered products

h. Nontoxic or less toxic alternatives

i. FEMP-designated efficiency requirements

j. Low standby power requirements

k. Other (describe in comments)

22. How useful are the existing sustainable product categories in FPDS to track performance towards meeting sustainable acquisition goals?

a. Very useful b. Somewhat useful c. Not useful d. Do not use

23. To what extent are purchase card purchases tracked to ensure user conformity with sustainable

acquisition requirements?

a. Always b. Frequently c. Occasionally d. Rarely e. N/A

24. What procedures are in place to monitor and ensure sustainable products and/or services are delivered through contracts where they are required? (Yes, No, N/A for all)
    a. Agency COTR letters include responsibilities to verify green deliverables under applicable contracts as part of reporting to contracting officer
    b. Agency policies/procedures for accepting contract deliverables include verifying conformity with green requirements
    c. Past performance reviews include evaluation of sustainable acquisition
    d. Specification reviews are conducted annually
    e. Other (describe in comments)

25. Estimated % of imaging equipment that has power management settings enabled.

a. 0-10% b. 11-50% c. 51-90% d. 91-100%
e. Not tracked/Unsure f. Plan to track in FY13 g. N/A

Estimated % of surplus or excess electronics that goes to the following categories:

- Unicor
- Reuse and Recycling
- Donation
- Landfill/Destruction

Answer choices:

a. 0-5% b. 6-10% c. 11-20% d. 21-30%
e. 31-50% f. 51-80% g. 81-100% h. Not tracked

26. Use the space below to describe other recommendations for consideration by OFEE/CEQ.

Appendix 5: Agency Scorecard Questions

(Scorecard Agencies must answer)

27. Do IT contracts include the FAR clause 23.704 to require EPEAT-registered products? (Yes/No) If not, by when will this be implemented? [MM/YY]

28. Is there an agency-wide policy in place requiring that eligible faxes, copiers, printers and other equipment be set to duplex by default? (Yes/No) If not, by when will this be implemented? [MM/YY]

29. Do applicable contracts include clauses that require default duplex settings on purchased/leased equipment? (Yes/No) If not, by when will this be implemented? [MM/YY]

30. Is there a reporting and audit system in place to ensure compliance with PM requirements? (Yes/No) Explain in the space provided.

31. Does the agency have a tracking system in place to report % of surplus or EOL electronics that are reused or recycled? (Yes/No) If not, by when will the agency be able to report this %? [MM/YY]

32. Is the agency using only R2 and/or E-steward Certified Recycler when recycling? (Yes/No) If not, explain in the space below.

33. Green Purchasing contract action review table.

# of Eligible Contract	Center/ Contract Number	QTR (3rd or 4th 2011)	Compliant? YES/ NO	CPG/ Recycled Content	EPEAT-registered products *(Note: Only new contracts)*	Energy Star products/ appliances	FEMP-designated energy efficient products/ appliances	USDA Biobased/ Biopreferred products	WaterSense or other water efficient products	Envr. Preferable products	Products containing non - or lower ozone depleting substances (SNAP)	Products containing no or low toxic or hazardous constituents (e.g., non-VOC paint)	Other (Indicate)	Brief Description of Contract Action:
1														

34. Green Purchasing: If 95% compliance was not achieved on quarterly review of contract actions, identify and indicate corrective actions to be taken.

APPENDIX B:
SUSTAINABILITY SCORECARD

OMB SCORECARD on SUSTAINABILITY/ENERGY

Department of Commerce/SSO: Mr. Fred Stephens, Deputy Assistant Secretary for Administration

FY 2010 STATUS (As of January 2011)		PROGRESS		COMMENTS
Yellow	• Submitted comprehensive inventory as 2008 baseline for Scope 1&2 GHG Reduction Target of **21%** by 2020[1] _X_ Inventory submission late (Y)	Red	Actions taken since July 1, 2010: • Evaluated NOAA-DESC MOU for projects in NW region. • Awarded $5M solar array (ARRA funds) at NIST Gaithersburg (MD). • Secretary signed proactive environmental stewardship policy 12/9/10. • Completed EMS Audit 11/10; Management Review completed & Self-declared EMS conformance in 12/10. • Completed NREL audit on fleet. • Met most Electronic Stewardship goals, but don't have monitoring/audit system to track compliance with power management and report on EPEAT purchases; OMB approved Data Center consolidation Plan. • Did not demonstrate GPP compliance but modified its acquisition forecasting system to address sustainable acquisition and mandated use of GSA's BPA for green office supplies under Strategic Sourcing Initiative. Planned actions for next six months: • Update FY10-12 budget data by 2/11/11. • Submit final Sustainability Plan by 6/2/11. • Complete EISA 432 evaluations on 75% of appropriate facilities by 6/30/11. • Implement NREL plan to move inefficient AFVs (50) to locations w/ AF availability. • NIST will re-assess 28 buildings; DOC will update its SBIP & include in SSPP. • Implement monitoring/audit system to track compliance with power management goal and report EPEAT purchases. • Review ≥5% applicable FY11 Q2 contract actions to demonstrate compliance with sustainable acquisition goal and identify corrective actions as needed. • Meet with OMB/CEQ to discuss path forward for achieving green building goal.	• DOC fell from green to red on energy intensity reduction. It remained red on sustainable buildings and green on all other status goals. • DOC is red on progress for both actions taken and proposed because it did not complete any planned actions associated with transportation scorecard, was unable to demonstrate compliance on green purchasing, and did not identify meaningful planned actions it could take in the next six months to impact energy reduction and green buildings. • To achieve green progress, DOC needs to develop a monitoring/audit system to track compliance with power management, report on EPEAT purchases by 6/30/11 and demonstrate compliance on green purchasing. • Prior to FY 2010, NOAA reported total gross square footage; its revised data includes only goal-subject facilities where NOAA directly pays utilities. The correction resulted in an increase in energy intensity, and delayed DOC's GHG inventory submission. • DOC did complete its planned energy actions, including a preliminary audit for a USPTO UESC project and testing and M&V of HCHB project to install 20 VFDs to air handling units. • DOC met petroleum reduction goal for FY10 but increased its use compared to FY09; however it does appear to be on track for achieving 2015 goal.
Yellow	• Submitted comprehensive inventory as 2008 baseline for Scope 3 GHG Reduction Target of **6%** by 2020[1] _X_ Inventory submission late (Y)			
Red	• Reduction in energy intensity in goal-subject facilities compared with 2003: __ at least 15 percent and on track for 30 percent by 2015 (G) _X_ **10.8%** and not on track (R)			
Green	• Use of renewable energy as a percent of facility electricity use: _X_ Total of **5.0%** from renewable electricity sources including 2.5% from new sources (thermal, mechanical, or electric) (G) ___ 5 percent from any renewable electricity source (Y)			
Green	• Reduction in potable water intensity compared with 2007 is at least: _X_ **20.3%** and on track for 26% in 2020 (G) __ 4 percent (Y)	Red		
Green	• Reduction in fleet petroleum use compared to 2005 is at least: _X_ ≥18.4 percent and/or on track for 20% by 2015 (G) __ ≥8 percent (Y)			
Red	• Sustainable green buildings: 3 % of buildings sustainable 1 % GSF of inventory sustainable			

Footnote: [1]Agency status on achieving GHG metrics in FY2010 will be assessed in July 2011.

Figure B-1: The Department's January 2011 OMB Sustainability/Energy scorecard.

APPENDIX C:
OU REQUIRED DATA ELEMENTS FOR ANNUAL GHG INVENTORY AND SUSTAINABILITY REPORT

OUs will be requested to provide the following information:

(i) Energy consumption at facilities that pay utilities directly, broken down by type (i.e. natural gas, steam, electricity, direct purchase renewable, on-site renewable generation, and purchase of renewable energy certificates). Purchased electricity data (fossil fuel based and renewable) shall be provided by zip code. On-site renewable energy generation projects shall be listed per site (OUs may group off-grid or non-electricity generating renewable projects that are small and similar and report them as a single sum. This shall be clearly noted in the OU submission.);

(ii) Vehicles and Equipment Energy (non-FAST);

(iii) Potable water consumption at facilities that pay water bills directly;

(iv) Industrial, Landscape, and Agricultural/Non-potable water consumption;

(v) Use of refrigerants and fluorinated gases;

(vi) On-site wastewater treatment data;

(vii) On-site landfill waste disposal data;

(viii) Emissions from specified industrial processes;

(ix) Tons of contracted waste disposal solid waste disposed of off-site;

(x) Contracted wastewater treatment;

(xi) Federal employee commuting survey;

(xii) Federal employee business ground travel data;

(xiii) Federal employee business air travel data;

(xiv) List of new Federal building designs and construction (efficiency mandate);

(xv) Facilities currently metered for energy and future metering plans;

(xvi) Square footage of buildings for which the OU pays utilities directly;

(xvii) Electricity, natural gas, and steam metering data;

(xviii) Energy training data (participants and funding);

(xix) Tons of construction and demolition (C&D) waste sent to landfill in the previous fiscal year and projected for the next five years;

(xx) Tons of construction and demolition (C&D) waste recycled in the previous fiscal year and projected for the next five years;

(xxi) Tons of non-hazardous, non-C&D waste sent to landfill in the previous fiscal year and projected for the next five years;

(xxii) Tons of non-hazardous, non-C&D waste recycled in the previous fiscal year and projected for the next five years;

(xxiii) Tons of non-hazardous, non-C&D waste composted in the previous fiscal year and projected for the next five years;

(xxiv) Tons of waste sent to an on-site or off-site waste-to-energy facility in the previous fiscal year and projected for the next five years;

(xxv) Number of sites or facilities with on-site composting programs;

(xxvi) Number of sites or facilities composting through off-site composting programs;

(xxvii) Percentage of OU-operated offices/sites with a recycling program;

(xxviii) If OU offices located in multi-tenant buildings, percentage of those buildings with a recycling program;

(xxix) Percentage of OU-operated residential housing with recycling programs;

(xxx) Operating Unit's environmental compliance assessment schedule for the next four years;

(xxxi) Names of facilities audited during the previous fiscal year and summary of compliance issues found (i.e. number and category of findings at each facility, [e.g. hazardous waste, NPDES permit, etc…] during all types of audits as well as inspections by regulatory agencies;

(xxxii) Details on the number of repeat findings and number of findings per facility;

(xxxiii) Current status of compliance issues, i.e. whether they have been closed out and timeline and action plan for closing outstanding compliance issues;

(xxxiv) Direct obligation and alternative finance (ESPC/UESC) sustainability funding data (as approved by OU chief financial officer);

NOTE: Sustainability funding data should be submitted directly to the Department's **Director for the Office of Budget.**

(xxxv) High performance sustainable buildings – total number of buildings to which the mandate applies (leased independently of GSA or owned, and greater than 5,000 GSF), broken down by:

1. Owned versus FRPP reported leased facilities
2. Percentage of owned that meet the guiding principles for high performance sustainable buildings, and
3. Percentage of FRPP leased facilities that meet the guiding principles for high performance sustainable buildings.

This shall include the previous fiscal year and a projection over the next five fiscal years.

(xxxvi) Update to Operating Unit five year energy and environmental project implementation plans detailing specific projects planned to meet sustainability goals, quantifying the estimated benefits of each project, and projecting energy consumption, potable water consumption, non-potable water consumption, metering, renewable energy consumption, pollution prevention, percent of buildings that will meet guiding principles for high performance sustainable buildings, and (sustainable) innovation over the next five fiscal years;

(xxxvii) Update of January OMB Sustainability/Energy "Progress" column on actions taken over the past six month and planned actions for the next six months;

(xxxviii) A completed OMB Sustainability/Energy scorecard depicting the OU's progress as per the OMB template (see sample in 3-4.6 above); and

(xxxix) Other information necessary to complete the January OMB Sustainability/Energy scorecard and greenhouse gas and sustainability data report for OMB.

FEMP Portal Tabs

	Electricity	
1.7	Scope 2 - Elec. Summary eGRID Direct Entry (no link to zip tool)	Data Input
	Renewable Energy	
2.1	Renewable Energy Instructions	Guidance
2.2	Renewable Energy Data	Data Input
2.3	Renewable Energy Emissions and Summary	Reporting
	Inputs/Calcs for scopes 1, 2 and 3	
3.1	Direct Fuel Use and GHGs Instructions	Guidance
3.2	Scope 1: Goal Subject and Excluded Buildings Energy	Data Input
3.3	Scope 1: Vehicles and Equipment Energy	Data Input
3.4	Scope 1: FAST Mobile (Vehicle Fleet) Energy	Data Input
3.5	Scope 1: Mixed Refrigerants	Data Input
3.6	Scope 1: Fugitive F-gases	Data Input
3.7	Scope 1: Wastewater Treatment Plant	Data Input
3.8	Scope 1: Fugitive Landfill Gases	Data Input
3.9	Scope 1: Process Emissions	Data Input
3.10	Scope 2: Steam and Hot Water	Data Input
3.11	Scope 2: Chilled Water	Data Input
3.12	Scope 2: Combined Heat and Power (CHP)	Data Input
3.13	Scope 3: Transmission and Distribution Losses	Data Input
3.14	Scope 3: Air Business Travel	Data Input
3.15	Scope 3: Ground Business Travel	Data Input
3.16	Scope 3: Commuter Travel	Data Input
3.17	Scope 3: Contracted Wastewater Treatment	Data Input
3.18	Scope 3: Contracted Waste Disposal	Data Input
	Other Reporting	
4.2	New Building Design	Data Input
4.3	Source Energy Savings Credit	Data Input
4.4	Other Data (Water, Square Footage, Project Financing and Training)	Data Input
4.5	Performance Summary	Reporting
4.6	GHG Results Summary	Reference

APPENDIX D:
AWARD CATEGORIES

Some of these award categories descriptions may be duplicative to the GreenGov Presidential Awards and the Federal Energy and Water Management Awards. Department level winners in the Energy and Environmental Stewardship Awards will be eligible to compete in the annual White House GreenGov Awards program and the Federal Energy and Water Management program. As stated in sections (n) and (o). NOTE: OSEEP will submit the awards outside of the Department if applicable.

(a) Sustainability Hero Award. This award recognizes a Federal employee who is a sustainability champion and agent of change within his or her agency. The selected individual will demonstrate a history of outstanding performance in leading implementation of sustainable practices while reflecting a comprehensive approach to energy and environmental management through innovative strategies, practices, and outreach.

(b) Green Innovation Award. This award recognizes an innovation or idea with clear potential to transform the Federal community's overall energy and environmental performance, in keeping with the goals defined by E.O. 13514. This award will be presented to an individual or team responsible for the development and execution of a novel new product, project, program, design, or revolutionary idea that facilitates sustainability across the Federal government. Award winners will ideally represent efforts in the implementation stage; however, innovation that demonstrates near-term feasibility may also be recognized.

(c) Lean, Clean, and Green Award. This award recognizes outstanding organizational achievement in building or fleet energy efficiency or renewable energy development and deployment. The winning project or program will demonstrate a combination of measurable results in energy efficiency (reduced energy consumption), increased use of renewable energy, and reduced greenhouse gas pollution, or decreased petroleum fuel consumption and greenhouse gas pollution reduction.

(d) Good Neighbor Award. This award recognizes a Federal agency team for its exemplary engagement with local or regional communities to promote one or more of the goals of E.O. 13514. Nominations in this category should focus on Federal agency representatives who are actively involved in local community planning and sustainability initiatives, have established and are pursuing collaborative sustainability goals, and demonstrate success in aligning policies and practices with community partners to achieve those goals. Nominations for this category must include at least one letter of support from a non-Federal local or regional community partner in order to be considered.

(e) Green Dream Team. This award recognizes exceptional leadership by an interagency green team to effectively place a Federal sustainability idea into action. The selected team will have clearly demonstrated that its collaboration efforts were integral to the successful implementation and institutionalization of the idea within its office, agency, or agencies and will highlight collaboration through Regional Councils, Federal Executive Boards, workgroups or other interagency organizations.

(f) Building the Future. This award recognizes a Federal civilian or military facility or installation that successfully demonstrates the policy and performance goals of E.O. 13514 by incorporating sustainable practices and principles into all aspects of their operations. Nominees should highlight significant achievements in building or installation design, operation and management, supply chain management, resource conservation, community engagement, employee involvement, and innovation in order to create a more sustainable facility.

(g) Recycling. This award recognizes a team, or individual for outstanding activities, including the collection, separation and processing by which products or other materials are recovered from the waste stream for use in the manufacture of new products (other than fuel for producing heat or power by combustion). Preference will be given for recycling programs that have an internal education component or a public outreach component designed to promote recycling at the site, facility or operation or to promote partnerships with the surrounding community.

(h) Renewable Energy. This award recognizes a team or individual for outstanding organizational achievement in building renewable energy development and deployment. The project or program will demonstrate a combination of measurable results in energy efficiency (reduced energy consumption), increased use of renewable energy, and reduced greenhouse gas pollution.

(i) Green Purchasing. This award recognizes a team or individual for outstanding activities on the most effective and innovative programs for the purchase and use of biobased products. Preference will be given for programs that have an internal and external education component or outreach program designed to promote the green purchasing objective of E.O. 13423 and E.O. 13514.

(j) Electronic Stewardship. This award recognizes a team or individual that promotes sustainable environmental stewardship of their electronic assets in all there lifecycle phases: acquisition and procurement, operation and maintenance, and end-of-life management practices in accordance with the Federal Electronic Challenge guidance for Gold partners.

(k) Alternative Fuel and Fuel Conservation in Transportation. This award recognizes a team or individual with outstanding organizational achievement in fleet energy efficiency. This includes establishment of new alternative fuel infrastructure; methods for encouraging the use of alternative fuels; ride use; or any other methods used to decrease petroleum consumption. The winning project or program will demonstrate a measurable decrease in petroleum fuel consumption and associated greenhouse gas pollution.

(l) Energy and Water Management. This award recognizes a team or individual that with project or program achievement in energy efficiency, renewable energy, water efficiency, sustainable buildings, vehicle fleet management, and multiple types of energy management.

(m) Historic Preservation. This award recognizes a Federal Agency Team or individual who demonstrated initiative and creativity in improving the Department of Commerce's consideration of the effects of agency programs or specific activities

on historic properties. This award recognizes that historic preservation promotes sustainable development through the conservation, improvement, and re-use of built resources. Award winners will demonstrate exceptional efforts to integrate historic preservation into agency programs through planning, management, support, and/or maintenance efforts.

(n) Green Gov Presidential Award Nomination. In order to be considered for the GreenGov Presidential Award, Department Award recipients and honorable mentions must update their nomination materials with recent accomplishments and nominate themselves for the GreenGov Presidential Awards. This includes verifying compliance with the applicable laws and regulations as required in the GreenGov Presidential Award Nomination form. GreenGov awards must be submitted through the Office of Sustainable Energy and Environmental Programs.

(o) Federal Energy and Water Management. These awards honor individuals and organizations making significant contribution to the efficient use of energy and water resources within the Federal Government. Nominations for this award must be submitted through the Office of Sustainable Energy and Environment.

APPENDIX E:
CLEAN AIR ACT GENERAL CONFORMITY EVALUATION GUIDANCE

1.0 Introduction and General Requirements

1.1 Purpose and Scope

This guidance establishes the procedures and responsibilities for conformity evaluation at U.S. Department of Commerce facilities. This guidance will assist the Department in implementing the Clean Air Act General Conformity Requirements for proposed actions.

This guidance is applicable to air emissions from stationary, mobile, and area sources associated with all facilities within the geographical borders of the United States, Commonwealth of Puerto Rico, U.S. Virgin Islands, Guam, American Samoa, and Commonwealth of the Northern Marianas Islands. Special limitations apply to actions involving aircraft and vessels.

1.2 Legislation

Clean Air Act, as Amended. In order to ensure that Federal activities do not hamper local efforts to control air pollution, Section 176(c) of the Clean Air Act (CAA), 42 U.S.C. § 7506(c), prohibits Federal agencies, departments, or instrumentalities from engaging in, supporting, providing financial assistance for, licensing, permitting or approving any action which does not conform to the applicable EPA-approved state, Federal, and/or Tribal implementation plans.

Conformity to an implementation plan means: Conformity to a plan's purpose of eliminating or reducing the severity and number of violations of the National Ambient Air Quality Standards (NAAQS) and achieving expeditious attainment of such standards; and that such activities will not (1) cause or contribute to any new violation of the NAAQS; (2) increase the frequency or severity of an existing violation; or (3) delay the timely attainment of a standard, interim emission reduction, or milestone. Section 176(c) of the CAA was amended in 1995 to clarify that the conformity requirements apply only to designated nonattainment and maintenance areas.

The CAA established two types of conformity programs: “transportation conformity” and “general conformity.” Conformity determinations for Federal actions related to transportation plans, programs and projects developed, funded, or approved under title 23 U.S.C. or the Federal Transit Act, 49 U.S.C. § 1601 et seq. are governed by the Transportation Conformity Rule found at 40 CFR Part 51, Subpart T rather than the General Conformity Rule. It is not expected that the Department will propose actions subject to the Transportation Conformity Rule; therefore, this document provides guidance only on the General Conformity Rule.

1.3 Rule Requirements

The EPA rule implementing the conformity requirements, “Determining Conformity of General Federal Actions to state or Federal Implementation Plans,” was published on 30 November 1993 at 58 FR 63214 and codified at 40 CFR Parts 51 and 93.

States and recognized Tribes may voluntarily revise their implementation plans to incorporate general conformity requirements. Once an SIP or TIP has been revised and approved by EPA, the conformity requirements become Federally-enforceable and Federal agencies are subject to the conformity requirements as they appear in the SIP. In cases where a Federal Implementation Plan (FIP) is in effect, Federal actions must conform to the requirements of the FIP.

More information on the rule requirements can be found at http://www.epa.gov/air/genconform/index.html.

1.3.1 Prohibition (40 CFR Part 93.150)

No department, agency or instrumentality of the Federal government shall engage in, support in any way or provide financial assistance for, license or permit, or approve any activity, which does not conform to an applicable implementation plan.

A determination must be made that a Federal action conforms to an applicable implementation plan in accordance with the General Conformity Rule before the action is taken.

A determination of conformity does not exempt the action from any other requirements of the applicable implementation plan, the National Environmental Policy Act (NEPA) or the CAA.

A determination of conformity in accordance with the General Conformity Rule must be made for all actions except: (1) actions covered by the Transportation Conformity Rule; (2) actions where the total emissions are below specified de minimis levels; and (3) certain other actions which are exempt or presumed to conform.

1.3.2 State Implementation Plan (SIP) and Tribal Implementation Plan Revisions (40 CFR Part 93.151)

Each state and Tribe has the option of revising its SIP/TIP to incorporate the criteria and procedures contained in the General Conformity Rule. In addition to containing the applicable conformity requirements, the SIP contains other information needed for the conformity analysis, such as emissions inventories. To date 29 states have received EPA approval for their conformity SIP revisions.

Until/unless EPA approves an SIP or TIP revision, Federal agencies must comply with the Federal General Conformity Rule set out in 40 CFR Part 93. If and when the SIP or TIP is approved, Federal agencies must comply with it and any additional provisions of 40 CFR 93 subpart B not contained in the new SIP/TIP. If only a portion of the SIP or TIP revision is approved, Federal agencies must comply with the approved portion of the SIP or TIP conformity revision, as well as the Federal General Conformity Rule for any portions not approved.

In addition, any previously applicable SIP requirements relating to conformity remain enforceable until the state revises its SIP to specifically remove the requirements and EPA approves the revision.

1.4 Responsibility for Conformity Evaluation (40 CFR Part 93.154)

Each Federal agency taking an action subject to the General Conformity Rule must make its own conformity evaluation. In making its conformity evaluation, a Federal agency must consider comments from any interested parties. In cases where multiple Federal agencies have jurisdiction over the action or parts of the action, an agency may adopt the evaluation of another Federal agency or develop its own evaluation in making the conformity determination. Other Federal agencies may have jurisdiction over parts of a Department action where the other agency is granting the Department a permit, approval, or conducting a required consultation. Examples of such actions are Endangered Species Act consultations, Federal Aviation Administration actions, and Army Corps of Engineers Permits.

1.5 Adopting a Conformity Evaluation. If the Department chooses to adopt the conformity

evaluation of another Federal agency, the Department must still prepare an independent, stand-alone, signed conformity determination describing any limitations, conditions or mitigation specific to the Department portion of the action. The determination must state that the Department adopts as its evaluation the evaluation contained in the conformity determination of the other agency, and the other agency's conformity determination must be attached as an appendix.

In those situations where the Department adopts the conformity evaluation of another Federal agency, the Department continues to be responsible for assuring that the reporting and public participation requirements set out in section 4.3 below are satisfied for the "adopted" conformity determination. The Department may satisfy those requirements by participating in the reporting and public participation procedures of the originating agency. All such communication with regulatory agencies and the public, however, must clearly state that the determination is satisfying the conformity obligation of both the originating agency and Department and offer the opportunity to submit comments to the Department on the conformity evaluation and determination. In those cases where the Department does not participate in the originating agency's procedures, the Department must separately satisfy the reporting and public participation requirements.

1.6 Procedure Overview and Documentation

A Conformity Evaluation must be completed for every Department action that generates emissions. The action proponent is responsible for the documentation. The Conformity Evaluation can be satisfied by (1) a determination that the action is not subject to the General Conformity Rule, (2) a Record of Non-Applicability, or (3) a Conformity Determination. All Records of Non-Applicability and Conformity Determinations and their supporting analytical materials must be separate, stand-alone documents signed by the appropriate delegated official. These documents, however, should be companion documents to any NEPA documentation being prepared (see discussion of NEPA integration below).

1.6.1. Action Not Subject to the Rule. The action proponent may make a determination that the proposed action is not subject to the General Conformity Rule. Actions not subject to the rule are actions that occur in attainment areas, and that do not generate emissions in nonattainment areas; or actions where the criteria pollutant (or its precursors) that is emitted is one for which the area is in attainment. See STEPS 2 and 3 in Section 2 below. If NEPA documentation is prepared for the action, the determination shall be described in that documentation; otherwise, no documentation is required.

1.6.2 Record of Non-Applicability. A Record of Non-Applicability (RONA) must be prepared if the proposed action is subject to the Conformity Rule, but is exempt because it fits within one of the exemption categories. These are listed in TAB F. A RONA is a stand-alone document setting out the facts and circumstances establishing that the action is exempt. A sample format for the RONA is provided in TAB C. If the action is exempt because the calculated total emissions are below the de minimis levels, the assumptions and calculations used to determine the level of de minimis emissions must be explained in the RONA. The manager of the facility sponsoring the action shall sign the RONA. Consultation with the Office of General Counsel is recommended.

RONAs are not separately subject to the Reporting or Public Participation requirements of the General Conformity Rule; however, they should be incorporated into any NEPA documentation that is being prepared. (See Integration with NEPA Document Preparation Section). Because the General Conformity Rule requires the Federal agency to make the determination of conformity with the SIP, a RONA is required to document that a responsible Department official has considered and complied with the rule. Since the conformity rule can act as a prohibition on moving forward with a Federal project, it presents a ripe area for challenge to controversial or unpopular actions. Complete and readily accessible documentation of compliance with the General Conformity Rule is critical to successfully defending

against legal challenges.

1.6.3 Conformity Determination. A Conformity Determination is required when the non-exempt emissions equal or exceed the de minimis levels or are regionally significant. A Conformity Determination is a stand-alone document containing the entire analysis and supporting materials necessary to demonstrate compliance with the conformity determination criteria and including any required mitigation measures.

1.6.4 Record Retention. All of the records identified above shall be maintained in the project file for at least two years after the action is completed.

1.6.5 Classified Actions. Actions considered classified for national security reasons are not exempt from the requirement for a Conformity Review. Conformity documentation, both draft and final, must be prepared, safeguarded, and disseminated per the requirements applicable to classified information. When feasible, the documents are to be organized in such a manner that classified portions are included as appendices so that the unclassified portions can be made available to the public. Review of classified documentation will be coordinated with personnel with appropriate security clearances at the U.S. EPA and the state to fulfill the reporting requirements of the General Conformity Rule.

Classified conformity documentation serves the same purpose as unclassified documentation, demonstrating that the statutory and regulatory requirements have been satisfied. Even though the classified documentation does not undergo public review and comment, it will still be part of the information package that is placed before the decision maker for the proposed action. The content of the classified conformity documentation will therefore meet the same content requirements applicable to publicly available documentation.

1.6.6 State and Tribe Rules. State and Tribe conformity rules cannot be less stringent than the General Conformity Rule. State and Tribe rules also cannot be more stringent than the General Conformity Rule with one exception. If the state or Tribe revises the SIP/TIP to apply the entire General Conformity Rule to non-governmental entities in the same manner as to governmental entities, then the state or Tribe may impose more stringent conformity requirements on both groups. States or Tribes may add to the General Conformity Rule in order to clarify the rule language or to develop new language for areas not addressed by the Federal rule. However, any such variations from the Federal rule should be carefully evaluated to assure that they do not result in the state or Tribe rule imposing more stringent requirements on Federal actions.

OUs (OUs) should monitor conformity SIP revisions to identify and raise issues of concern. Continuing problem areas should be referred up the chain of command.

Examples of areas States or Tribes may address in their SIP/TIP revisions that are acceptable include: (1) details on how emissions budgets will be determined, what projects will be included in the emissions budget, how emissions will be tracked and how emissions will be allocated in the budgets; (2) establishing criteria for applying area-wide and localized modeling; (3) describing the process for implementing and enforcing mitigation measures; (4) providing an interagency consultation process where multiple Federal agencies have jurisdiction; and (5) with respect to offsets, describing equally enforceable measures, other than SIP/TIP revisions, that satisfy the enforceability criteria.

Examples of areas States or Tribes may address in their SIP/TIP revisions that are not acceptable (unless applied equally to non-Federal entities) include: (1) lower de minimis thresholds; (2) requiring conformity determinations based on state, as opposed to Federal, air quality standards; and (3) requiring conformity determinations for pollutants other than criteria pollutants and their precursors.

1.7 ASSUMPTIONS (40 CFR Part 93.159)

1.7.1 Planning Assumptions

Conformity evaluations must be based on the latest planning assumptions derived from population, employment, travel and congestion estimates approved by the MPO or other authorized agency. Any revisions to these estimates that will be used in the conformity determination must be approved by the MPO or other authorized agency.

1.7.2Modeling

Air quality modeling analyses must be based on the applicable air quality models, databases, and other requirements specified by EPA in the most recent version of Guideline on Air Quality Models (EPA publication number 450/2-78-027R). If the guideline's techniques are inappropriate, written approval for any modification or substitution must be obtained from the EPA Regional Administrator on a case-by-case or specific program basis. All techniques used must be explained and documented.

1.7.3 Scenario Years

Evaluations must be based on the total of direct and indirect emissions and must reflect the scenarios that are expected to occur under each of the following circumstances:

– The mandated attainment year in the CAA, or the farthest year in which emissions are specified in the maintenance plan, if applicable;

– The year during which the total of direct and indirect emissions from the action is expected to be the greatest on an annual basis; and

– Any year for which the applicable SIP specifies an emissions budget.

2.0 Applicability Analysis

2.1 Procedure for Determining Applicability (40 CFR Part 93.153)

The following steps (outlined in Figure 1 below) should be followed to determine the applicability of the General Conformity Rule to a Federal action.

STEP 1: Define the Federal Action.

The first step in the process is to define the scope of the action. Federal action is defined in the conformity rule as “any activity engaged in by a department, agency or instrumentality of the Federal government or any activity that a department, agency or instrumentality of the Federal government supports in any way, provides financial assistance for, licenses, permits, or approves.”

The discussion of the action should include any identified alternatives. To facilitate comparison and review of the alternatives, they should be summarized in a table that includes a brief description of the major elements, such as construction projects and changes in personnel loading, motor vehicle use and number of aircraft or ships operating at the facility. The discussion and summary of the alternatives should include the “No Action” alternative. Routine or nominal actions may not have any identified

alternatives; therefore, no additional discussion would be necessary.

The Federal action for conformity purposes can be different from the Federal action for NEPA purposes. The conformity action is allowed to cover a shorter timeframe or have a more defined scope than the NEPA action may have. Conformity actions can also reach farther back in time than the NEPA action, when necessary to establish appropriate comparison years for netting emission increases and decreases. Consult with legal counsel if the proposed action may have these issues.

STEP 2: Is the Action Located in an Air Quality Nonattainment or Maintenance Area?

The General Conformity Rule applies only to actions that generate emissions in nonattainment or maintenance areas.

There are a few special circumstances, however, when conformity determinations may be required for actions that are located in attainment areas. If the action is located in an attainment area but emissions from mobile sources associated with the action are generated in a nearby nonattainment area, those emissions must be evaluated in accordance with the rule. Two examples of such a circumstance are facility employees who drive to work from or through a nonattainment area, and helicopters that fly low-level paths in a nonattainment area.

If the action is located in an air quality nonattainment or maintenance area, or falls within the special circumstances described above, proceed to STEP 3. If the action is located in an attainment area and no special circumstances exist, stop here; the General Conformity Rule does not apply.

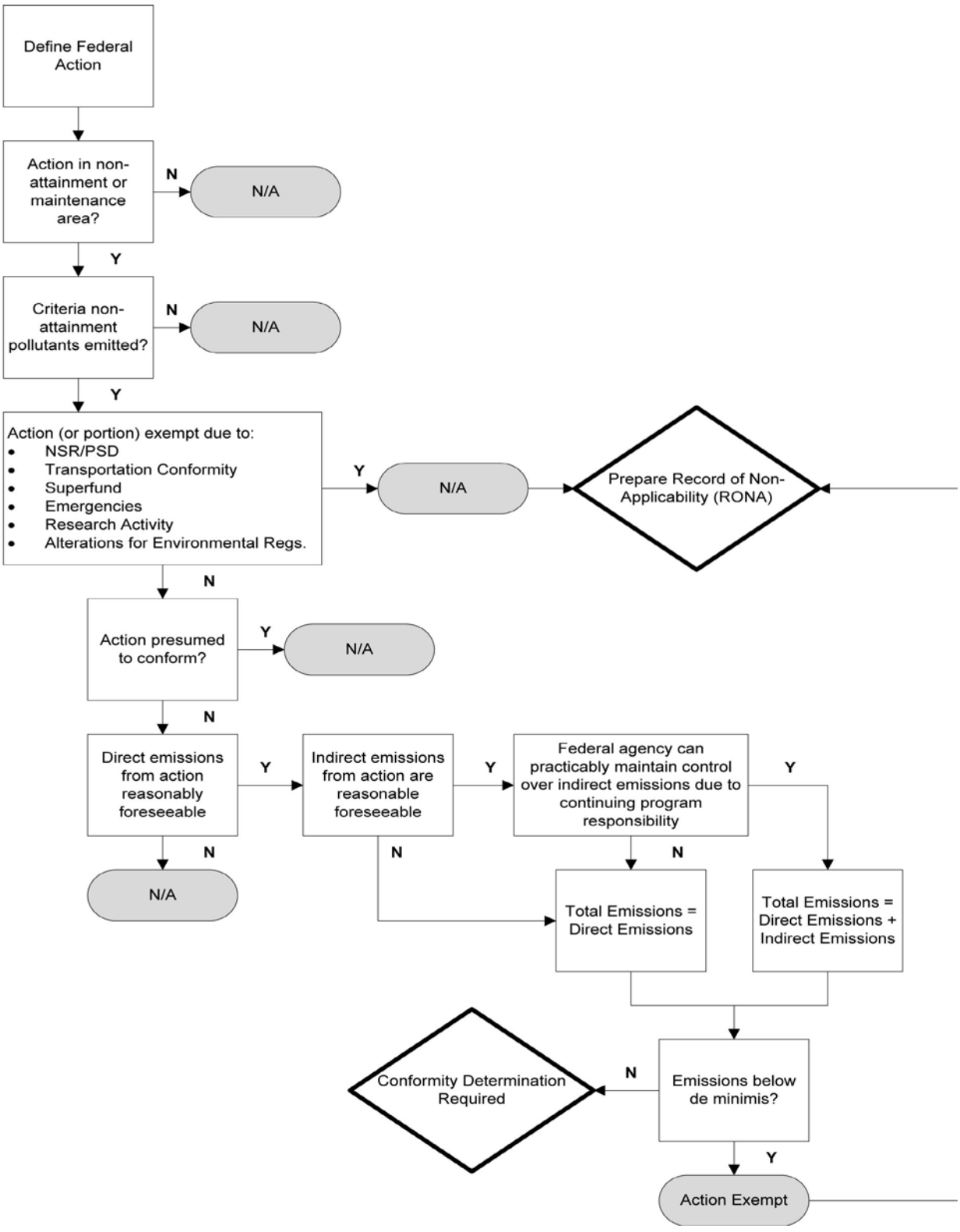

Figure 1: Flow Chart for Determining Applicability

STEP 3: Does the Action Result in the Emission of Criteria Pollutants?

The General Conformity Rule requires analysis only of emissions of criteria pollutants and their precursors for which an area is designated nonattainment or that are covered by a maintenance plan. If the action results in the emission of criteria pollutants for which an area is designated nonattainment or maintenance, proceed to STEP 4.

If the action results in the emission of criteria pollutant(s) other than those for which the area is designated nonattainment or maintenance, stop here; the General Conformity Rule does not apply.

STEP 4: Is the Action (Or Portion of the Action) Exempt From Conformity Requirements?

(a) EPA has determined the following Federal actions applicable to Department operations (or portions thereof) to be exempt:

(i) Actions as identified by EPA in 40 CFR 93.153 that would result in no emission increase or an increase that is clearly de minimis. A complete list of these actions, considered "exempt by definition," is provided in TAB F.

(ii) Actions implementing a decision to conduct or carry out a program for which a conformity determination has been made.

(iii) Actions that are determined exempt, regardless of the amount of emissions, because they are sufficiently covered by another program, positively contribute to air quality or fall within the emergency category.

(iv) The portion of an action that includes new or modified stationary sources that require a permit under the new source review (NSR) program (Section 173 of the Act) or the prevention of significant deterioration (PSD) program (Title I, Part C of the Act);

(v) Actions in response to emergencies or natural disasters which are commenced on the order of hours or days after the emergency or disaster and, if applicable, which meet the requirements of paragraph (e) of this section;

(vi) Research, investigations, studies, demonstrations, or training (other than those exempted under paragraph (a) of this section), where no environmental detriment is incurred, and/or the particular action furthers air quality research, as determined by the State agency primarily responsible for the applicable SIP;

(vii) Alteration and additions of existing structures as specifically required by new or existing applicable environmental legislation or environmental regulations (e.g., hush houses for aircraft engines and scrubbers for air emissions);

(viii) Direct emissions from remedial and removal actions carried out under the Comprehensive Environmental Response, Compensation and Liability Act

(CERCLA) and associated regulations, to the extent such emissions either comply with the substantive requirements of the PSD/NSR permitting program or are exempted from other environmental regulation under the provisions of CERCLA and applicable regulations issued under CERCLA.

(b) **Emergency actions** that continue for more than six months continue to be exempt only if the Federal agency makes a written determination that for a specified period not to exceed an additional 6 months, it is impractical to prepare the conformity analyses and the action cannot be delayed due to overriding concerns for public health, welfare, national security interests or foreign policy commitments. EPA and the States must be allowed 15 days to review and provide comments on the draft written determination to extend the exemption at the beginning of the extension period. EPA also requires Federal agencies to publish a notice within 30 days of making the extension decision. The notice must be published in a daily general circulation newspaper for the affected area. New determinations must be made for each additional six-month period. An agency may only declare three 6-month extensions without additional documentation. Thereafter, the agency must provide additional information concerning the emergency conditions to EPA and the State or Tribe.

(c) CAA Section 182(f) **Exemptions for Nitrogen Oxides** (NOx). In addition to the exemptions noted above, an area may also receive an exemption from the conformity requirements for NOx if EPA determines that additional NOx reductions would not contribute to attainment of the ozone standard in the area. A number of areas had obtained NOx exemptions under the 1-hour ozone standard but those exemptions no longer apply following the revocation of the 1-hour standard. Areas in nonattainment of the 8-hour ozone standard must submit a new petition for an exemption under that standard.

(d) **Procurement Actions**. The General Conformity Rule does not apply to procurement actions; for purposes of interpreting the present rule, the Department considers procurement actions not covered by the rule to include such things as the acquisition of supplies or services produced or developed by non-Federal entities at a location other than the facility. On the other hand, **acquisition of supplies such as the construction of buildings, or the provision of services such as facility support contracts on a Federal facility, are covered by this rule.**

All of the sources of emissions caused by an action should be separately evaluated to determine if any source is exempt. In some cases, the entire action will be exempt from the rule; in other cases, only portions of the action or individual sources will be exempt from the rule. Note, however, that some categories cannot be combined without violating the purpose of the rule. For example, routine maintenance operations could usually be exempted, but not if they are being relocated as part of a larger realignment into a new air district.

If the source is determined not to be exempt, include it in the total emissions for the action and proceed to STEP 5. If the source is one that is exempt due to any of the above circumstances, the emissions associated with the source should not be included in the total emissions for the action. If the entire action is exempt, stop here. Prepare a Record of Non-Applicability (RONA) to document the basis for exempting the emissions from the action (or portion of the action). Refer to Section IV of this guidance for further discussion and see TAB C for an example.

STEP 5: **Is the Action Presumed to Conform?**

40 CFR 93.153 describes Federal actions that are presumed to conform. Federal agencies may

also develop, through rulemaking, categories of actions that are presumed to conform. The Department of Commerce has not established any "presumed to conform" lists.

If States and Tribes choose to amend their SIP or TIP to include a general conformity rule, they may also develop a list of actions that are presumed to conform. Consult any applicable TIP or EPA-approved SIP.

STEP 6: **Identify all Direct Emissions Caused by the Federal Action**.

Direct emissions are those emissions caused by the Federal action and that occur at the same time and place as the Federal action. Emissions are caused by the Federal action if they would not otherwise occur in the absence of the Federal action. Typically, direct emissions will include those emissions associated with sources that are owned or operated by a Federal facility. This includes emissions from all mobile, area and stationary sources, including emissions from the construction phase of a project. Emissions should be calculated in tons per year on an annual calendar basis.

Essentially, the emissions must flow directly from the Federally-owned or operated aspects of the Federal action.

Proceed to STEP 7 to determine if any indirect emissions are caused by the action.

STEP 7: **Identify All Reasonably Foreseeable Indirect Emissions Caused By the Federal Action.**

Indirect emissions are those emissions that are caused by the Federal action, but that may occur later in time and/or may be farther removed in distance from the action itself but that are still reasonably foreseeable. Emissions are caused by the Federal action if they would not otherwise occur in the absence of the Federal action. Typically, indirect emissions will include two types: (1) emissions from mobile sources that are associated with the Federal action but that are not owned or operated by the Federal agency (i.e., employee vehicles, delivery trucks); and (2) emissions from the actions of private entities under a Federal lease, permit, or approval.

If reasonably foreseeable indirect emissions caused by the action are identified, proceed to STEP 8. If the indirect emissions caused by the action or any portion of the action are not reasonably foreseeable, those emissions are not included in the total emissions for the action; proceed to STEP 9.

STEP 8: Can the Indirect Emissions Caused By the Federal Action Be Practicably Controlled Due To Continuing Program Responsibility?

In calculating total emissions it is important to distinguish between direct emissions and indirect emissions. All direct emissions must be included in the calculation. Indirect emissions are included in the calculation, however, only if two criteria are met. First, the emissions must be reasonably foreseeable, and second, they must be caused by an emission source that is within the Federal agency's ability to practicably control and that will be controlled due to a continuing program responsibility.

Where an agency is performing its normal program responsibilities, takes actions itself, or imposes conditions that result in air pollutant emissions by a non-Federal entity taking subsequent actions, such emissions are considered within a continuing program responsibility. If the Federal action is a lease, the agency will often have sufficient control over the emissions to constitute a "continuing program responsibility." For example, if an action will result in 200 new families moving to an area, only those motor vehicle emissions associated with personnel commuting to and from work should be included

in the emissions calculation. Motor vehicle use for shopping trips and other errands, and emissions from heating homes off-site, are not emissions the Federal agency can control. Commuting can be controlled, at least to the degree the Department can encourage carpooling and the use of public transit through various incentive programs. When calculating construction-phase emissions, construction employee vehicle emissions generated while driving on base would be indirect emissions potentially under Federal control.

The construction employee vehicle emissions generated while commuting are not indirect because they are not caused by the Federal action, nor controlled by the Department, and presumably the construction workers would be driving to work regardless of our action.

If indirect emissions caused by the action that are both reasonably foreseeable and may be practicably controlled are identified, proceed to STEP 9 and include those emissions in the calculation of total emissions. If the indirect emissions associated with the action or any portion of the action may not be practicably controlled through a continuing agency program responsibility, those emissions should not be included in the total emissions for the action. Proceed to STEP 9.

STEP 9: **Determination of Total Emissions.**

Direct and indirect emissions from all non-exempt sources of criteria pollutants (or their precursors) caused by the Federal action must be included in the calculation of total emissions. The total direct and indirect emissions must be calculated for each nonattainment or maintenance pollutant (or precursor) in tons per year for each year of the project up to the attainment date for that pollutant. For the purposes of determining total emission levels for ozone, NOx and volatile organic compounds (VOCs) are treated separately (not added together) to determine the total emissions. The rule makes it clear, however, that only the net emissions must be considered (i.e., the sum of direct and indirect emission increases and decreases caused by the Federal action).

The calculation of net emissions allows the subtracting out of emission sources associated with activities that are moving from the facility, as well as adding in emissions from the new activities. In order for the conformity analysis to net the decreases and increases, however, they must be characterized as one Federal action. Consolidations and replacements of aircraft, vessels or equipment, are all good examples of situations where netting works well.

Emission Estimation Procedures

Assumptions used in calculating emissions should be verified to the extent possible to reflect the most accurate information available; all assumptions must be thoroughly documented. To facilitate comparison and review, the analysis must include a year-by-year summary chart listing the emissions from each source category and the annual total for the baseline year and each year of the project, out to the expected steady-state year. In accordance with the requirements of 40 CFR 93.159, analyses must be based on the latest and most accurate emission estimation techniques available. If such techniques are determined to be inappropriate, written approval must be obtained from the EPA Regional Administrator on a case-by-case basis for any modification or substitution. All techniques used must be documented and explained.

For motor vehicle emissions, the most current version of the motor vehicle emissions model specified by EPA and available for preparing or revising the SIP must be used. EPA will publish a notice of availability of any new motor vehicle emissions model in the Federal Register and a grace period of three months is allowed during which the previous model may be used. Analyses started during this grace period or no more than three years before a Federal Register notice of a newer model appears can continue to use the previous version. Copies of the program output must be included in the analysis. In

California, the approved model is the one utilized by the California Air Resources Board (CARB).

For non-motor vehicle emissions, including stationary and area sources, the rule specifies that the latest emission factors specified by EPA in Compilation of Air Pollutant Emission Factors (AP-42) must be used unless more accurate data are available, such as actual emission test data. Recognizing that more accurate factors may also be available, EPA has demonstrated a willingness to accept emission factors from other recognized sources, such as other EPA documents, references developed by the State or air district, or factors developed by recognized military department experts. However, the project manager must obtain written approval from EPA to use factors other than those found in AP-42 and the sources for all emission factors used in the analysis must be thoroughly documented. The results of the calculations must be included in the analysis and sample calculations must be provided.

Detailed emission estimation procedures are provided in TAB E.

Typical Emissions Sources to be Included in the Total Emissions Calculation

All emissions caused by the project from the operation of stationary sources including emissions from:

– Aircraft Maintenance Facilities
– Ship Maintenance Facilities
– Fuel Storage and Handling Facilities
– Hazardous Waste Storage and Transfer Facilities
– Airfield Facilities
– Port Facilities
– Hangars
– General Warehousing Facilities
– Personnel Housing
– Support Service Facilities
– Utility Upgrading
– New Power Plants/Expanded Use of Existing Plants
– Incinerators

All emissions caused by the project from the Construction phase including emissions from the following sources:

– Surface disturbance
– Construction equipment (bulldozers, backhoes, etc, at site)
– Construction of facilities (paints, coatings, solvents, adhesives)
– Delivery trucks (on-base emissions only)

All emissions caused by the project from the operation of mobile sources including emissions from the following sources:
– Aircraft (below 3,000 ft above ground level in air district)
– Ground support equipment
– Vessels (out to territorial sea within air district)
– Government fleet vehicles
– Private motor vehicles (Federal worker commutes only)
– Lawn and garden equipment
– Non-road vehicles
– Non-road equipment (cranes)

Procedures for calculating total emissions are provided in TAB E. Once the total emissions have been determined, proceed to STEP 10.

STEP 10: Are the Total Emissions Resulting From the Action Below De Minimis Levels?

Each calendar year's total of direct and indirect emissions for each nonattainment or maintenance pollutant must be compared to the de minimis levels set out in the rule and at http://www.epa.gov/air/genconform/deminimis.html. Actions where the total of all reasonably foreseeable direct and indirect emissions do not equal or exceed the de minimis levels are exempt. If the total emissions are equal to or greater than the de minimis levels for the pollutant in any year, a formal Conformity Determination is required for that pollutant.

If an action's emissions occur within more than one maintenance or nonattainment area, treat the action's emissions in each area as if they result from separate actions. For example, a facility could be located in multiple counties or in multiple States. Emissions from an action at such facilities could extend across the nonattainment or maintenance area boundaries.

Re-evaluate Project. Before proceeding with a conformity determination, it is recommended that the project be re-evaluated to determine if it can be redesigned to result in emissions that are below the de minimis thresholds. For example, has all the available pollution control equipment been included in the original design, or can additional control equipment be added? Can the actions be phased in on a different time schedule to result in lower annual emissions? Can the location, duration or intensity of any of the activities be altered to result in lower emissions? If any of the above or similar actions are available, the Federal action should be re-defined to include those revisions.

3.0 CONFORMITY DETERMINATION

3.1 Demonstrating Conformity (40 CFR 93.158)

There are two ways to demonstrate conformity:

1) An action shall be determined to conform if the total of direct and indirect emissions is in compliance or consistent with all relevant SIP requirements and milestones (i.e., reasonable further progress schedules, assumptions specified in the attainment/maintenance demonstration, prohibitions, numerical emission limits or work practice requirements) and meets any one or a combination of the requirements listed in detail below:

   (a) Project emissions are identified in the SIP budget: **For any criteria pollutant or precursor**. The total of direct and indirect emissions from the action is specifically identified and accounted for in the SIP attainment or maintenance demonstration. Alternately, the State or Tribe may commit to submitting a revised SIP/TIP to EPA that includes the emissions within 18 months.

   (b) **For precursors of ozone, nitrogen dioxide, or particulate matte**r, project emissions are fully offset. The total of direct and indirect emissions from the action is fully offset within the same nonattainment or maintenance area through a revision to the applicable SIP or a similarly enforceable measure that effects emission reductions so that there is no net increase in emissions of that pollutant. Emissions may also be offset in an adjacent nonattainment or maintenance area, with certain limitations.

To be used in a conformity determination, offsets must be:

– Quantifiable;
– Consistent with applicable SIP attainment and reasonable further progress demonstrations;
– Surplus to reductions required by, and credited to, other applicable SIP provisions;
– Enforceable at both State and Federal levels; and
– Permanent within the timeframe specified by the program.

(c) Modeling results demonstrate standards will not be exceeded:

(i) **For any directly emitted criteria pollutant**. The total of direct and indirect emissions:

– Is shown to comply (i.e., to not cause or contribute to any new violation of any standard in any area and not to increase the frequency or severity of any existing violation of any standard in any area) based on area-wide and local air quality modeling analysis; or
– Meets the requirements of paragraphs 2., 4. or 5. of this section and, for local air quality modeling analysis, the emissions are shown to comply.

(ii) **For carbon monoxide or directly emitted particulate matter**:

– Where the State determines that the area-wide air quality modeling analysis is not needed, the total of direct and indirect emissions is shown to comply based on local air quality modeling analysis; or
– Where the State determines that an area-wide air quality modeling analysis is appropriate and local modeling is not needed, the total direct and indirect emissions are shown to comply, based on the area-wide modeling, or the emissions meet the requirements of paragraphs b., d. or e. of this section.

(d) **For ozone or nitrogen dioxide,** project emissions are accommodated within SIP Budget. The total of direct and indirect emissions from the action meets the following requirements:

EPA has approved a revision to an area's attainment/maintenance demonstration after the most current calendar year with a complete emission inventory available before an area is designated unless EPA sets another year. and

(i) The State agency determines that emissions will not exceed the SIP emissions budgets; or

(ii) The State agency makes a written commitment to EPA to revise the SIP within 18 months, to accommodate the increased emissions, and that such revisions occur prior to the time emissions from the Federal action occur.

(e) **For ozone or nitrogen dioxide**, project emissions are already accounted for in Conforming Transportation Plan. The MPO must determine that the action is part of a current transportation plan that has been found to conform under the Transportation Conformity Rule.

All required analyses must be completed and any necessary mitigation measures must be identified before a conformity determination is made. A chart summarizing the criteria for determining conformity is provided in TAB B.

Information on the SIP contents may be obtained by contacting the appropriate EPA Regional Offices, as identified at http://www.epa.gov/airquality/urbanair/sipstatus/regionalpgs.html.

2) As per 40 CFR 93.161, in coordination with States and Tribes, a facility may demonstrate conformity by preparing a facility-wide emissions inventory. This approach allows States, Tribes and Federal agencies to identify acceptable levels of emissions from the facility for inclusion in the SIP before starting the environmental review for the actions and thereby expedite the review of the Federal actions at facilities that do not exceed the emission levels. This provision is intended to encourage the State, Tribe or local air quality agency and the Federal facilities to develop an upfront emission budget for the facility, thereby streamlining the action or project environmental review. The emission budget must be established based upon specific guidance and documented growth projections for the facility, and adoption of that budget into a SIP or TIP must demonstrate that the area could meet its air quality obligations with the identified emission budget.

3.2 Mitigation of Air Quality Impacts (40 CFR 93.160)

If conformity to the SIP cannot be satisfied in any other way, mitigation measures may be necessary.

(a) **Mitigation Measures.** Any measures that are intended to mitigate air quality impacts must be identified and the process for implementation and enforcement of such measures must be described, including an implementation schedule containing explicit timelines for implementation.

(b) **Mitigation Commitments.** Prior to making a conformity determination, The Department must obtain written commitments from the appropriate persons or agencies to implement any mitigation measures that are identified as conditions for making the conformity determination. Persons or agencies voluntarily committing to mitigation measures to facilitate positive conformity determinations must comply with the obligations of such commitments.

(c) **Permitting, Licensing, Approvals.** In instances where a Federal agency is licensing, permitting or otherwise approving the action of another governmental or private entity, approval by the Federal agency must be conditioned on the other entity meeting the mitigation measures set forth in the conformity determination.

(d) **Changed Circumstances.** When necessary because of changed circumstances, mitigation measures may be modified so long as the new mitigation measures continue to support the conformity determination. Any proposed change in the mitigation measures is subject to the reporting and public participation requirements discussed above.

(e) **Enforcement of Mitigation Measures.** After EPA approves a State SIP revision adopting the conformity rules, any mitigation measures identified in support of a conformity determination will be both State- and Federally-enforceable. Enforceability through the applicable SIP will apply to all persons who agree to mitigate direct and indirect emissions associated with a Federal action for a conformity determination.

3.3 Offsets. If offsets (including emission reduction credits) are needed from another facility to make the conformity determination, the following procedures apply. Trading of offsets from one facility to another must be approved by the Department after coordination with all other Department activities in the area. Before the conformity determination can be made, the sponsoring facility shall have obtained written confirmation that offsets necessary to a finding of conformity are available.

4.0 REVIEW PROCESS

4.1 Coordination

All Draft and Final Conformity Determinations shall be coordinated with and reviewed by the OU's Office of General Counsel. If a Conformity Determination is associated with an action for which a Finding of No Significant Impact (FONSI) is prepared, the entity delegated FONSI signature authority for the proposed action shall sign the determination. If the determination is associated with an action for which an EIS is prepared, the Department official delegated authority for signing the ROD, shall sign the Conformity Determination.

4.2 Reporting Requirements (40 CFR 93.155)

Draft Conformity Determination. A 30-day notice describing the proposed action and the Draft Conformity Determination must be provided to the following offices: the EPA Regional Office, State and local air quality agencies, the agency designated under Section 174 of the Act, the Metropolitan Planning Organization (MPO), Federal Land Managers whose lands may be impacted by the Action, and any Federally recognized Tribes in the nonattainment or maintenance area where the action is occurring.

The Draft Conformity Determination must constitute a complete analysis, including satisfaction of all of the requirements necessary for a Final Conformity Determination.

Final Conformity Determination. Notice of the availability of the Final Conformity Determination must be provided to the same offices within 30 days of the determination.

4.3 Public Participation (40 CFR 93.156)

4.3.1 Draft Conformity Determination. The Department must make the Draft Conformity Determination and its supporting materials (i.e., analytical methods and conclusions relied upon for the applicability analysis and Draft Conformity Determination) available for review upon request by any person. A notice of the availability of the Draft Conformity Determination must be placed by prominent advertisement in a daily newspaper of general circulation in the area affected by the action. If an Environmental Impact Statement (EIS) is being prepared, the notice can be included as part of the notice of availability of the draft EIS. However, if only one notice is published announcing the availability of both documents, then the single notice must clearly state that the notice is for both NEPA and General Conformity purposes. Failure to clearly state that the Conformity Determination is available for public review may require that a second comment period be initiated in order to meet this CAA requirement,

impacting project schedules and timelines. A 30-day period must be provided for written public comment before taking any action on the Draft Conformity Determination.

4.3.2 Response to Comments. All responses to the comments received must be documented, and the comments and responses made available upon request by any person within 30 days of the Final Conformity Determination.

4.3.3 Final Conformity Determination. Notice of the Final Conformity Determination must be provided by placing a prominent advertisement in a daily newspaper of general circulation in the area affected by the action within 30 days of the final determination. The Final Conformity Determination will be incorporated into the Department's Record of Decision. A final unsigned version of the conformity determination should be included in the Final EIS.

If a conformity determination is being prepared for a project that requires an Environmental Assessment (EA) that would not otherwise be distributed in draft form for public review and comment, a draft final version of the EA, to be identified as a "review EA," shall be distributed with the Draft Conformity Determination for purposes of satisfying the public participation requirement. Concurrently, a public notice on the availability of a Draft Conformity Determination must be published in the local newspaper.

4.4 Integration with NEPA Document Preparation

Conformity requirements must be considered early in the planning process for all actions and projects. Because a negative conformity determination could prohibit a proposed action, air emissions need to be identified early, as they may require adjustments in the design, intensity, location or timing of an action.

Conformity review and documentation should be completed prior to the NEPA analysis and documentation and be fully integrated into the NEPA analysis and documentation. NEPA documentation should be structured to discuss compliance with the CAA, including the Conformity Review requirements, as well as State and local air quality requirements. The various levels of NEPA documentation (Categorical Exclusion, EA and EIS) should all contain the information necessary to satisfy General Conformity.

If a conformity determination is required, it should be contained in a "stand-alone" appendix to the NEPA document. If calculations are required to determine that emissions resulting from the action would be below de minimis levels, the Record of Non-Applicability should be presented in an appendix to the NEPA document. This appendix must stand-alone for all regulatory and public review, so it should contain a general description of the proposed action. NEPA Categorical Exclusions may not be used for a non-exempt action that exceeds the conformity de minimis thresholds.

All decisions made as part of the Conformity Review process shall be summarized in the text of the NEPA document, with reference to the detailed supporting information/data in the appendix, as appropriate. If a different approach is required by the special circumstances of a particular project, approval by the OU's Office of General Counsel is required.

To address other non-conformity air quality impacts in the NEPA document, a subheading covering compliance with the NAAQS and other CAA requirements should be included. This section should include any additional analysis required by other portions of the CAA, or other analysis requested by the State to show that the action is in compliance with the SIP. For purposes of presenting the information, a separate appendix titled "Compliance with the NAAQS and other CAA requirements"

should be used if the material is too bulky or technical for the text.

Calculating a project's air emissions in accordance with the General Conformity Rule differs from the traditional air quality analyses included in NEPA documents. The definition of “indirect emissions” under conformity is narrower than NEPA's definition of “indirect impacts.” Also, the General Conformity Rule allows exemptions and presumptions not otherwise available under traditional NEPA analysis.

Finally, conformity only requires compliance with the “applicable SIP,” which means those portions of the SIP approved by EPA. A Federal action, however, is subject to all Federal, State and local air quality pollution and abatement requirements, regardless of whether they have been approved by EPA. The NEPA analysis must identify and evaluate any Federal, State or local requirements that apply to the project even if they are not included in the SIP. These differences could result in the presentation of differing sets of air quality data, causing confusion among the EA or EIS reviewers if the NEPA documentation does not clearly identify and distinguish the Conformity Review decisions.

5.0 Re-Evaluation of Conformity (40 CFR 93.157)

The conformity status of an action lapses 5 years from the date of the Final Conformity Determination, unless the action has been completed or a continuous program has been commenced to implement the action within a reasonable time. Ongoing activities at a given site showing continuous progress are not new actions, and do not require re-determination so long as such activities are within the scope of the Final Conformity Determination.

If an action is changed after the Final Conformity Determination is made, and the change results in an increase in the total of direct and indirect emissions that equals or exceeds the de minimis levels, a new conformity determination is required.

TAB A

DEFINITIONS (40 CFR 93.152)

Applicability analysis. The EPA is adding this new term to describe the process of determining if the Federal agency must conduct a conformity determination for its action.

1. **Caused By**, as used in the terms "direct emissions" and "indirect emissions," means emissions that would not otherwise occur in the absence of a Federal action, including direct and indirect construction emissions.

2. **Cause or Contribute to a New Violation** means a Federal action that causes a new violation of a NAAQS at a location in a nonattainment or maintenance area which would otherwise not be in violation of the standard if the Federal action were not taken; or contributes, in conjunction with other reasonably foreseeable actions, to a new violation of a NAAQS at a location in a nonattainment or maintenance area in a manner that would increase the frequency or severity of the new violation.

Conformity Determination. decision that a Federal agency official makes in determining that the action will conform with the SIP, TIP or FIP.

Conformity evaluation. The entire conformity analysis process from the applicability analysis through the conformity determination, if necessary.

3. **Criteria Pollutant or Standard** means any pollutant for which there is a NAAQS established at 40 CFR Part 50.

4. **Direct Emissions** means those reasonably foreseeable emissions of a criteria pollutant or its precursors that are caused or initiated by a Federal action and that occur at the same time and place as the action.

Emissions Inventory. A listing of information on the location, type of source, type and quantity of pollutant emitted as well as other parameters of the emissions.

5. **Emergency** means a situation where extremely quick action on the part of the Federal agencies involved is needed and where the timing of such Federal activities makes it impractical to meet the conformity requirements, such as natural disasters like hurricanes or earthquakes, civil disturbances such as terrorist acts, and military mobilizations.

6. **Emissions that a Federal agency has a Continuing Program Responsibility for** means emissions that are specifically caused by an agency carrying out its authorities, and does not include emissions that occur due to subsequent activities, unless such activities are required by the Federal agency. Where an agency, in performing its normal program responsibilities, takes actions itself or imposes conditions that result in air pollutant emissions by a non-Federal entity taking subsequent actions, such emissions are covered by the meaning of a continuing program responsibility.

7. **Federal Action** means any activity engaged in by a department, agency, or instrumentality of the Federal government, or any activity that a department, agency or instrumentality of the Federal government supports in any way, provides financial assistance for, licenses, permits, or approves, other than activities related to transportation plans, programs, and projects developed, funded, or approved under Title 23 of the U.S. Code or the Federal Transit Act. Where the Federal action is a permit, license

or other approval for some aspect of a non-Federal undertaking, the relevant activity is the part, portion or phase of the non-Federal undertaking that requires the Federal license, permit, or approval.

8. **Indirect Emissions** means
those emissions of a criteria pollutant or its precursors:

(1) That are caused or initiated by the Federal action and originate in the same nonattainment or maintenance area but occur at a different time or place as the action;
(2) That are reasonably foreseeable;
(3) That the agency can practically control; and
(4) For which the agency has continuing program responsibility.

For the purposes of this definition, even if a Federal licensing, rulemaking or other approving action is a required initial step for a subsequent activity that causes emissions, such initial steps do not mean that a Federal agency can practically control any resulting emissions.

Local Air Quality Monitoring Analysis means an assessment of localized impacts on a scale smaller than the entire nonattainment or maintenance area, including, for example, congested roadways on a Federal facility, which uses an air quality dispersion model (*e.g.*, Industrial Source Complex Model or Emission and Dispersion Model System) to determine the effects of emissions on air quality.

9. **Maintenance Area** means an area that was designated as nonattainment and has been re-designated in 40 CFR part 81 to attainment, meeting the provisions of section 107(d)(3)(E) of the Act and has a maintenance plan approved under section 175A of the Act.

10. **Metropolitan Planning Organization (MPO)** means the policy board of an organization created as a result of the designation process in 23 U.S.C. 134(d).

Mitigation Measure means any method of reducing emissions of the pollutant or its precursor taken at the location of the Federal action and used to reduce the impact of the emissions of that pollutant caused by the action.

11. **Precursors for ozone** are nitrogen oxides (NOx), unless an area is exempted from NOx requirements under Section 182(f) of the CAA, and volatile organic compounds (VOCs). For PM10, precursors are those pollutants described in the PM10 nonattainment area applicable SIP as significant contributors to the PM10 levels.
For $PM_{2.5}$,

(1) Sulfur dioxide (SO2) in all $PM_{2.5}$ nonattainment and maintenance areas,
(2) Nitrogen oxides in all $PM_{2.5}$ nonattainment and maintenance areas unless both the State and EPA determine that it is not a significant precursor, and
(3) Volatile organic compounds (VOC) and ammonia (NH3) only in PM2.5 nonattainment or maintenance areas where either the State or EPA determines that they are significant precursors.

12. **Reasonably Foreseeable Emissions** are projected future direct and indirect emissions that are identified at the time the conformity determination is made; the location of such emissions is known and the emissions are quantifiable as described and documented by the Federal agency based on its own information and after reviewing any information.

13. ‘‘**Take or start the Federal action**’’ means the date that the Federal agency signs or approves the permit, license, grant or contract or otherwise physically begins the Federal action that requires a conformity evaluation under this subpart.

14. **Total of Direct and Indirect Emissions** means the sum of direct and indirect emissions increases and decreases caused by the Federal action; i.e., the net emissions considering all direct and indirect emissions. The portion of emissions which are exempt or presumed to conform under 40 CFR 93.153 (c), (d), (e) or (f) are not included in the “total of direct and indirect emissions.” The “total of direct and indirect emissions” includes emissions of criteria pollutants and emissions of precursors of criteria pollutants.

Tribal Implementation Plan means a plan to implement the national ambient air quality standards adopted and submitted by a Federally recognized Indian tribal government determined to be eligible under 40 CFR 49.9 and the plan has been approved by EPA.

TAB B

SUMMARY OF CONFORMITY DETERMINATION CRITERIA

	Area-wide Only		**Local and/or Area-wide**				**Local Only**
Section 93.158(a)	O_3 precursors	NO_2 precursors	PM_{10} direct emissions	$PM_{2.5}$ direct emissions	$PM_{2.5}$ Precursors	CO	Pb/SO_2
Specified in attainment or maintenance demonstration	X	X	X	X	X	X	X
Offsets within same area	X	X			X		
Area-wide and local modeling			X	X		X	X
Local modeling and emission budget or state commitment			X	X		X	X
Area-wide modeling plus emission budget or state commitment			X	X		X	
Emission budget or state commitment	X	X	*	*	X	*	
Transportation Plan	X	X	*	*	X	*	
Offsets	X	X	*	*	X	*	
Baseline	X	X	*	*	X	*	
Water Project	X	X	*	*	X	*	

"X" means method is available for making a Conformity Determination for that pollutant
"*" option if area-wide problem only

TAB C

SAMPLE RECORD OF NON-APPLICABILITY (RONA)

DEPARTMENT OF COMMERCE RECORD OF NON-APPLICABILITY FOR CLEAN AIR ACT CONFORMITY

The proposed action falls under the Record of Non-Applicability (RONA) category and is documented with this RONA.

Proposed Action.

Action Proponent
Location:
Proposed Action Name:
Proposed Action & Emissions Summary:

Affected Air Basin(s):
Date RONA prepared:
RONA prepared by:

Proposed Action Exemption(s).

Attainment Area Status and Emissions Evaluation Conclusion.

RONA Approval:
Signature:
Name: Date:
Position:

TAB D

ACTIONS EXEMPT BY RULE (DEFINITION PER 40 CFR 93.153)

Per 40 CFR 93.153, the conformity requirements do not apply to the following actions, which would result in no emissions increase or an increase that is clearly de minimis:

(a) Judicial and legislative proceedings;

(b) Continuing and recurring activities such as permit renewals where activities conducted will be similar in scope and operation to activities currently being conducted;

(c) Rulemaking and policy development and issuance;

(d) Routine maintenance and repair activities, including repair and maintenance of administrative sites, roads, trails and facilities;

(e) Civil and criminal enforcement activities, such as investigations, audits, inspections, examinations, prosecutions and the training of law enforcement personnel;

(f) Administrative actions, such as personnel actions, organizational changes, debt management or collection, cash management, internal agency audits, program budget proposals, and matters relating to the administration and collection of taxes, duties and fees;

(g) The routine, recurring transportation of materiel and personnel;

(h) Routine movement of mobile assets, such as ships and aircraft, in homeport reassignments and stations (when no new support facilities or personnel are required) to perform as operational groups and/or for repair or overhaul;

(i) Maintenance dredging and debris disposal where no new depths are required, applicable permits are secured, and disposal will be at an approved disposal site;

(j) Actions, such as the following, with respect to existing structures, properties, facilities and lands where future activities conducted will be similar in scope and operation to activities currently being conducted at the existing structures, properties, facilities, and lands; for example, relocation of personnel, disposition of Federally-owned existing structures, properties, facilities, and lands, rent subsidies, operation and maintenance cost subsidies, the exercise of receivership or conservatorship authority, assistance in purchasing structures, and the production of coins and currency;

(k) The granting of leases, licenses such as for exports and trade, permits, and easements where activities conducted will be similar in scope and operation to activities currently being conducted;

(l) Planning, studies, and provision of technical assistance;

(m) Routine operation of facilities, mobile assets and equipment;

(n) Transfers of ownership, interests, and titles in land, facilities, and real and personal properties, regardless of the form or method of transfer;

(o) Actions that implement a foreign affairs function of the United States;

(p) Actions (or portions thereof) associated with transfers of land, facilities, title, and real properties through an enforceable contract or lease agreement where the delivery of the deed is required to occur promptly after a specific, reasonable condition is met, such as promptly after the land is certified as meeting the requirements of the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA or Superfund), and where the Federal agency does not retain continuing authority to control emissions associated with the lands, facilities, title, or real properties;

(q) Transfers of real property, including land, facilities, and related personal property from a Federal entity to another Federal entity and assignments of real property, including land, facilities, and related personal property from a Federal entity to another Federal entity for subsequent deeding to eligible applicants; and

(r) Aircraft emissions above the mixing height identified in the applicable SIP, TIP or FIP. Where the SIP does not contain a specific mixing height, EPA is establishing a default mixing height of 3000 feet AGL.

TAB E

EMISSION ESTIMATION PROCEDURES

1 Aircraft

For aircraft, all emissions up to the mixing height. If there is not an applicable SIP or TIP that identifies the mixing height, the mixing height is assumed according to the FIP to be3,000 ft above ground level (AGL), generated within the nonattainment area boundaries must be included in the emissions calculation.

1.1 Operations

a. **Methodology.** Traditionally, the landing and takeoff (LTO) cycle begins when the aircraft approaches the airport on its descent from cruising altitude, lands, and taxis to the gate. The cycle continues as the aircraft taxis back out to the runway for subsequent takeoff and climb-out as it heads back up to cruising altitude. The five operating modes in a conventional LTO cycle as described by EPA are:

- Approach
- Taxi/idle-in
- Taxi/idle-out
- Takeoff
- Climb-out

For Department conformity analyses, emissions from the following operating modes (and any other modes applicable to a particular type of aircraft) must be included:

- APU use (for certain aircraft)
- Pre-taxi system checks
- Taxi out
- Take-off
- Climb-out
- Level portion of flight below 3000 feet
- Approach
  - Straight in
  - Overhead break
- Landing
- Taxi-in
  - With hot refueling
  - Without hot refueling

Circular patterns (Touch-&-Go and Ground Controlled Approach Box) include a momentary touchdown followed by an immediate takeoff. Therefore, these patterns will only include the climb-out, level portion of flight below 3,000 feet AGL and approach modes.

For each aircraft type involved in the action, the following steps should be taken to calculate the emissions. All basic data and assumptions should be included on the calculation sheets. If an operational

cycle includes additional steps, those steps should also be shown on the calculation sheets.

- Determine the number of aircraft and the number of engines per aircraft;
- Determine the annual number of operations conducted per aircraft;
- Determine the power settings for each operating mode in order to determine the fuel flow per engine and appropriate emission factors (usually given as pounds of pollutant per 1000 pounds of fuel used);
- Determine the time-in-mode for each operating mode; and
- Multiply the number of operations per aircraft for each operating mode by the number of aircraft, fuel flow rate per engine, number of engines, emission factor, time-in-mode and appropriate conversion factors to obtain the total emissions in tons per year (tpy) for each operating mode.

Sum the emissions for all operating modes to obtain the total annual emissions for the aircraft type in tpy.

Items to check: How the action is quantified in total numbers of aircraft and types of operations. Actions often change scope over the course of the development of the conformity analysis. The document should be reviewed carefully to ensure that the number of aircraft and their associated operations are consistent throughout the conformity analysis. The calculation sheets should include the number of aircraft to facilitate this review.

Consistency with the conformity documentation and other related documents present a real challenge. Since related documents such as noise studies were developed for other purposes, the conformity analysis may not necessarily be consistent with these documents, but the reasons for any differences should be explained in the analysis. For the same reason, numbers taken from other related documents should be carefully examined to ensure that the numbers used in the analysis are appropriate. Another possible cause of error/inconsistency is due to varying interpretations of the types of operations and what is involved. For example, control towers generally count each landing and takeoff separately, while other estimates of aircraft operations use landing/takeoff cycles. The analysis must clearly state how all data are to be interpreted.

Other items to check for include: (1) assuming that circular patterns start from a dead stop and (2) using a mixing height of 3,000 feet above sea level rather than AGL, and (3) failing to include all of the emissions that occur below 3,000 feet AGL within the entire air basin.

b. Data Sources. The data needed to calculate aircraft emissions include the migration schedule, number and type of operations, times-in-mode, fuel usage records and power settings. We also need to be specific in identification of what and how many aircraft are involved.

Also we need to know the timing of when aircraft will arrive or depart as part of the Federal action. Of particular importance is the number of aircraft operations that occurred or will occur at the facility.

Three sources of information are often utilized:

(1) Facility air traffic control tower information - often the air controllers will record the number of landings and number of takeoffs at the facility over the course of 1 year.
This information usually only identifies the number of landings and takeoffs, and does not contain information on aircraft types or type of operation being conducted. Often, air traffic controllers will also count the number of aircraft entering the surrounding air space, and care must be taken to identify this separately from landings/takeoffs.

If control tower information is used, estimates must be used to determine the types of aircraft and the operations they are conducting.

(2) Aircraft unit information - the aircraft unit involved in the action can also provide information on current and historic operations.
If no other information is available, the major claimant should be requested to provide information on the number and mix of aircraft and operations. In all cases, the major claimant should be requested to validate the number and mix of aircraft and operations involved in a Federal action.

1.2 Aircraft Maintenance

(a) **Methodology.** In-aircraft (or in-frame) engine testing, known as maintenance run-ups, is conducted to perform routine maintenance checks and to test engines prior to and following test cell procedures. During maintenance run-ups, each engine is tested under specific power settings that correspond to typical operating modes (i.e., idle, takeoff, climb out and approach). The two common types of engine run-ups are low power and high power. Low power run-ups are routinely done to check operation of replaced components that do not require a high power run-up to verify operation, or to operate another aircraft system that is powered or driven by the engine(s). High power run-ups are performed following maintenance that requires verification of the engine's ability to perform throughout its full range of operation.

The emissions calculation procedure for maintenance run-ups is very similar to the procedures for calculating emissions from aircraft operations. For each aircraft type involved in the action, the following steps should be taken to calculate the maintenance emissions. All basic data and assumptions should be included on the calculation sheets:

(5) Determine the number of aircraft and the number of engines per aircraft;
(6) Estimate the annual number of both low power and high power run-ups conducted per aircraft;
(7) Determine the power settings for each operating mode in order to determine the fuel flow per engine and appropriate emission factors (usually given as pounds of pollutant per 1000 pounds of fuel used);
(8) Determine the time-in-mode for each operating mode;
(9) Multiply the number of run-ups per aircraft at each operating mode by the number of aircraft, fuel flow rate per engine, number of engines, emission factor, times-in-mode and appropriate conversion factors to obtain the total emissions in tpy for each operating mode; and
(10) Sum the emissions for all operating modes to obtain the total annual emissions for the aircraft type in tpy.

Items to check: Make sure the analysis includes emissions from maintenance run-ups in any analysis involving aircrafts. These emissions are quantifiable, are directly attributable to aircraft operations, and must be included in the analysis.

(b) **Data Sources.** The data needed to calculate emissions from aircraft maintenance run-ups include the migration schedule, unit deployment schedule, maintenance records to determine number and type of run-ups, times-in-mode, fuel usage records and power settings.

2 Vessels

For vessels, all emissions generated from the shoreline outward to the seaward boundary of the territorial sea (usually 3 miles) within the nonattainment area boundaries must be included in the calculation.

(a) **Data Sources.** Data required for calculating vessel emissions are the vessel types and the operating data for the time each vessel operates within the boundary of concern.

3 Motor Vehicles

Motor vehicles generate two primary types of emissions, exhaust and evaporative. Exhaust emissions occur only when the vehicle is operating, during either the start or the stabilized running mode. Evaporative emissions consist of organic gases (a portion of which are VOCs) and occur when fuel evaporates from the storage and delivery system. Although the rate varies with the operating mode, this evaporation occurs whether or not the vehicle is in operation.

3.1 Privately Owned Vehicles (POVs)

(a) **Methodology.** As discussed earlier, for POVs only those motor vehicle emissions associated with base personnel commuting to and from work should be included in the emissions calculations. Motor vehicle use for shopping trips and other errands are not emissions the Federal agency can control. The calculation should assume that each employee makes a total of two commute trips per day (one to and one from the facility), with adjustments made to reflect actual average vehicle occupancy rates for that facility taking into account any locally required vehicle ridership requirements. Any adjustments should be based on the installation's employee trip reduction plan or other documentation on file with the regulating agency. The source for the adjustments should be referenced with the calculation. Worker trip estimates from other sources or installation trip counts conducted for other purposes should not be used to generate the number of employee trips. The calculation should assume that Federal employee work commutes occur 240 days per year, unless special circumstances dictate some other number (e.g., a compressed work schedule in effect at the installation).

The following steps should be taken to calculate the emissions. All basic data and assumptions should be included on the calculation sheets or program printouts.

(i) Determine the change in personnel loading associated with the action;
(ii) Determine the number of workdays for the installation (usually 240 days per year);
(iii) Calculate the number of commute trips per day (number of personnel times two divided by the average vehicle occupancy rate);
(iv) Estimate the average vehicle trip length and speed;
(v) Determine the average summer and wintertime temperatures for the area;
(vi) Estimate the vehicle population mix;
(vii) Determine whether vehicles commuting to the installation are subject to an inspection and maintenance (I/M) program; and
(viii) Use the most current version of the motor vehicle emissions model specified by EPA and available for preparing or revising the SIP to calculate the total annual POV emissions in tpy.

Check with the State or air district to determine whether these emissions must be included in the calculation of total emissions. The State or air district may have already accounted for changes in the

installation's vehicle usage in the SIP.

Items to check: How the action is quantified in total numbers of personnel. Consistency with the conformity documentation and other related documents present a real challenge. Actions often change scope over the course of the development of the conformity analysis. Carefully review the calculations and documentation to ensure that the number of personnel used to calculate the POV emissions is consistent with the personnel migration schedule described in the action. Sources for other information such as the vehicle occupancy rate must be documented. Since related documents such as traffic studies were developed for other purposes, the procedures described above should be used to determine the number of commute trips. Ensure that the standard models and methodologies are used correctly for calculating vehicle emissions. Personnel should contact the State, air district or EPA Regional Office for detailed assistance with models and methodologies.

(b) **Data Sources.** Data needed to calculate POV emissions include the change in personnel associated with the action, number of work days, average vehicle occupancy rate, average commute trip length, average speed, estimated vehicle population mix, I/M program requirements applicable to the area in which the installation is located and the average summer and wintertime temperatures. A checklist to be used in summarizing key data and assumptions is provided in Table E-1 and should be included with each analysis.

TABLE E-1 CHECKLIST FOR DATA REQUIRED FOR POV CALCULATIONS

1. Change in personnel loading associated with the action _____
Source: _____

2. Number of work days (usually 240 days per year – document if a different number is used)
_____

3. Average Vehicle Occupancy Rate _____
Source: _____

4. Number of commute trips per day (number of personnel times two divided by the average vehicle occupancy rate) _____

5. Average one-way vehicle trip length in miles (estimate based on primary housing locations and average number of personnel living on/off-base) _____

6. Estimated vehicle population mix (% of total for each vehicle type)
Light-duty autos _____
Light-duty trucks _____
Motorcycles _____

7. Average vehicle speed in mph (estimate based on average speed limits on roads between installation and primary housing locations) _____

8. Average temperatures
Summer: _____
Winter: _____

9. Are vehicles commuting to the installation subject to an inspection and maintenance (I/M) program? _____
If yes, what level? _____

10. Name and version number of model used to calculate POV emissions:
_____

11. Include both a sample input and an output file printout with your analysis.

3.2 Government-Owned Vehicles (GOVs)

(a) **Methodology.** The procedures for calculating emissions from GOVs vary from the procedures for POVs because generally all of the miles driven by the GOVs are included in the calculation, unless the number of miles driven outside the air basin is known. Also, the vehicle mix does not have to be estimated because it can be determined from the fleet inventory.

The following steps should be taken to calculate the emissions. All basic data and assumptions should be included on the calculation sheets or program printouts:

(i) Obtain the inventory of fleet vehicles associated with the action; the inventory should include the number, fuel type, model year and mileage for each vehicle;
(ii) Calculate the average annual mileage for each vehicle by dividing its total mileage by its age;
(iii) Determine the total annual vehicle miles traveled (VMT) for each vehicle type;
(iv) Determine the average vehicle speed (usually the installation speed limit);
(v) Determine the average summer and wintertime temperatures for the area;
(vi) Determine whether the fleet vehicles are subject to an inspection and maintenance (I/M) program; and
(vii) Use the most current version of the motor vehicle emissions model specified by EPA and available for preparing or revising the SIP to calculate the total annual GOV emissions in tpy.

Items to check: Check with the State or air district to determine whether these emissions must be included in the calculation of total emissions. The State or air district may have already accounted for changes in the installation's vehicle usage in the SIP. Carefully review the calculations and documentation to ensure that the number of GOV used to calculate the emissions is consistent with the migration schedule described in the action. Ensure that the standard models and methodologies are used correctly for calculating vehicle emissions. Personnel should contact the State, air district or EPA Regional Office for detailed assistance with models and methodologies.

(b) **Data Sources.** The data needed to calculate GOV emissions include the fleet inventory and mileage, average speed and average summer and wintertime temperatures. A checklist to be used in summarizing key data and assumptions is provided in Table E-2 and should be included with each analysis.

TABLE E-2 CHECKLIST FOR DATA REQUIRED FOR GOV CALCULATIONS

1. Annual VMT for each vehicle type:
Heavy-duty trucks _____
Medium-duty trucks _____
Light-duty autos _____
Light-duty trucks _____
Motorcycles _____

2. Average vehicle speed in mph (usually the average installation speed limit; indicate if an alternative number is used such as a lower number for heavy-duty trucks due to their mode of operation) _____

3. Average temperatures
Summer: _____
Winter: _____

4. Are vehicles used at the installation subject to an inspection and maintenance (I/M) program? _____

If yes, what level? _____

5. Name and version number of model used to calculate GOV emissions: _____

5. Include both a sample input and an output file printout with your analysis.

4 Non-road Engines and Vehicles

Non-road sources include motorized vehicles and equipment that are normally not operated on public roadways to provide transportation.

(a) Methodology. The basic methodology for calculating emissions from non-road engines and vehicles is to take the product of the equipment population, the usage rate and an emission factor. Emission factors are defined as the average emissions of each pollutant per unit of use (hours of operation or quantity of fuel used) for each category of equipment and are dependent on the type of fuel used.

The emission factor used should be selected based on the best information available and should be consistent with the activity rate. For equipment for which an emission factor is not specifically defined, an emission factor for a similar category of equipment or for a miscellaneous category should be used. The reference for the emission factors and all assumptions must be documented.

The following steps should be taken to calculate the emissions. All basic data and assumptions should be included on the calculation sheets.

(1) Obtain the inventory of non-road equipment associated with the action;

(2) Determine the most appropriate emission factor from EPA's Compilation of Air Pollutant

(3) Emission Factors (AP-42) (Note: other emission factors from recognized sources may be used but EPA must approve them. Factors from EPA's Non-road Engine and Vehicle Emission Study Report are often used. Document the sources for all emission factors used in the analysis.)

(4) Calculate the total annual emissions in tons per year (tpy) for each type of equipment by taking the product of the population, usage and emission factor. If enough information is known, the best method for calculating emissions is on the basis of "brake specific" emission factors (g/kW-hr or g/hp-hr).

(5) Emissions are calculated by taking the product of the brake specific emission factor, the usage in hours, the power available (i.e., rated power) and the load factor (power actually used divided by the power available).

Items to check: Determine whether a particular item is considered a mobile source subject to the conformity requirements or a stationary source that is permitted and thus exempt from the conformity rule. Avoid incorrect categorization of vehicles and construction equipment as GSE, which can resulting the use of incorrect emission factors. Ensure that "pooled" equipment is not attributed to multiple squadrons to avoid double counting.

(b) **Data Sources.** The data needed to calculate the emissions are the equipment inventory, which should include the equipment population, fuel type, power rating and annual usage.

5 Construction Phase Emissions

In calculating the construction phase emissions, the total net combined emissions must be established separately for (1) each year of construction; (2) for each year that construction and operations overlap; and (3) for the first full year the proposed action is operating at "full-build out." Typically it can be assumed that a "full-build out" operational level would be consistent throughout subsequent years. If it is expected that a year will be different, analyze any such years also. Emissions may change during various stages of a construction project; each stage should be separately analyzed including the quarter in which it occurs.

Emissions associated with construction operations result from two different types of sources: the actual operation of the equipment, which generates emissions of all criteria pollutants, and the fugitive dust emissions of particulate matter generated by the disturbance of the soil. Because the methodologies for calculating emissions for these two source types vary greatly, they will be addressed separately.

5.1 Construction Equipment

(a) **Methodology.** The methodology for calculating construction equipment emissions is the same as for other non-road engines and vehicles as discussed earlier.

Items to check: The actual construction schedule and the most appropriate emission factors given the equipment type and fuel type and operating rate should be used rather than estimates.

(b) **Data Sources.** The construction schedule for the project should provide all of the data required to calculate the emissions from the construction equipment, including the quantity of each type of equipment, the projected usage of each item per month and the duration of each phase of the project.

5.2 Fugitive Dust

(a) **Methodology.** The quantity of dust emissions from construction operations is proportional to the area of land being worked and to the level of construction activity. Section 13.2.3 (Heavy Construction Operations) of AP-42, Volume I (NOTAL), provides an emission factor of 1.2 tons per acre per month of activity based on the assumption that construction activity occurs 30 days per month. This factor is based on field measurements of total suspended particulate (TSP) concentrations surrounding apartment and shopping center construction projects and is most applicable to construction operations with medium activity level, moderate silt content and semiarid climate. The fugitive dust calculations may be further refined by adjusting for the actual percentage of TSP that is attributable to PM10, by taking credit for dust control measures or adjusting for variations in silt content of the soil. Any refinements, however, must be based on sound engineering judgment and must be thoroughly documented.

(b) **Items to check**: Make sure that the analysis identifies the type of dust control measures and the effectiveness of the program when taking credit for a dust control program.

(c) **Data Sources.** The construction schedule should provide all information necessary to determine the level and duration of construction activity.

TAB F

REFERENCES

1. General Conformity Provision of the Clean Air Act, 42 U.S.C. 7601(C); Determining Conformity of General Federal Actions to State or Federal Implementation Plans, 40 CFR Parts 51 and 93.

2. National Environmental Policy Act, 42 U.S.C. 4321.

3. Compilation of Air Pollutant Emission Factors (AP-42), Volume II, Mobile Sources, U.S.EPA, 1985, as updated by Supplement A, 1991.

4. Non-road Engine and Vehicle Emission Study Report, EPA-21A-2001, U.S. EPA, Office of Mobile Sources and Office of Air & Radiation, November 1991.

5. Procedures for Emission Inventory Preparation, Volume IV, Mobile Sources, EPA-450/4-81-026d (Revised), U.S. EPA, Office of Mobile Sources and Office of Air Quality Planning and Standards, 1992.

6. Methodology For Estimating Emissions From On-Road Motor Vehicles, California Air Resources Board, Technical Support Division, Mobile Source Emission Inventory Branch, October 1996.

7. California Environmental Quality Act (CEQA) Air Quality Handbook, South Coast Air Quality Management District, April 1993.

APPENDIX F:
REPORTING FORMS

DEPARTMENT OF COMMERCE
INCIDENT NOTIFICATION REPORT

INCIDENT REPORTED BY:
Name: _____
Title: _____
Organization: _____
Phone: _____

INCIDENT LOCATION: ___ Transportation ___ Facility ___ Other
Location (Nearest Bldg. No.): _____
Phone: _____
Date of Incident: _____ Time (local): _____

IDENTITY OF SUBSTANCE SPILLED: ___ Known ___ Suspected ___ Unknown
Name of Substance(s): _____
Physical state (Gas, Liquid, Solid): _____
CAS Number: _____ ___ Substance Contained (Y/N/U)
Quantity Spilled: _____ ___ Actual ___ Potential ___ Estimated
Type of Release/Spill: ___ Terminated ___ Continuous ___ Intermittent
Reportable Quantity (Y/N) (Specify RQ Amount): _____
Waste Generated (Y/N/U): _____ Final Disposition: _____

INCIDENT DESCRIPTION:
___ Fire ___ Explosion ___ Air Release ___ Spill ___ Motor Vehicle Accident
___ Sewage ___ NPDES *(Storm water)* ___ Illegal Dumping ___ Radiation
___ Equip Fail/Upset ___ Other (Specify)
Injuries (Y/N/U): ___ Safety Notified (Y/N/U): ___ Public Exposure (Y/N/U): ___
Contamination of (Y/N/U): ___ Air ___ Land ___ Water ___ Potable Water Sources
Other ___ None ___ Receiving Water: _____

STATUS OF CLEANUP: _____

OFFICIALS NOTIFIED (Name/Title):
NRC: _____ Phone (800)424-8802 Date/Time_____
State: _____ Date/Time _____

NOTICE OF VIOLATION ISSUED: ___ Yes ___ No ___ Unknown
MEDIA INTEREST ANTICIPATED: ___ Yes ___ No
NARRATIVE OF INCIDENT: _____

_____

_____

_____

1.

NOTICE OF VIOLATION (NOV) REPORT FORM

Instructions: Complete for any NOV received. Email a copy of this report to OSEEP via gogreen@doc.gov.

Facility Information:

Facility Name: _____

Facility Address: _____

Facility Address in Regulatory Database (if different from NOV location): _____

_____

Facility Point of Contact: _____

Facility EPA ID #: _____

Regulations:

Regulations Cited in NOV: _____

_____

_____

_____

_____

Monetary Fine Anticipated? (Yes/No/Unknown): _____

Brief Narrative of Incident:

_____

_____

_____

_____

_____

Brief Summary of Corrective Action Plan & Timeline:

Remediation Plan Implementation Date: _____

Estimated Date of Remediation Completion: _____

Additional Information Relating to Immediate Plan of Action: _____

_____

_____

_____

_____

Anticipated Media Interest:

Yes _____ No _____ Unknown _____

APPENDIX G:
SCHEDULE OF GREENHOUSE GAS REPORTING

Annual Greenhouse Gas and Sustainability Data Report (Schedule)

Task	**Responsible POC**	**Annual Completion Date**
Update IMP	OSEEP	August 1
Release all annual (October –September) data calls and data collection tools	OSEEP	September 17
Provide training to all relevant personnel	OSEEP	September 17
Submit all data to DOC Energy Program Manager (HARD DEADLINE: later submissions will not be accepted)	OUs	November 9
Complete inventory - Compile all data Analyze data with appropriate tools Submit inventory to EMS ESC for review	OSEEP	November 23
- Pre-submission inventory quality assurance review	OSEEP	December 1
Management review and approval of inventory	Director, OAS	Week of December 3
Management review and approval of inventory	SSO Final Review & Approval	Week of December 3
Upload inventory to FEMP	DOC Energy Program Manager	December 14
Post-submission inventory quality assurance review	OSEEP	April 1

APPENDIX H:
FACILITY METERING REPORT

Metering of Electricity Activities

Bureau	Total Rqmt	Completed As of FY 10	% Complete	# Planned in FY 11	# Planned in FY 12	Short Fall

Metering of Natural Gas Activities

Bureau	Total Rqmt	Comp. As of FY10	% Comp.	# Planned In Fiscal Year						Shortfall
				FY11	FY12	FY13	FY14	FY15	FY16	

Metering of Steam Activities

Bureau	Total Rqmt	Comp. As of FY10	% Comp.	# Planned In Fiscal Year						Shortfall
				FY11	FY12	FY13	FY14	FY15	FY16	

Metering of Water Activities

Bureau	Total Rqmt	Comp As of FY10	% Comp	# Planned In Fiscal Year						Shortfall
				FY11	FY12	FY13	FY14	FY15	FY16	

For metering purposes only, total requirement (Total Rqmt) is "appropriate buildings". The definition of an "appropriate building" is any building or structure that is not considered excluded or exempted from energy reduction goals, i.e., radio transmitters, radars and other similar systems. DOE FEMP has developed additional guidance that encourages agencies to install meters on buildings where feasible, where energy cost savings are possible, and where cost-effective based on a ten 10-year payback and an annual savings of at least 2%.

[3] This document is available at http://www1.eere.energy.gov/femp/pdfs/adv_metering.pdf

APPENDIX I:
ENVIRONMENTAL LIABILITIES GUIDANCE

This appendix contains 1) an outline of Federal Accounting Standards Advisory Board (FASAB) guidance applicable to environmental liabilities; and 2) detailed information related to environmental liabilities from each of the applicable FASAB issuances. This information was compiled by the Department's Office of Financial Management (OFM). FASAB guidance can be downloaded from the following FASAB website: www.fasab.gov/accepted.html.

I. Outline of FASAB Guidance Applicable to Environmental Liabilities

NOTE: Items with an * have detailed information presented in Section II.

Category A Hierarchy

FASAB Standards (Statement of Federal Financial Accounting Standards (SFFAS) and Interpretations:

	*SFFAS 5	Accounting for Liabilities of the Federal Government, as amended by SFFAS 12, Recognition of Contingent Liabilities Arising from Litigation
0	*SFFAS 6	Accounting for Property, Plant, and Equipment
	SFFAS 34	The Hierarchy of GAAP, Including the Application of Standards by FASAB

Category B Hierarchy

FASAB Technical Bulletins:

*2002-1	Assigning to Component Entities Costs and Liabilities That Result From Legal Claims Against the Federal Government
*2006-1	EFFECTIVE FY 2013: Recognition and Measurement of Asbestos-Related Cleanup Costs

Category C Hierarchy

Technical Releases of the Accounting and Auditing Policy Committee of FASAB:

*No. 2	Determining Probable and Reasonably Estimable for Environmental Liabilities
*No. 10	Implementation Guidance on Asbestos Cleanup Costs Associated with Facilities and Installed Equipment
*No. 11	Implementation Guidance on Cleanup Costs Associated with Equipment
*No. 14	Implementation Guidance on the Accounting for the Disposal of General Property, Plant & Equipment

Additional accounting guidance for Environmental Liabilities could include:

Category B Hierarchy

Additional Category B Guidance: AICPA Industry Audit and Accounting Guides, if specifically made applicable to Federal governmental entities by AICPA and cleared by FASAB.

Category D Hierarchy

Implementation Guides Published by FASAB Staff

If Accounting Treatment for a Transaction or Event is Not Specified by a Pronouncement in Category A:

If the accounting treatment for a transaction or event is not specified by a pronouncement in category (a), a Federal reporting entity should consider whether the accounting treatment is specified by an accounting principle from a source in another category. In such cases, if categories (b)-(d) contain accounting principles that specify accounting treatments for a transaction or event, the Federal reporting entity should follow the accounting treatment specifies by the accounting principles from the source in the highest category – for example, follow category (b) treatment over category (c) treatment.

If Accounting Treatment for a Transaction or Event is Not Specified by a Pronouncement or Established in Practice as Described in Categories A to D:

If the accounting treatment for a transaction or event is not specified by a pronouncement or established in practice as described in categories (a)-(d), a Federal reporting entity should then consider accounting principles for similar transaction or events within categories (a)-(d) before considering Other Accounting Literature discussed in paragraph 8. For example, it might be appropriate to report the event or transaction by applying, in a similar manner, an accounting principle established within categories (a)-(d) for an analogous transaction or even on the basis of its substance.[7] A Federal reporting entity should not follow the accounting treatment specified in accounting principles for similar transactions or events in cases in which those accounting principles either (a) specifically prohibit the application of the accounting treatment to the particular transaction or event or (b) indicate that the accounting treatment should not be applied to other transaction or event by analogy.

Other Accounting Literature:
Other Accounting Literature includes, for example, FASAB Concepts Statements: the pronouncements referred to in category (b) of paragraph 5 when not specifically made applicable to Federal reporting entities by the FASAB; pronouncements of other accounting financial reporting standards-setting bodies, such as FASB, Governmental Accounting Standards Board, International Accounting Standards Board, and International Public-Sector Accounting Standards Board; professional associations or regulatory agencies; and accounting textbooks, handbooks, and articles. The appropriateness of other accounting literature depends on its relevance to particular circumstances, the specificity of the guidance, and the general recognition of the issuer or author as an authority. For example, FASAB Concepts Statements would normally be more influential than other sources in this category.

II. Detailed Information related to Environmental Liabilities from Each Applicable FASAB Issuance

Statement of Federal Financial Accounting Standard (SFFAS) 5, as Amended, *Accounting for Liabilities of The Federal Government*, defines "liability" as a probable future outflow or other sacrifice of resources as a result of past transactions or events. SFFAS 5, paragraphs 19 through 42 sets forth important liability standards, and which are applicable to environmental liabilities, including:

General purpose Federal financial reports should recognize probable and measurable

future outflows or other sacrifices of resources arising from (1) past exchange transactions; (2) government-related events; (3) government-acknowledged events; or (4) nonexchange transactions that, according to current law and applicable policy, are unpaid amounts due as of the reporting date.

The existence of a past event (which includes transactions) is essential for liability recognition.

A transaction involves the transfer of something of value. Transactions may be either exchange transactions or nonexchange transactions. The distinction between exchange and nonexchange transactions is important in determining the point of liability recognition in Federal accounting.

An event is defined as a happening of financial consequence to an entity. For Federal financial reporting, some events may be other than transaction based and these events may be classified in one of two categories: (1) government-related events; or 2) government-acknowledged events.

Government-related events are nontransaction-based events that involve interaction between the Federal government and its environment. The event may be beyond the control of the Federal entity. Events, such as a Federal entity accidentally causing damage to private property, would create a liability when the event occurred, to the extent that existing law and policy made it probably that the Federal government would pay for the damages and to the extent that the amount of the payment could be estimated reliably.

Government-related events include:

(1) Cleanup from Federal operations resulting in hazardous waste that the Federal government is required by statutes and/or regulations, that are in effect as of the balance sheet date, to clean up (i.e. remove, contain, or dispose of);

(2) Accidental damage to nonfederal property caused by Federal operations; and

(3) Other damage to Federal property caused by such factors as Federal operations or natural forces.

Government-acknowledged events are those nontransaction-based events that are of financial consequence to the Federal government because it chooses to respond to the event. The Federal government has broad responsibility to provide for the public's general welfare. The Federal government has established programs to fulfill many of its general needs of the public and often assumes responsibilities for which it has no prior legal obligation.

Consequently, costs from many events, such as toxic waste damage caused by nonfederal entities and natural disasters, may ultimately become the responsibility of the Federal government. But these costs do not meet the definition of a "liability" until, and to the extent that, the government formally acknowledges financial responsibility for the cost from the event and an exchange or nonexchange transaction has occurred. In other words, the federal entity should recognize the liability and expense when both of the following two criteria have been met (1) the Congress has appropriated or authorized (i.e.

through authorization legislation) resources; and (2) an exchange occurs (e.g., when a contractor performs repairs) or nonexchange amounts are unpaid as of the reporting date (e.g. direct payments to disaster victims), whichever applies.

"Probable" refers to that which can reasonably be expected or is believed to be more likely than not on the basis of available evidence or logic, with the exception of pending or threatened litigation and unasserted claims, in which case "probable" refers to that which is likely. The probability of a future outflow or other sacrifice of resources is assessed on the basis of current facts and circumstances.

"Measurability" or "measurable" means that an item has a relevant attribute that can be quantified in monetary units with sufficient reliability to be reasonably estimable.

A contingency is an existing condition, situation, or set of circumstances involving uncertainty as to possible gain or loss to an entity. The uncertainty will ultimately be resolved when one or more future events occur or fail to occur. Resolution of the uncertainty may confirm a gain (i.e., acquisition of an asset or reduction of a liability) or a loss (i.e. loss or impairment of an asset or the incurrence of a liability).

When a loss contingency (i.e. contingent liability) exists, the likelihood that the future event or events will confirm the loss or the incurrence of a liability can range from probable to remote. The probability classifications are as follows:

> Probable: The future confirming event or events are more likely than not to occur, with the exception of pending or threatened litigation and unasserted claims. For pending or threatened litigation and unasserted claims, the future confirming event or events are likely to occur.
>
> Reasonably possible: The chance of the future confirming event or events occurring is more than remote but less than probable.
>
> Remote: The chance of the future event or events occurring is slight.

A contingent liability should be recognized when all of the following three conditions are met:

> A past event or exchange transaction has occurred (e.g. a Federal entity has breached a contract with a nonfederal entity).
>
> A future outflow or other sacrifice of resources is probable (e.g. the nonfederal entity has filed a legal claim against a Federal entity for breach of contract and the Federal entity's management believes the claim is likely to be settled in favor of the claimant).
>
> The future outflow or sacrifice of resources is measurable (e.g. the Federal entity's management determines an estimated settlement amount). [See SFFAS 12.]

The estimated contingent liability may be a specific amount or a range of amounts. If some amount within the range is a better estimate than any other amount within the range, that amount is recognized. If no amount within the range is a better estimate than

any other amount, the minimum amount in the range is recognized and the range and a description of the nature of the contingency should be disclosed.

A contingent liability should be disclosed in the footnotes to the financial statements if any of the conditions for liability recognition are not met and there is at least a reasonably possibility that a loss or an additional loss may have been incurred.

SFFAS 6, *Accounting for Property, Plant and Equipment*, Chapter 4, *Cleanup Costs*, sets forth standards for cleanup costs, which are defined as the costs of removing, containing, and/or disposing of (1) hazardous waste (see paragraph 86 of SFFAS 6) from property, or (2) material and/or property that consists of hazardous waste at permanent or temporary closure or shutdown of associated PP&E. Cleanup may include, but is not limited to, decontamination, decommissioning, site restoration, site monitoring, closure, and postclosure costs. This standard applies only to cleanup costs from Federal operations known to result in hazardous waste which the Federal Government is required by Federal, state and/or local statutes and/or regulations that have been approved as of the balance sheet date, regardless of the effective date, to cleanup (i.e. remove, contain or dispose of).

Technical Bulletin 2002-1, *Assigning to Component Entities Costs and Liabilities that Result from Legal Claims Against the Federal Government*, requires that all liabilities and costs related to legal claims (i.e., judgments and settlements) must be attributed to the component entities responsible for the programs or activities that contributed to the claims, or to their successor component entities. This attribution follows the general principle that all transactions or events reported on the U.S. government consolidated financial statements should be attributed to some Federal component entity.

Technical Bulletin 2006-1, *Recognition and Measurement of Asbestos-related Cleanup Costs*, will be implemented for the Department, effective FY 2013. This technical bulletin clarifies the required reporting of liabilities and related expenses arising from asbestos-related cleanup costs. This technical bulletin supplements the relevant Federal standards. The primary effects of this technical bulletin are that:

Federal entities will (1) estimate both friable and nonfriable asbestos-related cleanup costs; and (2) recognize a liability and related expense for those costs that are both probably and reasonably estimable.

Federal entities will disclose information related to friable and nonfriable asbestos-related cleanup costs that are probably but not reasonably estimable in a note to the financial statements.

Technical Release 2, *Determining Probable and Reasonably Estimable for Environmental Liabilities in the Federal Government*, supplements the relevant Federal standards, and assists Federal agencies in determining probably and reasonably estimable liabilities related to their environmental cleanup responsibilities.

Technical Release 10, *Implementation Guidance on Asbestos Cleanup Costs Associated with Facilities and Installed Equipment*, supplements the relevant Federal standards, and provides a framework for identifying assets containing asbestos and assessing the asset to collect information and/or develop key assumptions in applying acceptable methodologies to estimate asbestos cleanup costs for Federal facilities and installed equipment.

Technical Release 11, *Implementation Guidance on Cleanup Costs Associated with Equipment*, supplements the relevant Federal standards, and focuses on cleanup of hazardous waste associated with

equipment. It focuses on when cleanup costs should be recognized as an environmental liability and when it should be expensed as a cost of routine operation. In addition, the guide includes two examples – one example is when an environmental liability should be recognized, and one is when the costs should be expensed as routing operations. The release provides steps that can be followed to help consistently apply existing standards, and also assists Federal entities to provide reasonable estimates of cleanup costs associated with the disposal of equipment assets, when required.

Technical Release 14, *Implementation Guidance on the Accounting for the Disposal of General Property, Plant, and Equipment*, supplements the relevant Federal standards, and clarifies SFFAS 6 paragraphs 97 and 98 requirements for recognition and measurement of disposal related cleanup costs. The release sets forth, that:

> A portion of estimated total cleanup costs shall be recognized as expense during each period that the General Property, Plant, and Equipment item is in operation.
>
> Recognition of the expense and accumulation of the liability shall begin on the date that the General Property, Plant, and Equipment item is placed into service, continue in each period that operation continues, and be completed when the item ceases operation.