



Managing Environmental Issues

Thomas Traceski

Office of Environmental Policy and Assistance

Thomas Traceski is Director of the Office of Environmental Policy and Assistance within the Office of Health, Safety and Security (HSS), U.S. Department of Energy Headquarters. He has spent the last 20 years at DOE managing specialized environmental protection programs covering Federal environmental laws, particularly RCRA (the Resource Conservation and Recovery Act) and CERCLA (the Comprehensive Environmental Response, Compensation, and Liability Act) as well as implementation of and Presidential Executive Orders on “greening the government.”

In his current position, he manages an organization that serves as the authoritative source within DOE for environmental sustainability, pollution prevention, radiation protection of the public and the environment, mixed radioactive and hazardous waste management, high performance sustainable building, and cultural and natural resource protection. He also directs the Office’s policy and technical assistance role in environmental management system implementation at DOE, including sustainable environmental practices for waste and toxic chemical reduction, environmentally preferable purchasing, electronics stewardship, post-consumer material recycling and greenhouse gas reduction, as well as preparation of corporate reports on DOE's environmental management systems and sustainable environmental stewardship performance pursuant to federal environmental and energy leadership Executive Orders.

Carol Borgstrom

Office of NEPA Policy and Compliance

Carol Borgstrom has been the Director, Office of NEPA Policy and Compliance, in the Department of Energy (DOE). The Office is currently located in the Office of the General Counsel.

In this position, she is responsible for managing a program to ensure that DOE’s proposed actions comply with the National Environmental Policy Act (NEPA) and related environmental review requirements. Her office develops NEPA compliance strategies and provides independent technical and policy reviews to ensure the adequacy of environmental impact statements (EIS) and related NEPA documents. The office serves as the DOE-wide focal point of NEPA expertise, and has prepared comprehensive guidance to improve the efficiency and effectiveness of DOE’s implementation of the NEPA process.



Ms. Borgstrom has been with DOE since 1977, previously in the Office of Environment, Safety and Health, and earlier with the Federal Energy Administration, serving as an environmental protection specialist. She also worked in the private sector, managing the preparation of EISs by engineering consulting firms.

Andrew Wallo III

Office of Nuclear Safety, Quality and Environment

Andrew Wallo is the Deputy Director of the Office of Nuclear Safety, Quality Assurance and Environment within the Office of Health, Safety, and Security. In this position he is responsible for assisting in establishing nuclear safety, quality assurance and environmental protection requirements and expectations for the Department to ensure protection of workers and the public from the hazards associated with nuclear operations, and protection of the environment from the hazards associated with all Department operations. He provides assistance to field elements in implementation of policy and resolving nuclear safety and environmental protection issues.

Prior to his current assignment, Mr. Wallo was the Director of the Office of Air, Water and Radiation Protection Policy and Guidance within the Department of Energy's Office of Environment. His Office was responsible for activities that range from the development of DOE directives for radiation protection of the public and environment to guidance on environmental issues including protection of air, water, biota and cultural resources at DOE facilities. Responsibilities also included the DOE lead for coordinating with other Federal agencies and groups representing the States on environmental protection issues including work with other agencies on the development of protective action guidance for radiological emergencies, Federal radiation protection guidance and implementation of Environmental Management Systems.

Mr. Wallo is the DOE representative to the Interagency Steering Committee on Radiation Standards (ISCORS), is a DOE representative to an Office of Science and Technology lead radiological/nuclear incident working group to the Domestic Nuclear Defense Policy Coordinating Committee and was the U.S. representative to the Waste Safety Standards Committee of the International Atomic Energy Agency (IAEA). Mr. Wallo also serves as the HSS representative to the DOE Federal Low Level Waste Review Group (LFRG) and the DOE Federal TRU Waste Review Group (TRUFRG). He has represented DOE on a number of the Conference of Radiation Control Program Directors (CRCPD) working groups on waste management and radiation protection and is or has served as a member or consultant to a number of NCRP (National Council on Radiation Protection and Measurement), ANSI (American National Standards Institute), and IAEA working groups and committees on radioactive waste, waste security, and residual radioactive material control.

Mr. Wallo is a Health Physicist and is a principal author of numerous DOE directives and guides including DOE 5400.5, Radiation Protection for the Public and Environment. Prior to joining the



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DOE Office of Environment in 1990, he worked for 3 years as the site designation and certification manager for remedial actions in the Department of Energy's Office of Nuclear Energy.

Before joining DOE, Mr. Wallo was project engineer and senior health physicist for 9 years at The Aerospace Corporation's Eastern Technical Division located in Washington, DC and supported numerous Department of Energy and Nuclear Regulatory Commission Projects. From 1971 to 1978, Mr. Wallo was employed by MITRE Corporation, as an environmental physicist, developing and implementing environmental monitoring and measurement systems in conducting analyses to support the development of and evaluation of environmental control technology and energy systems for EPA and ERDA.



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Managing Environmental Issues

Thomas Traceski
Carol Borgstrom
Andrew Wallo
August 4, 2010

Overview



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**Environmental Management Systems,
Strategic Sustainability Performance Plan
& Environmental Compliance**

Thomas Traceski

**National Environmental Policy Act (NEPA)
Compliance**

Carol Borgstrom

**Radiation Protection
of the Public and Environment &
Radiological Control and Release of Property**

Andrew Wallo



Environmental Management Systems, Strategic Sustainability Performance Plan & Environmental Compliance

Thomas Traceski

Overview



- Executive Order (EO) 13423 *Strengthening Federal Environmental, Energy, and Transportation Management*
 - DOE Order 450.1A, *Environmental Protection Program*
 - Environmental Management Systems
 - Sustainable Environmental Stewardship Goals
 - Performance

Overview (cont'd)



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- EO 13514 *Federal Leadership in Environmental, Energy, and Economic Performance*
 - Strategic Sustainability Performance Plan
 - Energy and Environmental Sustainability Goals
 - Greenhouse Gas Reduction Targets
 - Consolidated Energy and Environmental Sustainability Directive (pending)
- Environmental Compliance

Environmental Management Systems (EMS)



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EMS is a systematic and structured approach for addressing environmental consequences of an organization's activities, products and services.

DOE O 450.1A requires DOE sites to use **EMS** as the management framework to implement, manage, measure, and continually improve upon, the sustainable environmental, energy, and transportation practices and goals of EO 13423

Environmental Management Systems (EMS)



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EMS provides the framework:

- For managing *Regulatory Compliance*
- For achieving *Departmental Goals* established in DOE Orders
 - Environmental Stewardship
 - Green Building
 - Energy and Water Conservation
 - Fleet Management

DOE Sustainable Environmental Stewardship Goals – DOE O 450.1A



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DOE O 450.1A sustainable environmental stewardship goals address:

- Pollution Prevention
- Toxic Chemical Use and Release Reduction
- Environmentally Preferable Purchasing
- Electronic Stewardship
- Post-Consumer Material Recycling

DOE Sustainable Environmental Stewardship Goals – DOE O 450.1A (cont'd)



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DOE sustainable environmental stewardship goals emphasize mission accomplishment as well as environmental protection


- Reduce environmental hazards, protect natural resources, and minimize future environmental legacies
- Avoid pollution-control costs, reduce regulatory recordkeeping and reporting burden, protect health of workers and the public, minimize mission liability
- Contribute to mission accomplishment in a sustainable, cost-effective, and environmentally responsible manner.

Performance Monitoring – DOE O 450.1A (cont'd)



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- Performance Tracked by Office of Management and Budget (OMB) Through the Environmental Stewardship Scorecard.
 - OMB uses a stoplight scoring system: Green for success; Yellow for mixed results; Red for unsatisfactory 
- DOE sites report annually on the ongoing implementation of EMS, and progress achieving Sustainable Environmental Stewardship Goals.
- DOE Pollution Prevention Tracking & Reporting System (PPTRS) enhanced to accommodate Environmental Stewardship Scorecard performance reporting.

DOE Environmental Stewardship Scorecard-Results



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Metrics	'06	'07	'08	'09
Environmental Management Systems				
Green Procurement				
Green Building				
Electronics Stewardship				
Total				

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


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OMB Environmental Stewardship Scorecard



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-  Environmental Management System Implementation
 - All EMSs have been declared 'fully implemented'
 - >80% of EMSs score 'green' on site EMS scorecard
-  Green purchasing
 - Agency has affirmative procurement program for all green products and services, DOE sites demonstrate compliance
-  Sustainable design/green buildings
 - <1.75 percent of building inventory 'sustainable'
-  Electronic stewardship
 - Acquires ≥ 95% EPEAT-registered electronics
 - Enables power mgmt features on 100% of eligible PCs, laptops, monitors & uses sound disposition practices

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January 2010 OMB Scorecard

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Executive Order 13514



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Federal Leadership in Environmental, Energy, and Economic Performance



“To establish an integrated strategy towards sustainability in the Federal Government and make reduction of greenhouse gas (GHG) emissions a priority for agencies.”

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Executive Order 13514



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- Signed by President on October 5, 2009
- Supplements (does not replace) EO 13423
- Requires agency-specific GHG reduction targets
- Establishes energy & environmental sustainability goals:
 - Toxic Chemical Use and Release Reduction
 - Environmentally Preferable Purchasing
 - Electronics Stewardship
 - Post-Consumer Material Recycling
 - Energy and water conservation and fleet management

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Executive Order 13514

Presidents Message

“As the largest consumer of energy in the U.S. economy, the federal government can and should lead by example when it comes to creating innovative ways to reduce greenhouse gas emissions, increase energy efficiency, conserve water, reduce waste, and use environmentally-responsible products and technologies.”

President Obama, October 6, 2009



Executive Order 13514

“Working together we will successfully implement this vital Executive Order [13514] and enhance our ongoing efforts to strengthen environmental, energy, and economic performance across the complex.”

SECRETARY OF ENERGY STEVEN CHU



Five Key Aspects of EO 13514



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1. **Agencies must use a deliberative planning process, including a Strategic Sustainability Performance (SSP) Plan.**
2. Greenhouse Gas (GHG) emissions reduction is now an overarching performance metric for progress in Federal sustainability.
3. EO goals are to be linked to budget allocations and scored by OMB.
4. EO 13423, *Strengthening Federal Environmental, Energy, and Transportation Management* (January 29, 2007) remains in effect.
5. Order stipulates continued reliance on EMS for implementation.

EO 13514 Requirements & DOE Status



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	Requirement	DOE 09 Status
Scope 1&2 Greenhouse Gas (GHG) emission reduction from 2008 to 2020 – supported by existing mandates:	*28% *DOE selected target	new
• Energy Intensity reduction (Btu/ft ²)	30% (2003-2015)	17.2%
• Renewable electricity use	7.5% (2013 forward)	4.2%
• Fleet petroleum reduction	30% (2005-2020)	16.3%
Other sustainability goals:		
• Select scope 3 Greenhouse Gas (GHG) reduction target	*10% *DOE selected target	new
• Potable water intensity reduction (gal/ft ²)	16% (2007-2020)	2.6%
• Industrial/other water consumption reduction (gal)	20% (2010-2020)	new
• Recycling & waste diversion	50% (by 2015)	49%
• Procurements meet sustainability requirements	95%	new
• Buildings meet sustainability principles	15% (by 2015)	1.6%
• Net-zero energy in new facilities	100% (by 2030)	new

Strategic Sustainability Performance Plan: What is it?



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A planning document required by EO 13514.

- “Each agency shall **develop, implement, and annually update** an [SSPP] that will prioritize agency actions based on **life cycle return on investment.**”
- Integrates previous EOs, statutes, and requirements into a single framework.



Streamline and consolidate reporting requirements to reduce redundancy and duplication

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What are GHGs?



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- Greenhouse Gases (GHGs) allow sunlight to enter the atmosphere freely, however, when sunlight strikes the Earth's surface, some of it is radiated back towards space as infrared radiation (heat) and GHGs trap some of the heat. The seven primary GHGs include:
 - Carbon Dioxide (CO₂)
 - Methane (CH₄)
 - Nitrous Oxide (N₂O)
 - Sulfur Hexafluoride (SF₆)
 - Hydrofluorocarbons (HFCs)
 - Perfluorocarbons (PFCs)
 - Nitrogen Trifluoride (NF₃)

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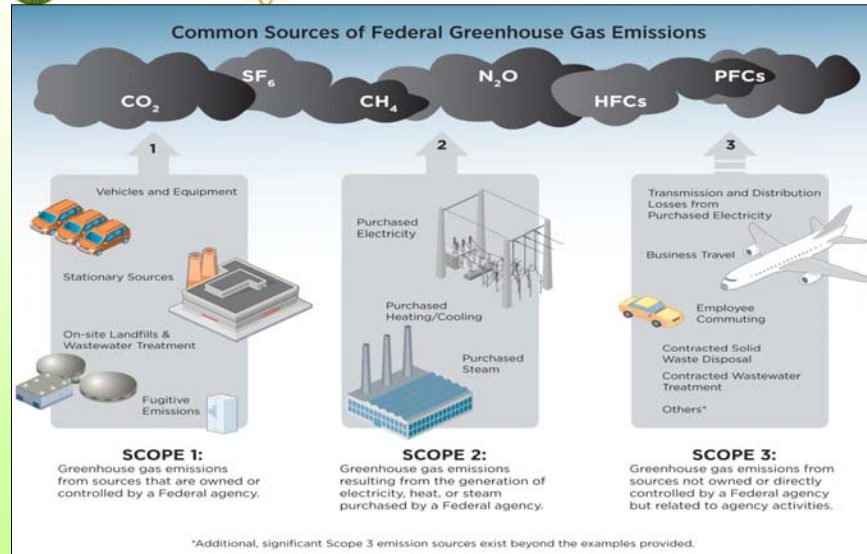
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GHG Sources and Scopes



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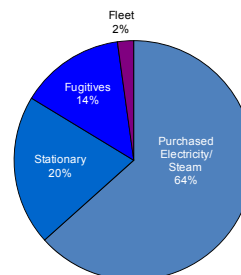
GHG Reduction Commitments



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- DOE is committed to a **28%** reduction in Scope 1 & 2 emissions.
- To meet this commitment, DOE will focus efforts on:
 - Buildings
 - Reduce facility energy intensity
 - Install and use renewable electricity
 - Fleet
 - Acquire alternative fuel vehicles (AFVs)
 - Optimize AFV deployment & inventory
 - Fugitive Emissions
 - Identify and implement measures to reduce and recapture non-CO₂ GHGs



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GHG Scope 3

- DOE is committed to a **10%** reduction in Scope 3 emissions (FY2008 baseline of 748,000 MMTCO₂e)
- Scope 3 reduction goals initially focus on:
 - Employee travel (**12%**)
 - Business ground and air travel
 - Employee commuting travel
 - Waste disposal (**12%**)
 - Contracted solid waste
 - Contracted wastewater
 - Transmission and distribution losses from purchased electricity (**6%**)
- DOE will include prime contractor activities in Scope 3 emission calculations



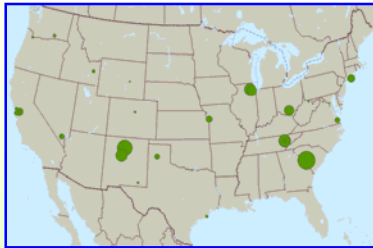
Greenhouse Gas Inventory

- CEQ will issue guidance on Federal GHG reporting requirements
- DOE shall annually submit a comprehensive GHG inventory to CEQ and OMB beginning January 2011
- Preliminary GHG emissions inventories relied upon annual reports and *ad hoc* requests for additional information
 - Inventory process for FY2011 and beyond will align with the forthcoming federal guidance
- Additional reporting may also apply to sites under EPA and/or state reporting requirements

TOP 10 GHG Emitting SITES- 2008



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Program	Site	State	Total GHG in 2008 (MtCO ₂ e)
EM	SRS	SC	515,779
NNSA	LANL	NM	410,896
NNSA	Y-12	TN	272,560
NNSA	SNL-NM	NM	266,087
Science	ORNL	TN	258,597
Science	Fermi	IL	252,791
EM	PORTS	OH	203,260
Science	ANL	IL	183,510
NNSA	LLNL	CA	123,506
Science	BNL	NY	123,273

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
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SSPP Goal 4: High-Performance Sustainable Building



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- By 2015, 15% of DOE buildings are to meet the HPSB *Guiding Principles (GP)* [per E.O. 13423]
- To date, DOE has 30 buildings that meet GP.
- *Lack of progress led to DOE scoring **RED** on OMB's 2009 Sustainability Scorecard.* 
- Additional goals in the SSPP include:
 - Make annual progress toward 100% conformance with GP.
 - Maintain buildings to reduce energy, water, and material consumption and achieve net reduction in operating costs
 - Beginning in FY2020 design zero-net energy buildings for achievement by FY2030..
- To aid DOE in meeting GHG reduction goal, efforts will focus on:
 - Reducing Facility Energy Intensity
 - Renewable Electricity Installation & Use
 - Utility Meter Installation

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Sustainable High-Performance Building (cont.)



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- The 15% by 2015 goal is challenging
 - We have relatively few new buildings in the pipeline; compliance will require addressing our existing inventory
 - We have limited experience in “greening” existing buildings; lack of metrics, practical knowledge
 - Integrating sustainability is a group effort; multiple parties must be involved to achieve success
- Success requires a multi-year, multi-party effort

SSPP Goal 5: Regional and Local Planning – *New*



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- Goal includes commitments to:
 - Incorporate regional transportation and building location into policy and planning.
 - Update policy and guidance to ensure NEPA studies identify and analyze impacts associated with energy usage and alternative energy sources.
 - Update policy and guidance to ensure coordination with regional authorities regarding ecosystems, watersheds, and environmental management.
- DOE commits to participate in addressing regional transportation, energy, water, and environmental priorities.

SSPP Goal 6: Water Use Efficiency and Management



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- Our previous goal is a 16% reduction in potable water use by 2015
- !! • *DOE is not meeting current water reduction goals*
- Now have new 20% reduction goal for *non-potable* water
- Water conservation efforts consist of 4 main components:
 - Conduct leak detection and consumption surveys.
 - Reduce potable water and industrial, landscaping, and agricultural water consumption.
 - Identify use of ground, gray, or storm water for cooling and opportunities for cooling water reuse.
 - Implement water reuse and recycling strategies.
 - Sites will develop a water efficiency policy and a water management plan.
 - Manage storm water runoff as it impacts local environments.

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SSPP Goal 7: Pollution Prevention and Waste Elimination



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- Sustainable practices focus on 3 categories:
 - Waste diversion
 - Construction & Demolition debris diversion – *NEW*
 - Compostable and organic material diversion – *NEW*
 - Toxic chemical reduction
 - Control of fugitive emissions will reduce Scope 1 GHGs
 - Paper use
- Implementation continues to rely on sustainability assessments to identify opportunities for process, product, or behavioral change

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SSPP Goal 8: Sustainable Acquisition



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- DOE will leverage established processes and mechanisms.
 - Policies and guidelines.
 - Training.
 - monitoring and assessment of contract compliance.
 - Performance reporting.
- Acquisition goals are similar to previous sustainability requirements; **however, the 95% compliance goal is new:** 95% of contracts must include mandated EPP criteria (recycled content, bio-based, Energy Star or FEMP designated, WaterSense, EPEAT, non-ODS, non-toxic or less-toxic alternatives).
- **Section 13 of EO:** GSA to explore the feasibility requiring federal vendors to focus on GHGs in the supply chain

SSPP Goal 9: Electronic Stewardship and Data Centers



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- Retain/strengthen current DOE policies addressing environmentally preferable purchasing (EPP), power management, and disposition.
 - Updated policy guidance for power management of electronic systems in to be developed in FY2011.
 - Updated policy guidance for environmentally sound decommission and disposition practices to be developed in FY2011.
 - New policy on network printer operations to be developed in FY2011.
- DOE will consolidate and optimize Data Centers to reduce energy consumption, save costs, and optimize space utilization.
- DOE will institute an IT Sustainability Scorecard to identify and track efficiencies from best management practices.

SSPP Goal 10: Departmental Innovation



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- Cool roofs.
 - DOE will establish a policy directing installation of cool roof technology where appropriate.
- “Net-Zero” or “low carbon” status for sites.
 - Explore opportunities for cogeneration plants at DOE sites.
- Energy efficient computer server facilities.
 - DOE has ~50 data centers that can be optimized and used as models for other agencies to follow.

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Status of SSPP



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- OMB and CEQ are reviewing.
- The Director of OMB is responsible for approval of the SSPP.
- The SSPP will be submitted and updated each year to reflect any changes in:
 - Schedule
 - Milestones
 - Approaches.

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Implementation: Budget



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- DOE will integrate the SSPP into planning, budget formulation and execution processes
- DOE estimates substantial funding is needed to meet the goals of E.O. 13514 through 2020
- The SSPP will inform the FY2012 budget submission

Implementation: Sustainability Performance Office (SPO)



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- The SSPP envisions the creation of a new headquarters office to address:
 - Corporate responsibilities in sustainability and GHG reductions
 - Behavior change
 - Performance towards meeting goals
 - Information management
 - Progress reporting
- In the interim, FEMP, HSS, MA, and CFO will continue to coordinate in supporting these functions

Implementation: Sustainability Transformation Teams



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- DOE will leverage scientific expertise to identify and implement cost effective, site-specific measures, including:
 - Utility metering at the building and process level
 - Capture and reuse of fugitive gases (specifically SF₆)
 - Implementation of energy conservation within the High Energy Mission Critical facilities
 - Effective energy and water auditing
 - Methods for modeling and disclosing GHGs at the facility level
- DOE will share results internally, and with other agencies

Implementation: New DOE Order



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- The SSPP envisions that its commitments, and the requirements of EO 13514, will be integrated into a new DOE Order
 - The SSPP commits to a draft of the directive by May 2011
- New Order will replace
 - DOE O 450.1A *Environmental Program*
 - DOE O 430.2B *Departmental Energy, Renewable Energy, and Transportation Management*
- The Justification Memo for the new Order is currently undergoing concurrence

Implementation: Reporting



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- Reporting mechanisms will be updated and aligned:
 - Energy/Fleet: CEDR, Executable Plans, FAST
 - Environment: EMS, PPTRS
 - Facilities: FIMS, IFI Crosscut, TYSP
 - Internal DOE Sustainability Scorecard
- New reporting elements include:
 - Diversion of compostable and organic waste
 - Diversion of sanitary waste and C&D debris (now separate)
 - Tracking integration of E.O. requirements into contracts
 - Fugitive Emissions (scope 1)
 - Scope 3 GHG emissions



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“DOE embraces the challenge of EO 13514 as an opportunity to promote sustainable operations and address the crisis of climate change.”

DANIEL PONEMAN
SENIOR SUSTAINABILITY OFFICER
AND DEPUTY SECRETARY
U.S. DEPARTMENT OF ENERGY



Environmental Compliance: EPA's ECHO Database



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- Enforcement and Compliance History Online (ECHO) is EPA's Web-based tool that provides public access to compliance and enforcement information.
- ECHO contains data for:
 - Resource Conservation and Recovery Act (RCRA)
 - Clean Water Act (CWA)
 - Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA)
 - Clean Air Act (CAA).
- ECHO is updated monthly.
- Anyone with access to the Internet can use ECHO:
<http://www.epa-echo.gov/echo>

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DOE Sites in Non-Compliance



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ECHO reports that during the 12 months ending May 31, 2010:

- DOE sites received 24 Notices of Violation (NOVs) at 15 sites (compared with 24 NOVs at 13 sites the prior year)
 - 16 RCRA
 - 8 CWA
- Four DOE sites were in Significant Non-Compliance (SNC) (compared with 9 sites as of June 2009)
 - Hanford (EM)
 - Portsmouth (EM)
 - Los Alamos (NNSA)
 - Brookhaven (SC)
- Two sites were assessed a total of \$2,355,060 (compared with 4 sites assessed a total of \$484,581 in the prior year)
 - LANL (NNSA) received 3 fines totaling \$2,255,274 for RCRA violations
 - WIPP (EM) received 3 fines totaling \$99,786 for RCRA violations

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Distribution of NOVs

Of the 24 NOVs received between June 2009 and May 2010:

- **EM received 10 NOVs***

- ETPP 1 RCRA
- Paducah 1 CWA
- Portsmouth 2 RCRA
- Savannah River 1 CWA
- WIPP 5 RCRA

- **FE received 4 NOVs**

- La Porte, TX 1 CWA
- NPR 1 CWA
- RMOTC (B-TP) 1 CWA
- RMOTC (PWIF) 1 CWA

- **NNSA received 7 NOVs**

- LANL 4 RCRA; 1 CWA
- SNL 1 RCRA
- Y-12 1 RCRA

- **SC received 3 NOVs**

- Brookhaven 1 CWA
- Fermi 1 RCRA
- Lawrence Berkeley 1 RCRA

*NOTE: Hanford does not appear on this list because it did not receive any NOVs within the past year but is still a SNC because of unresolved earlier violations.



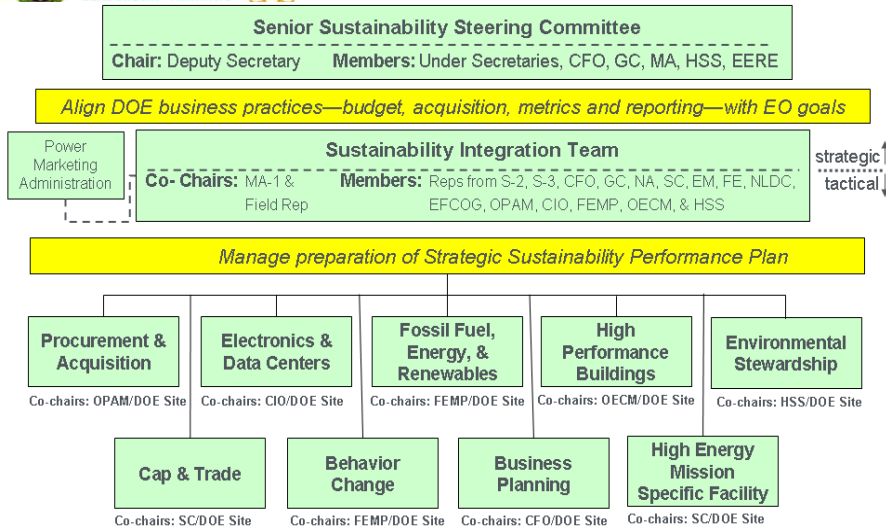
Thank You!

Questions? Comments?



Backup Slides

How was the SSPP Developed?



GHG Sources for Scope 1, 2 & 3 Inventory



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• **SCOPE 1: Direct GHG emissions owned or controlled by Federal agency**

- Stationary External Combustion
- Stationary Internal Combustion
- Fleet Vehicles
- Fugitive Emissions

• **SCOPE 2: Direct GHG emissions from purchased utilities**

- Electricity
- Heat
- Steam

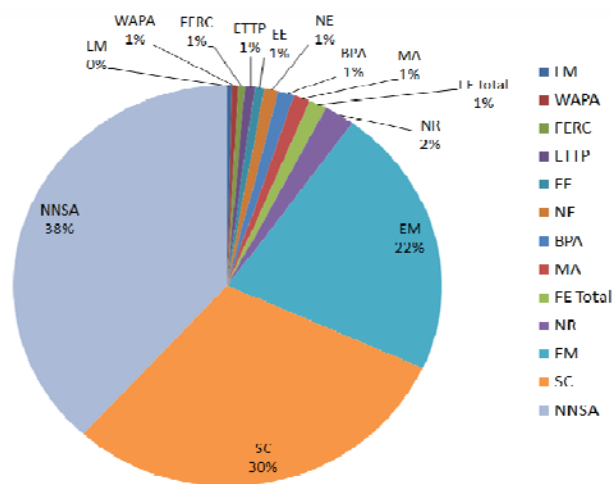
• **SCOPE 3: Indirect GHG emissions**

- Employee commuting
- Business travel
- Waste
- Production & transport of purchased material
- Other (T&D Losses)

DOE GHG Emission Profile



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Implementation: EMS



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- EMS is the overarching framework for implementing sustainable practices
- Sites will revise EMSs as necessary:
 - To meet goals and targets in SSPP
 - To conform to the ISO 14001 standard
- Sites will review EMS cross-functional team
 - Do you have the right functions?
 - Do you have the right people?
- Use EMS process to integrate energy use reduction and environmental sustainability into site operations and activities

Violations at SNC Sites



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New and ongoing violations at the 4 DOE sites currently in SNC status:

•Hanford (EM)

- Ongoing Violations*
 - RCRA – TSD – General (since 4/14/2009)
 - RCRA – TSD – Tank System Standards (2 instances since 3/28/2007)
 - RCRA – TSD – Manifests/Records/Reporting (since 7/14/2006)
 - RCRA – Generators - General (since 9/18/2006)

•Brookhaven (SC)

- New Violations
 - CWA – NOV issued 11/16/2009

*Hanford does not have any new violations but is still a SNC because of previous unresolved violations.

Violations at SNC Sites (cont.)



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- **LANL (NNSA)**
 - New Violations
 - CWA – NOV issued 3/29/2010
 - RCRA – NOV issued 10/7/2009
 - RCRA – NOV issued 9/15/2009
 - RCRA – NOV issued 11/23/2009
 - RCRA – NOV issued 12/1/2009
- **Portsmouth (EM)**
 - Ongoing Violations
 - RCRA – Generators – General (since 11/3/2008)
 - RCRA – State Regulation (since 11/3/2008)
 - New Violations
 - RCRA – NOV issued on 12/18/2009
 - RCRA – NOV issued on 3/10/2010



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National Environmental Policy Act (NEPA) Compliance

Carol Borgstrom

Outline



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- A. Overview of National Environmental Policy Act (NEPA)
- B. How to Manage a Successful NEPA Program
- C. Making Decisions under NEPA
- D. Current NEPA Issues

Forty years ago, the National Environmental Policy Act (NEPA) was signed into law with overwhelming bipartisan support, ushering in a new era of environmental awareness and citizen participation in government. NEPA elevated the role of environmental considerations in proposed Federal agency actions, and it remains the cornerstone of our Nation's modern environmental protections. . . .

*President Barack Obama
Proclamation on the 40th Anniversary
of the National Environmental Policy Act, 2010*



A. Overview of NEPA



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Basic national charter for protection of the environment

- policy goals
- procedural requirements
- established Council on Environmental Quality

Purpose = Better Decisions

B. How to Manage a Successful NEPA Program



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1. Learn Basic NEPA Principles
2. Plan Ahead and Stay Involved
3. Engage Public and Cooperating Agencies
4. Use Available Guidance and Resources

1. Basic NEPA Principles



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- **Ensure full disclosure/public participation**
 - Better decision making based on:
 - Understanding of alternatives and environmental impacts
 - Public input and scrutiny
 - Expert review and comment
- **Explore all reasonable alternatives**
 - “Heart” of the NEPA process
 - Rigorous, objective evaluation
 - Include No Action

1. Basic NEPA Principles (cont.)



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- **Assess environmental impacts**
 - Level of analysis commensurate with significance of impacts/issue
 - “Reasonably foreseeable” impacts include low-probability, high-consequence accidents
- **Consider mitigation**
 - Ways to reduce/avoid impacts
- **Weigh options/explain decisions**
 - Balance environmental/technical/cost and other considerations
 - Need not select environmentally “best” alternative

1. Basic NEPA Principles (cont.)



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Three levels of NEPA review

1. **Categorical Exclusion (CX)**
 - Class of action listed in DOE Regulations
 - Must not involve “extraordinary circumstances”
2. **Environmental Assessment (EA)** —
brief analysis if need for EIS is unclear
 - Finding of No Significant Impact (FONSI)
 - Decision to prepare an EIS
3. **Environmental Impact Statement (EIS)** —
if environmental impacts may be significant

2. Plan Ahead/Stay Involved



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- **Annual Planning Summary**
 - Senior management involvement in NEPA planning process
 - Allocation of adequate resources to enable timely compliance
- **Monthly EA/EIS Status Chart, Key EIS Schedules**

2. Plan Ahead/Stay Involved (cont.)



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- **NEPA Compliance Officers**
 - Make CX determinations
 - NEPA expertise/policy within programs
- **NEPA Document Managers**
 - Need project management and public participation skills, plus NEPA knowledge
 - Need access to senior management
- **Management/Executive Councils**
 - Useful for large, complex EISs

3. Engage Public and Cooperating Agencies



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- **Early scoping of issues and impacts**
 - Actively seek input to build credibility
 - Controversy may be a guide to sliding scale
- **Streamline interagency reviews**
 - Memorandum of Understanding to facilitate cooperating agency participation
- **Responsible Opposing Views**
 - Reflect all major points of view
 - Address uncertainty and unavailable information
 - Respond appropriately to comments

4. Use Available Guidance and Resources



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- **Website — nepa.energy.gov**
 - Regulatory Requirements/Extensive Guidance
 - DOE NEPA Documents
 - DOE-wide NEPA Contracts
 - Public Participation Calendar
- **Lessons Learned Program**
 - Cost, time, and effectiveness data
 - Case studies, mini-guidance, training opportunities
- **Corporate expertise/experience**
 - Office of NEPA Policy and Compliance, (202) 586-4600

C. Making Decisions under NEPA



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1. Preferred Alternative(s)
2. Environmentally Preferable Alternative
3. Mitigation
4. Amending Decisions

1. Preferred Alternative(s)



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- Must be identified in a Draft EIS, if one exists
- If none identified in a Draft EIS, EPA will rate all alternatives
- Required in a Final EIS
- Separate Notice of Preferred Alternative

2. Environmentally Preferable Alternative



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- NEPA does not require Agency to select the environmentally preferred alternative.
- However, if not selected, Agency must explain why not in Record of Decision (ROD).
- State whether all practicable means to avoid or minimize harm have been adopted; if not, why not.

3. Mitigation



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- **How:**
 - Avoid the impact altogether (pollution prevention)
 - Minimize impact
 - Rectify impact by repair, rehabilitation
 - Reduce or eliminate impact over time
 - Compensate for impact by replacement
- **Mitigation Action Plan for ROD commitments**
- **Annual Mitigation Monitoring Report**

4. Amending Decisions



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- **If proposed action is covered** in existing EIS, simply publish an amended ROD.
- **If there is significant new information or substantial change** in the proposed action bearing on environmental impacts, Supplemental EIS is required.
- **Supplement Analysis (SA)** is a DOE vehicle for determining if a Supplemental EIS is needed.

D. Current NEPA Issues



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1. American Recovery and Reinvestment Act (Recovery Act) Implementation
2. Council on Environmental Quality (CEQ) Draft Guidance, February 18, 2010
 - Global Climate Change/Greenhouse Gas Emissions
 - Mitigation and Monitoring
 - Establishing and Applying CXs
3. Continuous Improvement
 - DOE CX Rulemaking
 - Process Improvements
 - Transparency



1. Recovery Act

- “**Adequate resources** ... must be devoted to ensuring environmental reviews under [NEPA] are completed on an expeditious basis and that the shortest applicable process ... shall be utilized” (section 1609(b)).
- **Significant increase** in number of NEPA reviews
 - Mostly CXs (doubled DOE’s annual rate to about 4,000); increased number of ongoing EAs (wind, geothermal, solar energy) and some EISs
- **Time urgency** prompting hard look at improving NEPA process efficiency
- **NEPA process benefits:** project definition, environmental protection
- **Quarterly reports** to CEQ show timely completion of NEPA reviews for Recovery Act projects



2. CEQ Draft Guidance

Global Climate Change/Greenhouse Gas Emissions

- Intended to explain *how* Federal agencies should analyze GHGs in NEPA documents
- Emphasizes consideration of reasonable alternatives and potential mitigation measures
- Agencies should analyze impacts of GHG emissions from proposed actions on climate change and impacts of climate change on proposed actions

2. CEQ Draft Guidance (cont.)



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- Agencies may quantify GHG *emissions* as a “proxy” for assessing climate change *impacts*
- 25,000 metric tons per year of direct carbon dioxide equivalent proposed as indicator of when GHG analysis required – not intended as a measure of significance
- Recommended references for quantifying GHG emissions include
 - Environmental Protection Agency mandatory reporting tools
 - Guidance to be issued under EO 13514 , Federal Leadership in Environmental, Energy, and Economic Performance
 - DOE Voluntary Reporting Program guidance

2. CEQ Draft Guidance (cont.)



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Mitigation and Monitoring

- Consider mitigation throughout the NEPA process
- Ensure implementation of mitigation measures through monitoring program
- Provide public access to monitoring reports

Establishing and Applying CXs

- Include EAs/FONSIs, demonstration results, expert opinion, and/or benchmarking as a basis for establishing a CX
- Whenever practicable, provide supporting information for proposed CXs through a website
- Consider extraordinary circumstances whenever applying a CX

3. Continuous Improvement



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DOE CX Rulemaking

- Proposed revisions to 10 CFR Part 1021 to address expanded activities, experience with new technologies
- 11 stakeholders responded to Request for Information
- 18 new CXs proposed - solar projects (less than 10 acres), wind turbines (less than 200 feet), carbon sequestration experimental wells, nanotechnology research
- About 50 modifications, some to expand scope

3. Continuous Improvement (cont.)



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• NEPA Review Process Improvements: June 15, 2009, GC-1 Memorandum

- Concerns about time to complete EISs
- Coordinated, substantive GC comments
- Agreed upon review schedules
- Significant issues to be identified within five days
- Ad hoc EIS delegation – case-by-case decisions based on program office experience and complexity and sensitivity of EIS issues

3. Continuous Improvement (cont.)



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Transparency in the NEPA Process – New Policies

- Online Posting of CX Determinations (listed in Appendix B)
 - Policy established by Deputy Secretary Poneman, effective November 2009
 - Implementation guidance issued by the NEPA Office; CX determinations to be posted within two weeks and remain online at least three years
 - Comprehensive CX Database on DOE NEPA Website, updated approximately monthly, featured on Data.gov; approximately 3,000 determinations posted

4. Continuous Improvement (cont.)



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Public Involvement in the EA Process

- Policy established by Deputy Secretary Poneman
- Draft EAs made available to the public for review must be posted on the DOE NEPA Website before start of public review period
- E-Notifications of NEPA document availability to stakeholders upon request

Conclusion



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- NEPA is a decision-making tool, not just another hurdle.
- DOE has an excellent NEPA track record.
- We get into trouble when we start late and try to cut corners. Litigation is costly and time consuming.
- Good NEPA compliance builds DOE credibility; enables DOE to accomplish its mission.



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Backup Slides

Basic NEPA Process



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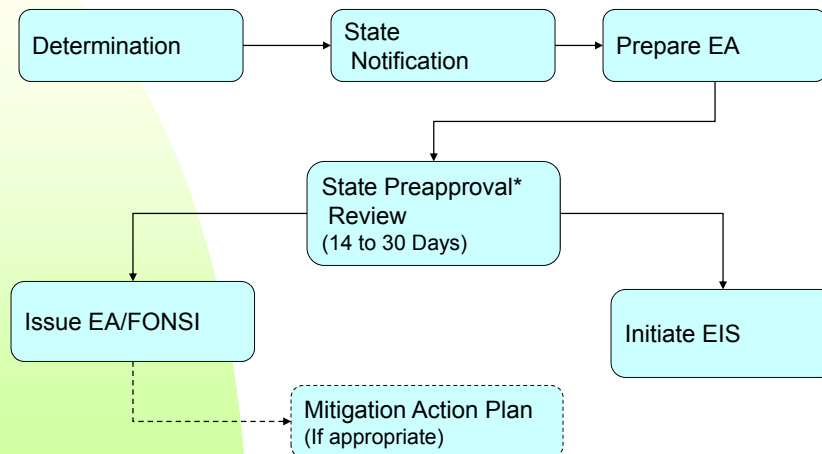


- Council on Environmental Quality Regulations (40 CFR Parts 1500-1508)
- DOE NEPA Regulations (10 CFR Part 1021)
- DOE Order 451.1B, NEPA Compliance
- Substantial Case Law

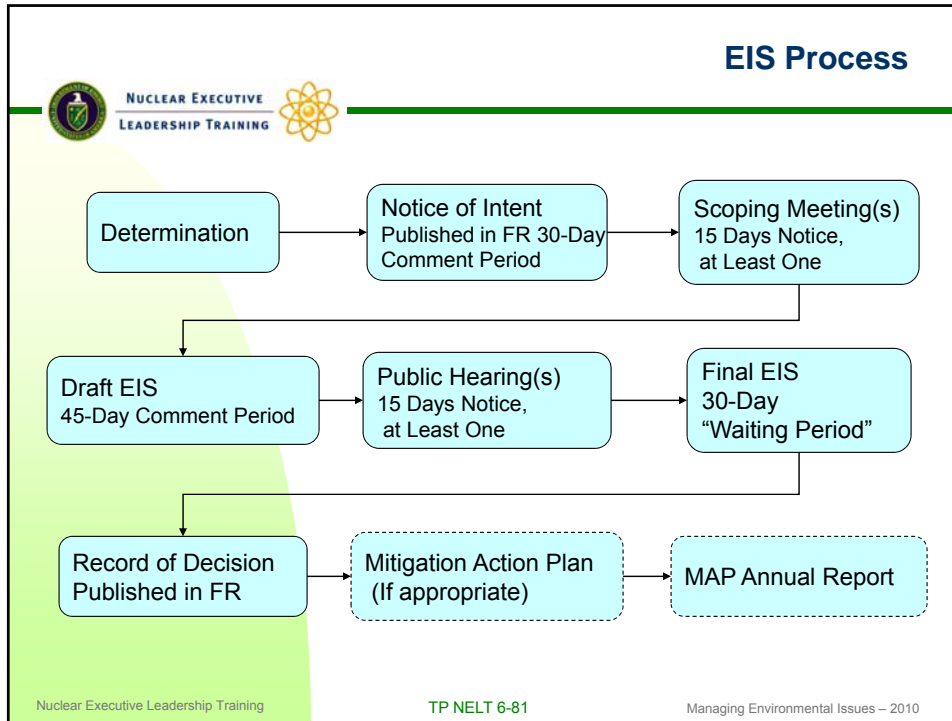
EA Process



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*May include public review of draft EA.



- ## DOE NEPA Authorities: DOE Order 451.1B
- **Applicability:** Order applies to all DOE elements, including NNSA (modified)
 - **Purpose:** Establishes internal requirements and responsibilities for implementing NEPA, CEQ regulations and DOE regulations
 - **Goal:** Ensure efficient and effective implementation through teamwork; control cost and time while maintaining quality
 - **Conforming Changes:** General Counsel has responsibilities of former Assistant Secretary, Environment, Safety and Health; documenting, posting CXs (June 25, 2010)
- Nuclear Executive Leadership Training TP NELT 6-82 Managing Environmental Issues – 2010



NEPA Approval Authorities*

Document Type	Approval Authority**	Other Program Roles
Notice of Intent to Prepare EIS	GC-1	PSO – request approval GC-54 – concur GC-51 – concur
Draft and Final EIS	GC-1	PSO – request approval GC-54 – recommend approval GC-51 – concur
Record of Decision for EIS	PSO	GC-54 – concur (for environmental content) GC-51 – concur GC-1 – concur
Supplement Analysis	PSO or Head of Field Organization	Headquarters or Field Counsel – concur
Environmental Assessment	PSO or Head of Field Organization	Headquarters or Field Counsel – concur
Categorical Exclusion Determination	NEPA Compliance Officers (program or field)	None required

Key

GC-1: Office of the General Counsel
 PSO: Program Secretarial Officer
 GC-54: Office of NEPA Policy and Compliance
 GC-51: Assistant General Counsel for Environment

*Based on DOE Order 451.1B.

**NNSA-1, after consultation with GC-1, approves EISs that do not warrant S-1 attention.



DOE EIS Costs and Schedules, 6/00 – 5/10

EIS Costs and Schedules (64 EISs)

	Cost	Time
Mean	\$4.6 million	32 months
Median	\$1.4 million	29 months
Range	\$56,000 (BPA) – \$44 million (Yucca)	9 months (WAPA) – 99 months (WAPA)



DOE EIS Costs and Schedules, 6/00 – 5/10

Programmatic EIS Costs and Schedules (14 PEISs)

	Cost	Time
Mean	\$7.5 million	41 months
Median	\$4.0 million	35 months
Range	\$56,000 (BPA) – \$44 million (Yucca)	15 months (Nuclear Infrastructure) – 99 months (WAPA)

Project-Specific EIS Costs and Schedules (50 project-specific EISs)

	Cost	Time
Mean	\$3.0 million	30 months
Median	\$1.2 million	27 months
Range	\$320,000 (BPA) – \$31 million (West Valley Demonstration Project)	9 months (WAPA) – 82 months (West Valley Demonstration Project)



DOE EA Costs and Schedules, 6/00 – 5/10

EA Costs and Schedules (281 EAs)

	Cost	Time
Mean	\$100,000	14 months
Median	\$65,000	9 months
Range	\$3,000 (BPA) – \$633,000 (WAPA)	0.2 months (NETL) – 96 months (Idaho Operations Office)

Thank You!



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Questions? Comments?



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**U.S. Department of Energy
Radiation Protection of the Public
and Environment
&
Radiological Control and
Clearance of Property**

**Andrew Wallo, HS-20
Office of Nuclear Safety, Quality Assurance
and Environment**



Goals of Session

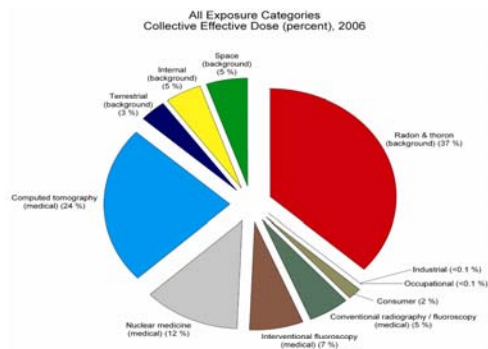
- General understanding of DOE radiation protection requirements for protection of the public
- More specific understanding of DOE radiation protection property control and clearance requirements
- Understanding who is the regulator



For immediate release
March 3, 2009 (12:00 PM)

Annual Estimate of
Collective Dose to the
U.S. Population:
1,870,000 person-Sv
(187,000,000 person-rem)

Annual Average
Effective Dose per
Individual:
6.2 mSv
(620 mrem)



A limited number of prepublication copies of Report No. 160 will be available during the NCRP annual meeting on March 2-3, 2009. The final Report will be available from the NCRP website, <http://NCRPpublications.org>, in both soft- and hardcopy formats. For additional information contact David A. Schauer, ScD, CHP at schauer@NCRPonline.org, 301.657.2652 (x20) or 301.907.8768 (fax).

Background Radiation Dose to the Public



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Magnitude of Changes in Collective Effective Dose and Effective Dose per Individual in the U.S. Population Between the Early 1980s (NCRP Report No. 93) and 2006 (NCRP Report No. 160)

Exposure Category	Collective Effective Dose (person-Sv) ^a			Effective Dose per Individual in the U.S. Population (mSv) ^a		
	(1) 2006	(2) Early 1980s	Ratio (1) / (2)	(1) 2006	(2) Early 1980s	Ratio (1) / (2)
Ubiquitous background	933,000	690,000	1.35	3.11	3.00	1.04
Medical	899,000	123,000	7.3	3.00	0.53	5.7
Consumer	39,000	12,000 - 29,000	— ^b	0.13	0.05 - 0.13	— ^b
Industrial, security, medical, educational and research	1,000	200	— ^b	0.003	0.001	— ^b
Occupational	1,400	2,000	— ^b	0.005	0.009	— ^b
Total	1,870,000	836,000	2.2	6.2	3.6	1.7

^aThe quantities used in NCRP Report No. 93 were expressed in effective dose equivalent.
^bNot listed; disparate aggregated sources.

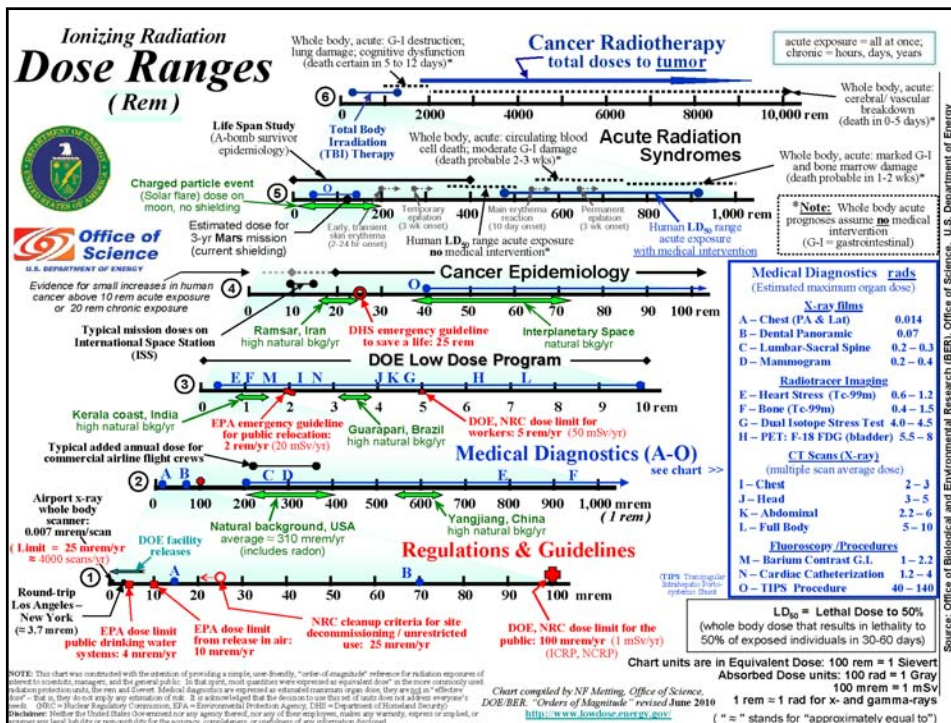


<http://NCRPonline.org>
<http://NCRPPublications.org>

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Managing Environmental Issues - 2010



Who is the Regulator?



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Insert your name here: _____

Who is the Regulator? (cont.)



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- DOE is self regulating in radiation protection areas.
- Line management **is** responsible for ensuring DOE and its contractors meet these requirements.
 - ensure implementation
 - verify compliance
 - enforce requirements through contracts
 - may not delegate this responsibility to a non-DOE entity



DOE Regulatory System

Line management

- Implements health, safety and environmental protection,
- Oversees DOE and contractor implementation,
- Verifies compliance and
- Enforces Order requirements through contracting.

HS-10 (worker) and HS-20 (public/environment)

- develops and maintains directives (policy and orders or rules) and
- provides guidance, technical interpretations and tools and assists line as requested.

HS-30 tracks performance

HS-40 enforces Price-Anderson rules.

HS-64 (ES&H) and IG provides independent oversight.



DOE Directives, Radiation Protection of the Public and the Environment

- Policy-DOE P 441.1, Department of Energy Radiological Health & Safety Policy
- Directive-Order DOE 5400.5, Radiation Protection of the Public and the Environment (DOE O 458.1 in process)
- Others
 - DOE O 450.1, General Environmental Protection
 - DOE P 454.1, Institutional Controls Policy
 - 10 CFR Part 835 (worker radiation protection)
 - DOE O&P 226.1 (oversight policy and Order)
 - DOE O 231.1 – reporting
 - DOE O 435.1 – waste management



DOE Radiation Protection of the Public and the Environment — Objectives

- Protect the public and the environment
- Implement legally applicable standards
- Maintain doses as far below dose limits and constraints as is reasonably achievable (ALARA)
- Establish standards and requirements consistent with other national standards, and national and international radiation protection recommendations



Order DOE 5400.5, Radiation Protection of the Public and the Environment

Based on:

- National and International Principles of Radiation Protection:
 - Justification
 - Optimization
 - Dose limitation
- Federal Guidance
- Response to GAO, IG and DOE policies
- Field and Program feedback

Supported by accessible, useable guidance & tools



Order DOE 5400.5, Radiation Protection of the Public and the Environment (cont.)

- Requires DOE operations to protect public and environment from undue exposure to radiation or radioactive material.
 - all sources, all pathways dose limit (100 mrem/y)
 - DOE O 458.1 additions
 - Dose to the lens (1,500 mrem/y), skin or extremities (5,000 mrem/y)
 - Dose constraints for DOE only sources and pathways
 - ALARA process (Optimization)
- Includes specific requirements for:
 - controlling wastes and liquid effluents
 - controlling air emissions and protecting drinking water systems
 - environmental protection and monitoring
 - **controlling and clearing property**



Rank Any 5 According to Estimated Dose to Individual Member of the Public (Answers based on 2002 and 2003 ASERS)

- Argonne National Laboratory
- Hanford Site (ORP and RL facilities including PNNL)
- Idaho National Engineering Laboratory
- Los Alamos National Laboratory
- Nevada Test Site
- Oak Ridge Reservation (ORNL and Y-12)
- Savannah River Site
- Thomas Jefferson National Accelerator Facility (Jlab)



Control and Clearance of Property Objective of Presentation

Encourage the integration of property control and clearance needs into management systems

- Consider early
- Review periodically
- Confirm implementation
- Openly communicate and document



Principal Requirements for Control and Clearance of Property

- Survey or characterize radiological condition
- Evaluate dose
- Establish authorized limits with ALARA
- Document limits, radiological condition and any clearance conditions
- Verify and QA clearance process
- Keep public informed
- Maintain records and report property clearance



General Requirements for the Control and Release of DOE Property

ALARA dose constraints for clearances

- **Real property** is 25 mrem/yr, w/ goal of a few mrem/yr (actual or likely use)
- Contingency analysis (worst plausible use <100 mrem/y)
- **Personal property** expedited approval for <1mrem/yr and <10 person-rem
- Clearance at higher doses possible up to few mrem/yr should be for a restricted or specified clearance.



General Requirements for the Control and Release of DOE Property (cont.)

ALARA constraints for clearances (continued)

- Use of surface activity guidelines for structures and personal property allowed (can be assumed consistent with dose-based constraints)
 - Change for DOE O 458.1 – Technical Standard rather than surface guidelines with volumetric limits (ANSI N13.12/IAEA RSG 1.7)
- Concentration limits provided for Ra-226 in soil and Rn-222 in structures (ALARA must be addressed)

Surface Activity Guidelines



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Allowable Total Residual Surface Activity (dpm/100 cm²)

Radionuclides	Average	Maximum	Removable
Group 1 - Transuranics, I-125, I-129, Ac-227, Ra-226, Ra-228, Th-228, Th-230, Pa-231	100	300	20
Group 2 - Th-natural, Sr-90, I-126, I-131, I-133, Ra-223, Ra-224, U-232, Th-232	1000	3000	200
Group 3 - U-natural, U-235, U-238, and associated decay products, alpha emitters	5000	15000	1000
Group 4 - Beta-gamma emitters (radionuclides with decay modes other than alpha emission or spontaneous fission) except Sr-90 and others noted above	5000	15000	1000
Tritium (applicable to surface and subsurface)	N/A	N/A	10000

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Managing Environmental Issues – 2010

Recent DOE Property Release Limitation: Scrap Metal



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- Secretarial moratorium — release of volumetrically contaminated metal (January 2000)
 - Metal with/potential for volumetric residual activity
 - Then, no release into commerce
- Secretarial suspension — recycle of scrap metal (July 2000, modified January 2001)
 - If scrap metal in radiological area (per 10 CFR 835)
 - Then, no release for recycle into commerce

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Managing Environmental Issues – 2010

Primary Guidance and Tools

(<http://www.hss.energy.gov/nuclearsafety/env/>) Under "Radiation Protection"



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- Guide for "Control and Release of Property with Residual Radioactive Material," April 2002
- EH Guidance Memorandum, November 1995
- ALARA Guidance, Volumes 1 and 2
- Modeling Tools:
 - RESRAD-OFFSITE & ONSITE
 - RESRAD-BUILD
 - RESRAD-RECYCLE
 - TSD Dose
- Multi-Agency Radiation Survey and Assessment of Materials and Equipment Manual (MARSAME) & Multi-Agency Site Survey and Investigation Manual (MARSSIM)

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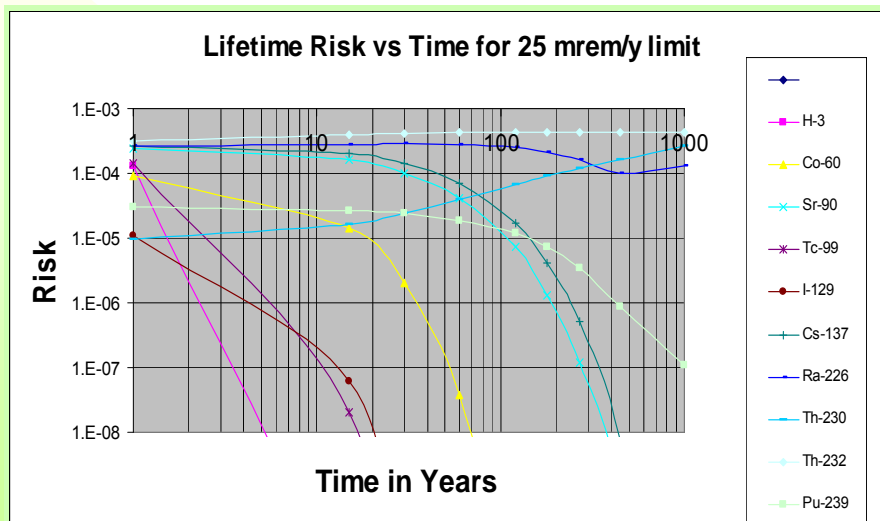
TP NELT 6-107

Managing Environmental Issues – 2010

Lifetime Risk vs. Time



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TP NELT 6-108

Managing Environmental Issues – 2010

Control and Release of Property with Residual Radioactive Material, DOE G 441.xx, April 2002



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- DOE 5400.5 contains the flexibility to permit use of DOE approved Dose-Based authorized limits (clearance criteria)
- Guidance outlines processes for real property (lands and structures) and personal property
- Integrates policy memoranda with DOE 5400.5 requirements

Opportunities for Improving DOE Clearance Practices



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- “There is a need to improve radiation monitoring, independent verification, and record keeping and reporting. We must also better engage the public in our decision making and help them better understand our release practices.”
- “These steps are consistent with existing provisions of DOE Order 5400.5 and should be incorporated into your existing release programs.”

Secretary of Energy
January 19, 2001

Specific Areas



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- Greater attention to process knowledge
- Well-defined and documented control and release criteria
- Line management, in particular Field Offices, have the responsibility to ensure that contractors and DOE personnel comply with release requirements
 - Internally review property release and control systems
 - Appropriate independent verification

DOE Approvals for Dose-Based Authorized Limits



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Action or Condition	Organization Approval
Authorized limits consistent with Surface Activity Guidelines (O 458.1 - Use of pre-approved authorized limits)	Review/approval by field offices in coordination with program offices. (field element manager)
Personal Property — Alternate dose-based limits where doses < 1 mrem/y and 10 person-rem/y (O 458.1 – same but in Order)	Review/approval by field elements in coordination with program office. Mandatory submittal to HS-20, 45 working days prior to use. Limits considered approved if the field is not notified by HS-20 within 30 working days following receipt of request. (same)
Personal Property — Alternate dose-based limits where doses < 25 mrem/y dose constraint but in excess of 1 mrem/y or 10 person-rem/y (O 458.1 – same but in Order)	Review/approval by field elements in coordination with program office. Mandatory submittal to HS-20 for HS-1 written approval (never been used for personal property). (same)



DOE Approvals for Dose-Based Authorized Limits (cont.)

Action or Condition	Organization Approval
Limits for open land (soil criteria). Does not include waste or soil-like wastes for disposal in a landfill or other disposition (O458.1 – same)	Review/approval by DOE field elements in coordination with program offices. HS provides technical assistance upon request. (same except no longer needs to be delegated)
Approval of authorized limits for structures	Same as above for personal property, except that for surface activity on structures, submittal to HS-20 is voluntary and HS-1 approval not required. (field element manager in consultation with program office)
10 CFR Part 835 posting, access control.	Property cleared to DOE 5400.5 authorized limits excluded from 10 CFR Part 835 posting requirements if authorized limits are approved by DOE secretarial officer in consultation with the Chief Health, Safety and Security Officer. (Same)

(Table 3 and Chapter 6 of April 2002 guidance)



Revision to Part 835

- Clarifying those requirements in 10 CFR part 835 which apply to radioactive material transportation;
- Excluding from the scope of 10 CFR part 835 material, equipment, and real property approved for release in accordance with DOE approved authorized limits which have been approved by a Secretarial Officer in consultation with the Chief Health, Safety and Security Officer;
- Updating the dosimetric models and dose terms to be consistent with newer recommendations from ICRP, including use of updated tissue and radiation weighting factors and updated derived air concentration (DAC) values; (DOE O 458.1 will be consistent)

Revision to Part 835 (cont)



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- Establishing DAC values for Special Tritium Compounds (STCs);
- Lowering the maximum amount of radioactive material which need not be labeled;
- Allowing use of thresholds for recording occupational exposures;
- Establishing DAC default values for radionuclides not listed in the rule; and
- Revising values in Appendix E to be consistent with newer dosimetric models and adding values for STCs.

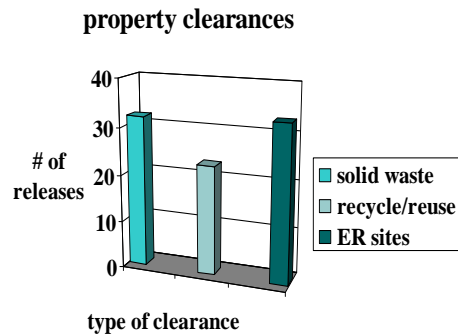
Summary – Property Release Actions



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- HS reviews for volumetric and dose-based-ALARA personal property
- Most clearances use Surface Guidelines
- Real property approved by program and field





A Guide to Good Practices for the Control and Release of Property



http://www.hss.energy.gov/CSA/csp/safety_bulletins/SB_2006-05.pdf

Authorized limits should not be an afterthought but should be integrated into life-cycle project planning.

Key elements include:

- Identifying needed authorized limits early;
- Applying DOE pollution prevention policies and guidance such that property is controlled and cleared in a manner that reduces or prevents the generation of new waste and pollutants, reduces the further contamination, and reduces life-cycle costs;
- Keeping stakeholders appropriately informed of authorized limits and clearance processes;
- Developing, coordinating, and obtaining appropriate DOE approval for and documentation as soon as practical in the contractor's work planning and execution process; and
- Conducting self-assessments within the program, and implementing independent verification as part of DOE oversight activities.



DOE Regulatory Activities

- Update Order DOE 5400.5 to DOE O 458.1
 - Update to new radiation protection recommendations
 - Clarifies expectations from Secretarial Memoranda to address issues that caused suspension and moratorium.
 - Issue necessary guidance or technical standards:
 - o Issue ALARA guidance and 441.xx or replacement in final
 - o Update and revise guide DOE/EH-0173T, "Effluent Monitoring & Environmental Surveillance"
 - o Derived Concentration Guidelines (DCGs) [new-draft stage]
 - o Surface Activity Guidelines [new- draft stage]
 - o Volumetric residual radioactivity process (NNSA/SC working group)
 - Proposed 10 CFR Part 834

Summary



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HSS staff are available to help the field **comply** with DOE Order requirements and use of alternative dose-based authorized/supplemental limits.

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Thank You!



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Questions? Comments?