



FY 2010 Department of Energy Annual Occupational Safety and Health Report for Federal Employees to the Secretary of Labor

(Comprehensive Report Format)

Name of Department/Agency: U.S. Department of Energy
Address: 1000 Independence Avenue SW
Washington, DC 20585

Number of Federal civilian employees this report covers: 16,650

Name		Official Title	Telephone	E-mail
DASHO:	Mr. Glenn S. Podonsky	Chief Health, Safety, and Security Officer	301-903-3777	Glenn.Podonsky@hq.doe.gov
OSH Manager:	Mr. Carlos Coffman	Industrial Hygienist	301-903-6493	Carlos.Coffman@hq.doe.gov

Appendix I Contains the list of sub-agency contacts.

Table of Contents

Executive Summary	3
Detailed Report	7
I. Statistics	8
A. Injury and Illness Statistics	8
1. <u>Injury and illness rates</u>	8
2. <u>Facilities with high injury and illness rates</u>	9
B. Fatalities and Catastrophic Incidents	10
C. Overseas Employees	10
D. Significant Trends and Major Causes or Sources of Lost Time Disabilities	10
1. <u>Tracking accidents</u>	10
2. <u>Controlling trends</u>	11
E. Contract Workers and Volunteers	11
II. Occupational Safety and Health (OSH) Initiatives	12
A. Motor Vehicle Safety	12
1. <u>Number of motor vehicle accidents experienced by employees in FY 2010</u>	12
2. <u>Seatbelt use</u>	12
3. <u>Motor vehicle safety and distracted driving</u>	13
B. Integrating OSH and Emergency Response	13
III. Employee and Contractor Support	15
A. OSH Training	15
1. <u>Ensuring that staff are trained</u>	15
2. <u>Staff trained</u>	15
B. OSH Conferences/Seminars	15
C. Field Federal Safety and Health Councils	15
1. <u>Involvement</u>	15
2. <u>Field Council Support</u>	15
D. Other Support Activities	16
E. Certified Committees	16
IV. Self-Evaluations	16
V. Accomplishments for FY 2010	17
VI. Resources	18
VII. Goals	18
VIII. Questions/Comments	20
Appendix I — Sub-Agency Contacts	21
Appendix II — DOE Organizational Chart	22
Appendix III – Types of Training Provided in FY 2010	23

Executive Summary

The mission of the U.S. Department of Energy (DOE) is to ensure the nation's energy security; maintain the safety, security, and reliability of the nuclear weapons stockpile; develop innovations in science and technology; and clean up the environmental and radioactive legacy of the Cold War. In fulfilling its mission, DOE and contractor employees regularly encounter significant hazards that pose risks for occupational injury and illness.

Given this expansive mission, safety is an integral part of everything DOE does. The safety of workers and the public and the responsibility to safeguard our natural surroundings are integrated into management practices throughout DOE. This Fiscal Year (FY) 2010 DOE Annual Occupational Safety and Health Report for Federal Employees to the Secretary of Labor provides an overview of DOE accident, injury, and illness data, as well as initiatives the Department is undertaking to continuously improve worker safety and health.

In FY 2010, DOE continued its safety and health improvements. Since FY 2003, DOE has reduced overall Federal employee injury and illness case rates by 31 percent. There were no Federal employee fatalities, and there were no catastrophic¹ events in FY 2010. Of special note is that those organizations with the highest injury rates in prior years made the greatest progress in reducing injuries. For example, process improvements in physical training for Federal agents within DOE's Office of Secure Transportation contributed to a 44 percent reduction in their injuries in FY 2009 and a further 10 percent reduction in FY 2010. Electrical workers at the Western Area Power Administration saw this year's case rates reduced by 25 percent, thanks, in part, to workplace stretching programs and training in defensive driving and winter driving.

DOE's emphasis on controlling the highest hazards in its workplaces has been effective in reducing serious injuries and illnesses. The challenge now is to improve safety in more commonplace tasks, such as driving, materials handling, walking, and use of computers. More than ever, employees are involved in workplace safety, including training, safety committees, workplace inspections, safety fairs, fitness activities, and communications.

Statistics

Injury and Illness Trends

The DOE Total Case Rate (TCR) and its Lost Time Case Rate are both less than half that of the overall rate for the Federal government. The Department continues to set and strive for even more ambitious goals each year. In FY 2010, DOE had 247 cases as compared with 254 cases in FY 2009. The TCR was 1.48, the lowest rate in DOE history. DOE experienced 89 lost time cases, for a rate of 0.53 – a 21 percent decrease from FY 2009. Many lost time injuries were strains or traumatic injuries associated with falls, materials handling, and slips and trips. Lost Work Days decreased slightly from FY 2009 (a 3.6 percent decline).

Total workers' compensation chargeback costs were \$9,383,054 for the 2010 chargeback year, a marginal increase over the 2009 chargeback year costs of \$9,300,197.

¹ A catastrophe is defined by the Occupational Safety and Health Administration as the hospitalization of three or more employees resulting from a work-related incident or exposure (in general, from an injury or caused by a workplace hazard).

Fatalities and Catastrophic Accidents

DOE experienced no fatalities among Federal employees and no catastrophic events.

Overseas Employees

DOE has assigned 18 Federal employees to work overseas, operating under the umbrella of the host organization's occupational safety and health plan. No injuries were reported by these employees.

OSH Initiatives

Motor Vehicle Safety

DOE Federal employees were involved in 60 motor vehicle accidents. None of these accidents resulted in lost time injuries.

DOE requires seat belt usage when driving on DOE property and when operating a vehicle on official business. The agency's seat belt usage rate (90-100% compliance rate) exceeds the national average. Seat belt use is emphasized throughout DOE as part of a multi-media safety promotion effort.

DOE has undertaken a number of initiatives to address distracted driving. The fatal injury of a contractor employee at Lawrence Livermore National Laboratory in June 2009 spurred an extensive DOE accident investigation that identified several contributing factors and recommended corrective actions. DOE created a wiki titled *Vehicle Safety Awareness* to allow users to freely create and edit webpage content using any web browser. Since its inception in April 2010, users in over 32 states and 10 countries have participated (over 5,000 hits) in this social dialogue to increase motor vehicle safety awareness. The site can be accessed at: <http://vsa.doe-hss.wikispaces.net/>

Other examples of DOE efforts implementing the Presidential motor vehicle safety initiatives² include memoranda from top DOE officials, webpage messages, discussions at safety meetings, posters, pamphlets, information displayed in lobby entrances, and training.

Integrating Occupational Safety and Health and Emergency Response

In accordance with Executive Order 12656, *Assignment of Emergency Preparedness Responsibilities*, DOE established its Continuity of Operations Plan (COOP) to address mission-critical functions. The plan incorporates procedures to secure sensitive DOE material movements involving transportation of classified nuclear materials from facilities under DOE purview, upgrades the security of all facilities to the extent required in a given emergency, and assures the safety and health of its employees.

The DOE COOP includes procedures for tracking the location and safety of all employees in an emergency. This plan includes Short-Term Continuity of Operations Plans and Procedures, which provide for the assembly and operation of the smallest staff necessary to support the Secretary and DOE critical essential functions for limited-duration operations at the peak of an

² Two Executive Orders emphasize motor vehicle safety: Executive Order 13043, *Increasing Seat Belt Use in the United States*, and Executive Order 13513, *Federal Leadership on Reducing Text Messaging While Driving*.

emergency. The changing threat of recent emergencies has highlighted the need for capabilities that enable Federal agencies to continue their essential functions while ensuring the safety and health of its workforce. For example, in response to events created by Hurricane Katrina, DOE's Strategic Petroleum Reserve Office successfully implemented emergency procedures for natural disasters that included safely securing the families of these mission-critical workers.

Several field sites incorporate training, drills, and exercises to evaluate scenarios to help ensure that employees take the appropriate actions to protect themselves. For example:

- The Bonneville Power Administration includes the Safety Office staff on the Incident Management Team.
- The DOE Idaho Operations Office incorporates employee safety and health into the preplanning phases (e.g., identifying potential hazards) of emergency plan development.

Employee and Contractor Support

DOE provides Department-wide orientation and site-specific training for its Federal employees through such mechanisms as the integrated safety management (ISM) system, the Federal Employee Occupational Safety and Health (FEOSH) program, technical committees, safety and health programs, employee concerns programs, and assistance visits. DOE requires its contractors to have a DOE-approved site-specific worker safety and health plan³ and pays for site-specific training. Contractors attend DOE-sponsored courses, seminars, and workshops.

Accomplishments and Goals

DOE's safety focus on the highest hazards has been successful in reducing serious injuries and preventing fatalities and catastrophic events. The implementation of the ISM system has led to the dramatic reduction in DOE's injury rates, and there is much more emphasis on evaluating trends and recommending corrective actions to improve safety.

An example of this impact can be seen at the Southwestern Power Administration, which experienced no electrical-related injuries in FY 2010. This is a significant achievement for an agency in which nearly half the employees work near energized high-voltage electrical equipment.

The Department recognizes the challenge and need for action to sustain accomplishments and further improve safety performance. DOE has established five FEOSH program goals for FY 2011:

1. Motor Vehicle Safety Awareness – Develop an on-line training module to be incorporated into the orientation and annual FEOSH training to improve driver safety awareness and support the President's Executive Order on texting.
2. Protecting Our Workers and Ensuring Re-employment (POWER) Initiative – Explore intervention strategies aimed at improving return-to-work outcomes. Include an Office of Worker's Compensation Programs refresher training module in the FEOSH annual training for managers and supervisors.

³ Title 10, Code of Federal Regulations, Part 851, *Worker Safety and Health Program*, established the regulatory requirements for contractor safety on DOE sites.

3. Best Practices and Standards – Integrate safety and health considerations into Federal facility design requirements, and determine best practices, codes, and specifications for integrating occupant safety and health considerations into building design. Establish a work group to centralize information, develop guidelines, and integrate those guidelines into building standards and codes. The General Services Administration is very willing to establish the work group or to cooperate or partner with a DOE-led work group.
4. Young Worker Safety and Health Initiative – Partner with other Federal agencies and departments to develop safety awareness tools to encourage Federal workers to inform, instruct, and influence the young people in their families and communities on worker safety and health issues.
5. FEOSH Training - Update and enhance Federal agency occupational safety and health (FEOSH) training for Federal employees. Provide distance-learning opportunities, make more training available on-line, and determine “best practices” used by other Federal agencies in developing and delivering occupational safety and health training.

Detailed Report

The overarching mission of the U.S. Department of Energy (DOE) is to advance the national, economic, and energy security of the United States; to promote scientific and technological innovation in support of that mission; and to ensure the environmental cleanup of the national nuclear weapons complex.

A key strategy for DOE mission accomplishment is to conduct most of its operations through full time, long term contracts. In fact, while DOE has approximately 16,650 Federal employees subject to the Occupational Safety and Health Administration (OSHA) requirements, it has over 110,000 contract employees working to fulfill its mission who are not covered by OSHA. Contractors operate most DOE facilities and provide technical, research, administrative, construction, maintenance, and emergency services. Most contractor employees are subject to the comprehensive worker safety and health program pursuant to 10 CFR 851.

DOE is organized into the following major units:

- National Nuclear Security Administration (NNSA)
 - Responsible for the management and security of the nation's nuclear weapons and nuclear non-proliferation programs
 - Responds to nuclear and radiological emergencies in the United States and abroad
 - Provides safe and secure transportation of nuclear weapons and components, and special nuclear materials, along with other missions supporting national security
 - 2,000 Federal employees, of whom approximately 700 are assigned to the Office of Secure Transportation (OST), which has an elite security protective force
- Program Offices
 - Manage the core mission of national security
 - Include Environmental Management; Fossil Energy; Legacy Management; Nuclear Energy (NE); Electricity Delivery and Energy Reliability; and Energy Efficiency and Renewable Energy (EERE)
 - 2,300 Federal employees
- Office of Science
 - The single largest supporter of basic research in the physical sciences in the United States
 - The principal Federal funding agency of the nation's research programs in high-energy physics, nuclear physics, and fusion energy sciences
 - Oversees the construction and operation of some of the nation's most advanced research and development user facilities, including particle and nuclear physics accelerators, synchrotron light sources, neutron scattering facilities, supercomputers, and high-speed computer networks
 - Manages ten of the nation's national laboratories
 - 900 Federal employees

- Power Marketing Administrations (PMAs)
 - The four PMAs market electricity and operate extensive electricity transmission systems
 - Maintain high voltage transmission lines and right of ways, substations, and microwave towers
 - 4,700 Federal employees, with nearly 3,000 in the Bonneville Power Administration (BPA), 1,500 in the Western Area Power Administration (WAPA), 200 in the Southwestern Power Administration (SWPA), and 40 in the Southeastern Power Administration (SEPA)

- Departmental Staff and Support Offices
 - Staff offices provide administrative, management, and oversight support to the DOE program offices and include the Office of Management (MA); the Office of Health, Safety, and Security (HSS); the Office of Human Capital; and various other offices
 - MA provides facilities management support in the Headquarters offices
 - 5,800 federal employees are stationed at DOE Headquarters.

The Designated Agency Safety and Health Official (DASHO) is the Chief Health, Safety and Security Officer of the Department and reports directly to the Deputy Secretary of Energy. This role provides corporate-level leadership for safety, including the Federal Employee Occupational Safety and Health (FEOSH) program. Included in the HSS responsibility for support and oversight are offices on worker health and safety, nuclear safety, corporate safety analysis, worker safety and health enforcement, independent oversight, and the National Training Center.

Sub-agency contacts are provided in Appendix I, and an organizational chart of DOE is provided in Appendix II.

I. Statistics

A. Injury and Illness Statistics

1. Injury and illness rates

Since 2003, DOE has reduced overall Federal employee injury/illness case rates by 31%. This year's rate of 1.48 is the lowest rate in DOE history.

	FY 2009	FY 2010	Change
Number of Federal Civilian Employees , including full-time, part-time, seasonal, intermittent workers	15,346	16,650	+ 1,304
Total Cases Injury/Illness (number of injury/illness cases - no lost-time, first aid, lost-time and fatalities)	254	247	- 7
Total Case Rate (rate of all injury/illness cases per 100 employees)	1.66	1.48	- 0.18
Lost Time Cases (number of cases that involved days away from work)	103	89	- 14
Lost Time Case Rate (rate of only the injury/illness cases with days away from work per 100 employees)	0.67	0.53	- 0.14

Lost Work Days (number of days away from work)	2,609	2,514	- 95
Lost Work Day Rate (per 100 employees)	17.0	15.1	- 1.9

2. Facilities with high injury and illness rates

DOE’s programs and facilities with high injury and illness rates have been the NNSA and the PMAs. NNSA tracks injury and illness rates in the DOE Computerized Accident/Incident Recording System (CAIRS)⁴ and reviews organizational statistics with the Administrator on a quarterly basis. The NNSA OST has experienced the highest accident/injury rates in NNSA. OST has a mission to secure transportation of nuclear weapons, components, and nuclear materials conducted by specially trained Federal agents. The necessity of having a highly specialized, physically fit, tactically trained Federal agent force impacts OST’s higher injury rates. An OST review tracks, investigates, and trends all injuries (and near misses). Lessons learned are disseminated to all personnel within OST to help maintain awareness and help prevent recurrence of injuries. Exercise physiologists assist in the evaluation of injuries, review physical fitness programs, and develop exercise regimens to reduce lost time injuries. The OST integrated safety management (ISM) program implemented a goal in 2008 to reduce injuries by 5 percent per year, which has been realized through these OST initiatives.

Most of the BPA high-risk occupations are mobile work crews who move from facility to facility. BPA tracks, analyzes, and reports performance data by workgroup rather than facility. BPA’s recordable accident rate for fiscal year (FY) 2010 is 1.3, compared to the national average for this industry of 4.0. BPA’s Days Away, Restricted or Transferred (DART) rate is 0.9, against the national average for this industry of 1.9.⁵ BPA has a regular reporting and analysis process to continuously monitor safety performance and share lessons learned at all levels of the agency. All accidents and near accidents are tracked, investigated, and analyzed. A BPA safety committee reviews all injuries, near misses, motor vehicle accidents, and accident investigations monthly. In addition, BPA’s safety committee structure may escalate safety issues up to an overall labor/management committee with a Vice President as chairman to ensure that all identified safety issues are resolved in a timely manner.

WAPA reports monthly on accidents, injuries, and corrective actions by region. WAPA’s Desert Southwest Region is starting a pilot program to determine the physical requirements for a craft job description and to improve yearly work physicals. A major WAPA concern is the impact of unsuccessful efforts to return employees to a level of fitness when they have been determined not to be fit for duty. WAPA’s Total Case Rate (TCR) for FY 2009 was 1.4, and the FY 2010 TCR is 1.5. Its Lost Time Case Rate (LTCR) is 0.5. Most of WAPA’s lost time cases are musculoskeletal disorders (e.g., back, shoulders).

⁴ CAIRS collects all of the information required under 29 CFR 1904, *Recording and Reporting Occupational Injuries and Illness*, as well as information and corrective actions taken and recommended.

⁵ National data is based on NAICS code 22112, *Electric Power Transmission, Control and Distribution*, as published by the Bureau of Labor Statistics.

B. Fatalities and Catastrophic Incidents

DOE completed FY 2010 with no Federal employee fatalities and no catastrophic incidents.

Fatality and Catastrophic Accident Investigations: None.

C. Overseas Employees

A small number of NNSA and various Headquarters staff may be assigned overseas for periods of up to two or three years. No DOE safety officers are assigned overseas. Although the home DOE program office is responsible for the identification and control of hazards, DOE overseas employees are typically covered under the occupational safety and health plan of the host organization. For example, 14 NNSA employees reside on State Department posts, three NE employees were stationed overseas, and EERE has one employee stationed with the International Energy Agency in Paris, France.

D. Significant Trends and Major Causes or Sources of Lost Time Disabilities

1. Tracking accidents

Injuries are tracked in the Department of Labor's Office of Worker's Compensation Programs (OWCP) reports and in the DOE CAIRS. CAIRS collects all of the information required under 29 CFR 1904, *Recording and Reporting Occupational Injuries and Illness*, as well as information about corrective actions taken and recommended. Both the OWCP and CAIRS reporting systems are being improved through continuing efforts to train employees in incident reporting and in conducting quality analyses of the data. In addition, DOE performs field visits to evaluate the CAIRS recordkeeping system.

The predominant lost time injury category is sprains and strains, accounting for more than one-third of lost time cases. What is notable about DOE Federal employee injuries is that most arise from ordinary tasks (i.e., material handling; slips, trips and falls; and motor vehicle operation) and not from the recognized high hazard tasks that DOE performs. Rigorous attention is paid to controls and procedures for handling nuclear materials, high energy sources, weapons, and hazardous chemicals. To make further improvements in workplace safety, DOE is devoting renewed attention to such areas as human performance improvement (HPI) precursors for skill-based tasks.

NNSA OST security force personnel experience the highest injury/illness rates in DOE. The predominance of these injuries is related to physical fitness or operational exercise activities. Within the rest of the workforce, injuries arising from improper office ergonomic layouts prevail.

The total DOE workers' compensation costs for the 2010 chargeback year was \$9,383,054.42, a marginal increase over the 2009 chargeback year costs of \$9,300,197.

2. Controlling trends

The Department tracks and analyzes data on injuries and illnesses. The CAIRS password-protected system allows Department-wide, as well as organization-specific, trends to be analyzed to measure improvements and opportunities for improvement. The DASHO is regularly briefed on organizational trends. An HSS website provides updates on injury/illness rates.

The DOE Occurrence Reporting and Processing System (ORPS) provides timely notification to the DOE complex of events that could adversely affect public or DOE worker health and safety, the environment, national security, DOE's safeguards and security interests, functioning of DOE facilities, or the Department's reputation. This system encourages the reporting of near misses so that lessons learned can be applied to improve operations and prevent future injury. DOE has a robust lessons-learned program.

Program offices also track and control their trends. They conduct inspections in response to occasional employee complaints, notices of unsafe or healthful conditions, or in the process of other routine business. HSS provides comprehensive site assistance to assess the effectiveness of environment, safety, and health (ES&H) programs.

FY 2010 Major Trends			
Nature	% of total	% of cost	Description
Sprain/Strain	21	27	Over half due to falls while walking
Traumatic Injury – Unclassified	15	25	Over half due to falls while walking
Back Sprain/Strain, Back Pain	12	15	Material handling, falls, vehicles
Pain/Swelling/Stiffness/Redness in Joint	5.5	3.3	Material handling, falls
Cause of Injury	% of total	% of cost	Description
Unclassified	33	37	Walking, animate objects, noise, furnishings, material handling
Other falls	13	12	Walking, vehicles
Slip, twist	6.7	4.0	Walking, vehicles
Other material handling	6.3	15	Office furniture, boxes, trash

E. Contract Workers and Volunteers

Contract workers comprise the overwhelming majority of the DOE workforce. There are approximately 110,000 full-time equivalent contractors, mostly working on DOE

premises. DOE issued a comprehensive rule for DOE contractors as Federal regulation 10 CFR 851, *Worker Safety and Health Program*, on February 9, 2006. This rule goes beyond OSHA compliance to require each contractor and subcontractor to submit a site-specific safety and health plan for approval before work commences and to submit annual updates to their plans. The rule guarantees every contract worker the right to stop work if conditions are believed to be imminently dangerous.

To further instill a safety culture at DOE sites, DOE implemented a Voluntary Protection Program (VPP) similar to the OSHA VPP, which has been active since January 1994. In FY 2009, there were 28 DOE VPP Star sites, exemplary worksites with comprehensive, successful safety and health management systems. In addition, four DOE contractor sites maintain Star status under the OSHA VPP. The impact of this commitment to a safety culture has resulted in injury and illness rates significantly lower than their comparable industry counterpart (on average, 50 percent lower).

Contractors play a key role in ES&H operational activities and contribute to a safe DOE workplace by maintaining facilities in a safe operable condition and requiring safe work practices that exceed OSHA standards. Many Federal DOE employees work in contractor workspaces and are protected by contractor safety and health programs at operating facilities, construction and field sites, and national laboratories. Many contractors work side by side with Federal employees in government offices. Contractor initiatives to improve safety directly impacting Federal employees include: training, participation in safety committees, fire drill exercises and safety fairs, engineering and administrative controls, and access to contractor medical clinics.

The DOE complex uses only a few volunteers who support functions and events for Federal employees, such as the blood bank; Combined Federal Campaign; science fairs; and active programs for summer student interns, college co-op students, and visiting professors. The volunteers are all briefed and follow job safety analyses tailored to their efforts.

II. Occupational Safety and Health (OSH) Initiatives

A. Motor Vehicle Safety

1. Number of motor vehicle accidents experienced by employees in FY 2010

Complex-wide, DOE Federal employees were involved in 60 motor vehicle accidents. None of the accidents resulted in lost time injuries to Federal employees.

2. Seatbelt use

Overall, DOE programs and facilities report upwards of 90-100 percent compliance with seat belt policies. Around the complex, information regarding seatbelt use, and the prohibition of handheld devices (to include no texting) while driving is promoted through the use of posters, pamphlets, and information displayed in lobby entrances and included in monthly safety topics at meetings. Weekly safety messages on various topics are sent to all Federal and support service contractor employees through employee newsletters.

At some sites, a vehicle may be stopped and seat belt usage discussed with the driver and passengers.

3. Motor vehicle safety and distracted driving

Most field sites report some form of motor vehicle safety and distracted driving awareness training and/or initiatives to comply with Executive Order 13513, banning texting while driving, as well as to improve overall motor vehicle safety and distracted driving.

Examples of field site efforts to improve motor vehicle safety include:

- The Office of River Protection (ORP) FEOSH Program Manager has provided driver safety presentations at ORP all-hands meeting, including a focus on distracted driving, avoiding deer strikes, winter driving, and seat belt use. The ORP FEOSH Program Manager periodically performs informal qualitative field surveys in office parking lots to evaluate cell phone usage.
- The National Safety Council Defensive Driving Course is mandatory for all Legacy Management personnel who operate a government vehicle.
- The Office of Chief Information Officer's (OCIO) Office of Information Technology (IT) Corporate Management distributes messages to all OCIO employees (Federal and contractor) regarding motor vehicle safety, including the recent notification of the new Maryland ban on cell phone use while driving.
- DOE program offices have utilized newsletter articles, e-mail, intranet websites, posters, screensavers, and other means to disseminate information on distracted driving.

B. Integrating OSH and Emergency Response

Overall, the DOE Continuity of Operations Plan (COOP) includes procedures for tracking the location and safety of all employees in the event of a terrorist attack or natural disaster and also includes Short-Term Continuity of Operations Plans and Procedures, which provide for the assembly and operation of the smallest staff necessary to support the Secretary and DOE critical essential functions for limited duration operations at the peak of a national emergency. These procedures address the requirements of Executive Order 12656, *Assignment of Emergency Preparedness Responsibilities*.

The DOE COOP addresses mission-critical functions. The plan incorporates procedures to secure sensitive DOE material movements involving transportation of isotopic shipments, upgrades the security of nuclear facilities to the extent required in a given emergency, and assures the safety and health of its employees.

The DOE COOP includes procedures for tracking the location and safety of all employees in the event of a terrorist attack or natural disaster.

The response to an incident or emergency affecting a Headquarters building is addressed in the DOE Headquarters Occupant Emergency Plan (OEP). When this plan is activated, an incident command team reports to a command center. Safety and health specialists are part of the response team and are prepared to conduct necessary safety services (e.g., sampling of contaminated equipment).

The incident command team response is terminated when the incident has ended or been resolved, when command is transferred to another Federal agency, or when the DOE COOP is invoked.

The Headquarters response to an emergency that occurs at a DOE or NNSA field site is initially handled by the Headquarters Operations Center Watch Office, which is operational 24 hours a day, seven days a week. An alternate Operations Center is available in Germantown, Maryland, if the Forrestal Operations Center in Washington, DC, becomes uninhabitable or non-operational.

If a decision is made to relocate DOE personnel to Germantown or outside of the Washington, DC, metropolitan area to reconstitute critical Departmental functions in an alternate location, the DOE Headquarters COOP is activated. Individual Headquarters organizations have established office-specific COOPs and provided them to the Headquarters COOP Program Manager.

All DOE field sites have emergency management programs that include emergency plans, training, and regular drills. Plans include assistance during evacuations for employees with special needs and medical conditions. The plans also address coordination with site safety offices and with incident management and other emergency officials.

In an actual response to a real emergency event – Hurricane Katrina – the Strategic Petroleum Reserve Office (SPRO) implemented the emergency procedures for natural disasters; mobilized the mission-critical workers at the Baton Rouge, Louisiana, facility; and safely secured the families of these mission-critical workers.

Examples of rigorous emergency response plans and preparations include:

At Headquarters:

- MA: works closely with the Health Clinics and Human Capital Management to address emerging health concerns, such as MRSA (methicillin-resistant *Staphylococcus aureus*) infections and pandemic influenza
- MA's Office of Procurement: works with NNSA to ensure that DOE's radiation assessment assets get to the appropriate location

At field locations:

- WAPA: held drills addressing natural disasters and violence in the workplace
- NE-Idaho: covers pandemics and other mass casualty events
- AdvanceMed Hanford: monitors Federal health advisories and recommendations as well as information from national and international health agencies, to prepare for a pandemic outbreak.

III. Employee and Contractor Support

A. OSH Training

1. Ensuring that staff are trained

Each DOE organization is responsible for identifying specific safety training needs and providing specific safety training for its personnel. In FY 2010, DOE again updated its annual online FEOSH training for all Federal employees.

At Headquarters offices, Federal and contractor employees are briefed on emergency procedures and general safety. Headquarters offices also provide awareness campaigns on such topics as slips, trips, and falls; electrical safety; workplace violence; construction safety; and emergency procedures. Safety issues are also communicated via on-line videos, handouts, flyers, broadcast e-mail messages, pamphlets, and newsletters.

DOE field offices augment Headquarters training programs in covering specific subject matter. For example, SWPA provides training relating to work on high voltage electrical hazards, and Portsmouth/Paducah Project Office oversight workers are qualified as Hazardous Waste Operators (HAZWOPER).

2. Staff trained

See Appendix III for a list of training, by type.

B. OSH Conferences/Seminars

DOE encourages professional development and participation in professional conferences and seminars. A number of Headquarters and field office personnel participated in national safety conferences in FY 2010, such as the National Safety Congress Expo and various American Society of Safety Engineers and OSHA VPP events.

In addition, field offices have been proactive in sponsoring safety and health meetings. For example, the WAPA held its annual Western-wide Safety Committee training in Phoenix, Arizona. All regions were represented at this training, and an OSHA representative provided the mandatory training. Western's region provides seminars and training throughout the year on ergonomics, cardiopulmonary resuscitation (CPR), automatic external defibrillators (AEDs), first aid, nutrition, exercising, and stress management, as well as safety speakers and presentations on safety performance and many more topics.

C. Field Federal Safety and Health Councils

1. Involvement

DOE encourages its offices to take advantage of safety services available through the Federal Field Council network. DOE has also provided safety and health assistance to the Councils.

2. Field Council support

In addition to active participation in the Federal Field Councils, DOE has offered to serve as a meeting host.

D. Other Support Activities

All DOE field sites have active safety and health committees, and HSS is responsible for providing guidance, support, and assistance to DOE field organizations. In some of DOE's specialized facilities, safety and health personnel are encouraged to seek professional certification, and many have achieved it (Certified Industrial Hygienist or Certified Safety Professional). These personnel often belong to the American Industrial Hygiene Association, the American Society of Safety Engineers, the American Conference of Governmental Industrial Hygienists, and other professional organizations.

Some notable examples of field participation activities include:

- BPA has a Safety Proctor Program in which a cross-section of volunteer, hourly craft employees are given specialized training by the Safety Office in inspecting facilities, identifying hazards, and correcting unsafe conditions. In addition to this training, BPA supports and encourages their participation in the Washington State Governor's Safety and Health Conference. Safety Office staff members have a number of professional certifications through OSHA certification programs.
- Two WAPA maintenance personnel have attained the new Certified Utility Safety Professional Blue certification (which replaced the old CUSA certification).⁶
- Three of the Oak Ridge Office technical staff are members of national standards committees: Nuclear Criticality National Standards, American National Standards Institute/American National Standard (ANSI/ANS) 8 Series, *Use of Soluble Neutron Absorbers in Nuclear Facilities*; Hydrogen Fluoride Industry Practice Institute; National Fire Protection Association (NFPA) 1710, *Standard for the Organization and Deployment of Fire and Deployment of Fire Suppression Operations, and Special Operations to the Public by Career Fire*.

E. Certified Committees

As noted above, DOE field sites have active safety and health committees. DOE's larger field units have proactive Certified Safety and Health Committees (CSHCs). For example, BPA has a number of local safety committees that report directly to a CSHC composed of labor delegates, management delegates, and technical advisors. The CSHC is a focal point for system-wide safety and health concerns as well as changes to BPA's Accident Prevention Manual. The CSHC is an integral part of BPA's overall safety program that promotes continuous process improvement to key BPA safety processes and programs.

IV. Self-Evaluations

DOE complies with 29 CFR 1960.79, *Self-evaluations of Occupational Safety and Health Program*, through the ISM annual self-assessments performed by each program and field office. The scope of these evaluations varies across the Headquarters and field offices. For Headquarters offices, these evaluations are primarily facility/office building inspections. In contrast, the field offices conduct comprehensive evaluations of more industrialized facilities. Examples include:

⁶ The Certified Utility Safety Professional certification program is the only program that offers safety credentials to utilities, related contractors, and communication providers. A two-tier, color-designated program geared toward individual growth and increased value for employers supports the certification process.

For Headquarters facilities:

- NNSA Headquarters conducts a FEOSH program review at each of its field sites every four years. The review is conducted utilizing a Criteria, Review and Approach Document similar to that used by OSHA for Federal Agency FEOSH program evaluations.
- NE Headquarters participates in the annual FEOSH walkthroughs coordinated by MA for Headquarters organizational elements.
- The EERE ISM system (ISMS) annual evaluation is prepared by reviewing the Headquarters ISM system description and findings from any other self-evaluation efforts, including workplace inspections, surveys, ORPS reports, and DOE Headquarters or EERE field sites.

For the PMAs/field offices:

- BPA's safety staff conducts periodic reviews of BPA's safety program, not only for compliance with OSHA regulations, but also for incorporating industry best practices and innovative solutions to reduce risk. BPA is in a constant cycle of identifying program improvements, especially in high-risk occupations.
- SEPA's FY 2010 Summary Management Review revealed that its safety and health program is in compliance with applicable laws and regulations.
- WAPA's Corporate Services Office (CSO) Safety and Security office began an audit of the agency's fire protection program. It was anticipated that every region and CSO would be audited.
- DOE-Savannah River (DOE-SR) self-evaluations focused on ergonomic evaluations and needs, building inspections for safe conditions, and training needs.
- The DOE Idaho Operations Office performs an annual ISMS effectiveness review and uses the results of the review to develop the annual ISMS declaration for itself and for each contract under its purview.

V. Accomplishments for FY 2010

DOE has been successful in controlling the high hazards in its workplaces. As noted in the Executive Summary, the ISM mechanism, which was instituted in 2007, is having a positive impact in reducing injuries, and greater emphasis is being placed on evaluating trends and recommending corrective actions to improve workplace safety. Examples include the following:

- SWPA experienced no electrical-related injuries in FY 2010. This is a significant achievement for an agency in which nearly half the employees work near energized high-voltage electrical equipment. Southwestern is concerned about soft tissue injuries and sprains and will continue prevention awareness.
- BPA focuses on a system of continuous process improvements within the safety committee process. In addition, BPA is expanding its safety proctor program to increase field expertise in employee safety inspections and observations. Long-range programs include:
 - Development of a database of hazardous substances
 - Implementation of a more stringent policy for protective footwear
 - Implementation of a new silica policy.

- In FY 2010, DOE-SR noted several safety accomplishments, including:
 - Instituted “No electronic devices used while driving” policy, on which preliminary feedback is excellent (no policy violations issued, to date)
 - Instituted vehicle 360° safety inspection walk-around for all government vehicle use
 - Maintained low injury/illness rates in its workforce, partially due to its oversight of a contractor with excellent safety performance and VPP status
 - Demonstrated a strong safety culture (documented via surveys)
 - Installed AEDs last year and ensured that first responders are trained and ready
 - Reinstated onsite medical services (e.g. physical exams, health screening, and vaccinations) last year (and continuing) for DOE-SR employees’ health.

VI. Resources

Overall, DOE maintained current resources and made modest investments in additional safety and health resources. Some examples include:

- BPA expanded its safety staff in FY 2010 to include a contractor safety professional to expand its contract worker safety oversight program. BPA is migrating hard-copy lab reports related to industrial hygiene to an electronic database to provide real-time feedback to employees engaged in projects that may involve asbestos, lead, mercury, or other harmful substances.
- The DOE-SR main allocation is to complete its approximate 30 percent need for ergonomic chairs, keyboards, and adjustable trays for the field office. SRS is exploring innovative training tools to address ergonomic issues.
- EERE brought onboard a one-time contractor employee to help catch up and maintain their OEP due to the continual adding of personnel and movement between three buildings at DOE Headquarters and to help update EERE’s six existing ISMS program documents and draft two new documents.

VII. Goals

DOE has established five agency-wide FEOSH program goals for FY 2011:

1. Motor Vehicle Safety Awareness – Develop an on-line training module to be incorporated into the orientation and annual FEOSH training to improve driver safety awareness and support the President’s Executive Order on texting.
2. Protecting Our Workers and Ensuring Re-employment (POWER) Initiative – Explore intervention strategies aimed at improving return-to-work outcomes (consistent with the President’s POWER Initiative). Include an OWCP refresher training module in the FEOSH annual training for managers and supervisors.
3. Best Practices and Standards – Integrate safety and health considerations into Federal facility design requirements, and determine best practices, codes, and specifications for integrating occupant safety and health considerations into building design. Establish a workgroup to collate and centralize information, develop guidelines, and integrate those guidelines into building standards and

codes. The General Services Administration has indicated that it is very willing to establish a “work group” or cooperate with a DOE task group or partner.

4. Young Worker Safety and Health Initiative – Partner with other Federal agencies and departments to develop safety awareness tools to encourage Federal workers to inform, instruct, and influence the young people in their families and communities on worker safety and health issues.
5. FEOSH Training – Update and enhance Federal agency FEOSH training for Federal employees. Provide distance-learning opportunities, make more training available on-line, and determine “best practices” used by other Federal agencies in developing and delivering occupational safety and health training.

In addition, a number of offices have adopted additional site-specific goals. Following are a few examples:

At Headquarters offices:

- Legacy Management goals are to complete the implementation of ISM core functions and guiding principles and to continue the no-injury trend. To attain these goals, LM will perform awareness and hazard recognition training and continue to perform facility and program inspections.
- EERE Headquarters goals are to ensure the safety and health of its employees and all personnel who work in or visit EERE work spaces; provide executive leadership, coordination, and professional technical information for safety and health actions to support EERE programs and field activities to ensure EERE mission success; and serve and support the Assistant Secretary for EERE as the senior principal technical authority and expert consultant for all safety management functions and responsibilities.
- The Office of the Human Capital Officer will strive to reduce trips and falls by performing preventive maintenance, such as clean sweep operations to rid offices of boxes, papers, and other potential hazards.

At field locations:

- BPA is exploring changes to its Accident Prevention Manual that would facilitate faster and more robust changeout of process improvement documentation. BPA is also exploring initiatives to strengthen medical surveillance programs by including a contractor industrial hygienist to oversee data collection for employee exposure sampling. BPA is in the process of populating a new hazardous materials database that should provide a more streamlined process for providing employees with copies of industrial hygiene reports on facility lead, mercury, and asbestos exposures.
- SWPA’s FY 2011 goals are to continue the excellent electrical work safety awareness program activities and work toward eliminating injuries and driving errors. Daily job briefings will be documented to remind employees of proper ergonomics and lifting procedures. More formal instruction will be provided in

safety meetings. Success will be measured by the number of injuries and vehicle incidents.

- In FY 2011, DOE-SR will aim for a zero injury year and more employee involvement; educate the workforce and provide more timely service for ergonomic awareness and needs; improve the tracking system for corrective actions and hazardous conditions; promote employee awareness to prevent slips, trips, and falls; evaluate mini-programs; and improve supervisors' awareness of safety expectations.

VIII. Questions/Comments

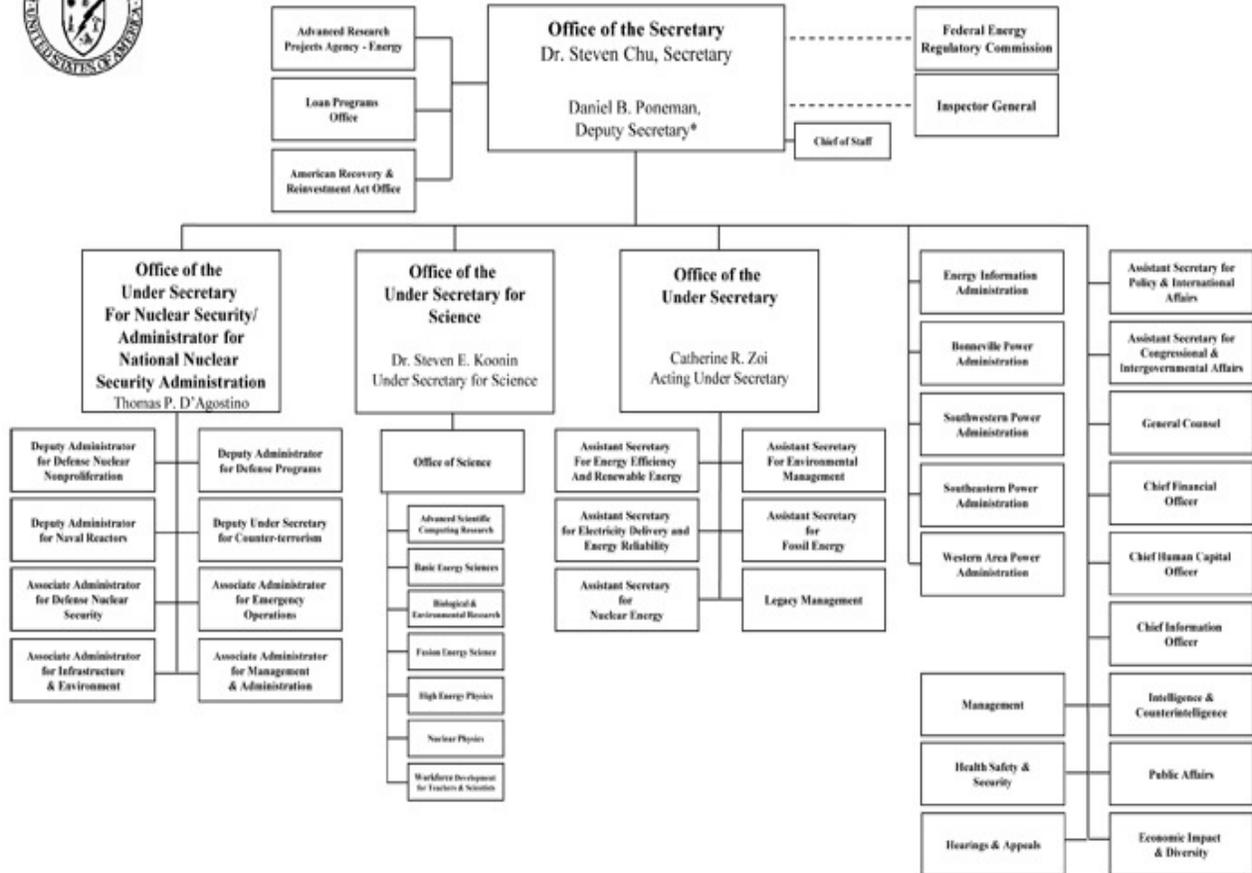
DOE has no questions but would like to thank Mr. Francis Yebesi, Director, Office of Federal Agency Programs, for his office's support and contributions to the DOE 2010 ISM Conference.

Appendix I — Sub-Agency Contacts

Sub-Agency	>1000 Employees	Name	Telephone	E-mail
National Nuclear Security Administration	Y	Frank Russo	202-586-8395	frank.russo@nnsa.doe.gov
Office of Science	Y	Matt Cole	301-903-8388	matt.cole@science.doe.gov
Bonneville Power Administration	Y	Alan Connors	360-418-2383	awconnors@bpa.gov
Western Area Power Administration	Y	Kathy Patchell	720-962-7295	patchell@wapa.gov
Southwestern Power Administration		Darlene Low	918-595-6750	Darlene.low@swpa.gov
Southeastern Power Administration		Carol P. Rice	706-213-3822	carolr@sepa.doe.gov
Headquarters	Y	Cherylynne Williams	202-586-1005	cherylynne.williams@hq.doe.gov
Office of Environmental Management	Y	Terry Krietz	301-903-6456	terry.krietz@hq.doe.gov
Office of Nuclear Energy	Y	Margaret Kline	301-903-4567	margaret.kline@nuclear.energy.gov
Office of Fossil Energy	Y	Rick DuBose	502-586-4641	Rick.dubose@hq.doe.gov
Office of the Chief Information Officer		Sarah Gamage	301-903-1059	sarah.gamage@hq.doe.gov
Office of Human Capital Management		Wanda Robinson	202-586-0979	wanda.robinson@hq.doe.gov
Office of Inspector General		Tiffany Jenifer	202-586-2729	tiffany.jenifer@hq.doe.gov
Office of the Chief Financial Officer		Matt Kittell	202-586-8687	matthew.kittell@hq.doe.gov
Energy Information Administration		Keith Rapoza	202-586-2626	Keith.Rapoza@eia.gov
Office of Energy Efficiency and Renewable Energy		Gary Staffo	202-586-9577	Gary.Staffo@ee.doe.gov
Office of Legacy Management		Joseph Desormeau	970-248-6034	joe.desormeau@lm.doe.gov
Office of Policy and International Affairs		Marlisa Cornitcher	202-586-0015	marlisa.cornitcher@hq.doe.gov
Oak Ridge Ops Office		Jenny Mullins	865-576-0836	MullinsJG@oro.doe.gov
Nevada Site Office (NSO)		Eric Allred	702-295-1156	allrede@nv.doe.gov
Pantex		Ken Meyers	806-477-4209	KMEYERS@pantex.doe.gov
Office of River Protection		Paul Hernandez	509-376-2209	Paul_R_Hernandez@RL.gov

Appendix II — DOE Organizational Chart

DEPARTMENT OF ENERGY



* The Deputy Secretary also serves as the Chief Operating Officer

13 Oct 10

Appendix III – Types of Training Provided in FY 2010

National Training Center	
HPI Fundamentals	Hazard Identification
HPI Investigations	Hazard Categorization I
Integrated Safety Management Workshop	Hazard Categorization II
Nuclear Safety Fundamentals	Specific Hazards Analysis
Accident Investigation	Hazard Evaluation Techniques I
Operational Safety & Accident Analysis	Hazard Evaluation Techniques II
Advanced Human Performance Improvement	Chemical Facility Safety Basis
Protective Force Safety Fundamentals	Airborne Release Fractions & Respirable Fractions
Safety System Oversight Duties and Responsibilities	Accident Analysis Techniques
Safety System Oversight Assessments	Environmental Restoration, Deactivation & Decommissioning Safety Basis
Nuclear Executive Leadership Training	Accelerator Facility Safety Basis
Human Performance Improvement Exec Overview	Packaging and Transportation Safety Basis

Power Marketing Administrations	
<i>Bonneville Power Administration:</i> Hearing Conservation Respirator Fit Testing Asbestos Awareness Asbestos Class III Competent Refresher	<i>Western Area Power Administration</i> Fire Safety Hearing Conservation HAZCOM [Hazard Communication] Lockout/Tagout PPE [Personal Protective Equipment]
<i>Southeastern Power Marketing Administration:</i> Fire Protection Defensive Driving	Respirators Confined Space RF [Respirator Fit] Training Defensive Driving Safe Work Practice CPR
<i>Southwestern Power Marketing Administration:</i> Ergonomics, Defensive Driving Safety awareness Job Briefing and Job Hazard Analyses Hearing Conservation Back safety Proper lifting Proper lifting Fire extinguisher use Personal protective equipment Slips, trips and falls Hazard Communication Standard CPR, AED, Blood Borne Pathogen and First Aid	First Aid AED Hanta Virus Blood Borne Pathogens [BBP] Ergonomics

DOE Field Elements

<p><i>Idaho Operations Office (Nuclear Energy)</i> ES&H Awareness Training GERT [General Employee Radiological Training] ICP Access Training ICP RadWorker 1 Initial Training, ICP RadWorker 1 Refresher Training INL RadWorker 1 Initial, INL RadWorker 2 Initial, RadWorker 1 Refresher Training RadWorker 1 Practical Training ICP RadWorker 2 Initial Training, ICP RadWorker 2 Refresher Training RadWorker 2 Practical ICP RadWorker 2 Practical HAZWOPER Core Part A, HAZWOPER Core Part B 24-Hour HAZWOPER Training 8-Hour HAZWOPER Modules (Scope, Toxicology, Hazard and Risk, Respiratory, Confined Space, Site Control, Emergency Response, Refresher INEEL & Classroom) MFC Access HazardCom Core Training 15 ICP Personal Protective Equipment, PPE INTEC Facility Specific TSDF HAZWOPER RWMC Access and HazardCom ICP Beryllium Safety INL Beryllium Safety Accelerated Retrieval Project Health and Safety BEA Site Access Training TSCM [Technical Surveillance Countermeasures Awareness Training SMC Equipment Operator Boundaries/Zones</p>	<p><i>Oak Ridge Operations Office</i> ISMS Non-TQP [Technical Qualification Program] 47 ISMS TQP ISO/IECI 7025 and Accreditation NFPA 25, Inspection, Testing & Maintenance Nuclear Criticality for Support Nuclear Facility Safety Basis Fundamental Nuclear Facility Safety Basis Requirements Office Safety Packaging & Transportation - Safety Basis</p> <hr/> <p><i>Office of River Protection</i> Industrial Hygiene Hazard Awareness Training HGET [Hanford General Employee Training] HAZWOPER Respirator 60 Radworker ORP FEOSH DOE-Headquarters FEOSH</p> <hr/> <p><i>Savannah River Operations Office</i> FEOSH Annual Training AED & BBP & First Aid FEOSH Orientation Annual Electrical Safety Briefing/Update CAT (annual update of GET [General Employee Training]) ISMS Workshop (limited employees) GET (basic safety & site safety) 90 PPE training TQP (limited technical employees)</p>
<p><i>Oak Ridge Operations Office</i> 2009 NFPA 70E 2010 Chemical Safety Workshop 2010 DOE Fire Protection Workshop EFCOG [Energy Facilities Contractor Group] Safety Analysis Workshop FEOSH Annual Training 30 Fire Safety Workshop SM Workshop 22nd Annual Safety & Health Accelerator Safety Workshop Accident Analysis Techniques Accident Investigation SAF230 Advanced Laser Safety Workshop Asbestos Awareness Asbestos Project Monitor ASP [Analytical Services Program] 2010 Workshop Cal/Fed OSHA Standards Construction Chemical Safety & Lifecycle Construction Safety Orientation Electrical Safety Awareness Facility Safety Authorization 45 Industrial Safety - Confined Space</p>	<p><i>Richland Operations Office (RL)</i> RL Functions, Responsibilities and Authorities Manual, RL Quality Assurance Program Description RL Integrated Safety Management System Description Hanford “Stop Work” Policy, Hanford Site Tri-Party Agreement, SCRD O 470.2B, Rev. 2, Independent Oversight and Performance Assurance Program, Richland Integrated Management System (RIMS), Contractor Integrated Performance Evaluation Management System 75 Safety and Health Management System RL Contracts Project Hanford Management Contract River Corridor Closure Contract I Plateau Remediation Contract, Contractor Quality Assurance Program Description Contractor Integrated Safety Management System</p> <hr/> <p><i>Portsmouth Paducah Project Office</i> GET CAT</p>

DOE Headquarters Elements	
<i>Chief Information Officer</i> FEOSH COOP	<i>Nuclear Energy</i> FY 2010 FEOSH annual training COOP training Emergency Response
<i>Human Capital</i> Security, Safety, and Communication, Recognizing Safety Procedures, Effective Communication, and Professional Behavior Implementing IT Security and Workplace Safety Measures Office Safety/Workplace Safety/Site Safety & Health Plan	<i>Energy Efficiency and Renewable Energy</i> Escape Mask training DOE Continuity of Operations OSH awareness and hazard recognition (included in annual Individual Development Plan) DOE OLC2 [DOE Online Learning Center] FEOSH training
<i>Legacy Management</i> SAF-100DE Federal Employee Occupational Safety and Health	