



FY 2008 Department of Energy Annual Occupational Safety and Health Report for Federal Employees to the Secretary of Labor

(Comprehensive Report Format)

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Address: 1000 Independence Avenue SW
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Number of Federal civilian employees this report covers: 14,755

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EXECUTIVE SUMMARY

The Department of Energy (DOE) contributes to the future of the Nation by ensuring energy security, maintaining the safety, security and reliability of the nuclear weapons stockpile, cleaning up the environment from the legacy of the Cold War, and developing innovations in science and technology. The *FY 2008 Department of Energy Annual Occupational Safety and Health Report for Federal Employees to the Secretary of Labor* provides an overview of DOE accident, injury and illness data, and initiatives the Department is undertaking to continuously improve worker safety and health.

The Department operates national laboratories, the nuclear weapons industrial complex, and Power Marketing Administrations (PMA), and manages the environmental cleanup from 50 years of nuclear defense activities that impacted two million acres in communities across the country. DOE Staff and Support Offices provide administrative, management, and oversight support to DOE's Program Offices to assist them in the successful accomplishment of their respective missions. The Designated Agency Safety and Health Official (DASHO) provides corporate level leadership through the Office of Health, Safety, and Security (HSS) and the DOE Federal Employee Occupational Safety and Health (FEOSH) program.

DOE continues to provide safe working conditions for its 14,755 Federal employees. DOE's Total Case Rate (TCR) is less than two-thirds that of the Federal Government average, and its Lost Time Case Rate (LTCR) is less than one-half. However, a more strategic approach is needed to improve the overall safety program as DOE met only one of its four FY 2008 SHARE goals.

The Department has achieved several notable accomplishments in the past year. Some field operations offices have demonstrated improvements in their case rates. This is due to improved leadership highlighting implementation of Integrated Safety Management (ISM), expansion of safety training and awareness campaigns, and improved performance feedback to help target specific activities contributing to high injury rates that need attention. The Office of Environmental Management (EM) has led the DOE in the analysis of monthly injury and illness data, helping identify root causes and corrective actions, thereby resulting in significantly fewer injuries.

Three subagencies, Bonneville Power Administration (BPA), Western Area Power Administration (WAPA), and the Office of Secure Transportation (OST), are engaged in high hazard work activities (e.g., high voltage power transmission and secure transportation of nuclear materials). Each of these operations has implemented initiatives to reduce injury rates. BPA and WAPA are implementing workplace stretching exercises and a behavior-based safety initiative, while OST is addressing recommendations to minimize physical and tactical training injuries. These organizations have been the focus for needed improvement since FY 2006. In FY 2008,

these organizations made improvements that brought their rates closer to the DOE average.

The Department recognizes the challenge and need for action to sustain accomplishments and further improve safety performance. DOE also recognizes that an integrated and coordinated strategic approach is needed across all organizational levels and programs operations. Therefore, Department-wide goals for FY 2009 have been established to:

- Strengthen leadership and improve subagency understanding of roles, responsibilities and authorities;
- Enhance employee training and awareness;
- Strengthen management systems to provide feedback on program performance.

Statistics

Injury and Illness Trends – The Department’s total number of cases increased by 101 cases over the prior year. This jump was caused by a single contagious disease in one operating organization. Absent this outbreak, the DOE claims experience in FY 2008 would have been 283 cases, a reduction of 48 cases compared with FY 2007. The Total Case Rate would have been 1.92 instead of 2.93. This misses the SHARE target, but would have been the lowest rate DOE has ever achieved. DOE improved its Lost Time Case Rate from FY 2007, but did not achieve the target goal. Many lost time injuries were strains or traumatic injuries associated with falls or materials handling. After four years of timeliness improvements, DOE slipped in FY 2008, falling to the lowest Timely Filing of Claims (TFC) rate since FY 2003. On the positive side, DOE experienced a sharp reduction in Lost Production Days (LPD) to a rate of 14.6, meeting this SHARE goal of 21.7 – half of last year’s rate. Reducing injury severity directly impacts this measure.

Fatalities and Catastrophic Accidents - DOE experienced two employee deaths in separate work-related events. A BPA employee died in a January 28, 2008 motor vehicle crash. A WAPA employee who was a passenger in a government vehicle was killed in a collision with another government vehicle on July 1, 2008. There were no catastrophic events.

Emergency Response and Disaster Recovery Operations – DOE Federal and contractor employees may supervise and conduct emergency response and disaster recovery operations. These include deploying response teams to radiological events, providing response to DOE site emergencies, and supporting Federal facility emergency plans. Existing real time reporting systems are not designed to effectively distinguish agency codes of injuries for emergency response. A manual review of DOE records indicated no fatalities, no Federal employee injuries, and five contractor employee injuries during response activities. There are an estimated 6,000 Federal and contractor employees to support DOE response to a national level emergency.

Occupational Safety and Health Initiatives

Fiscal year 2008 marked the first full year that Integrated Safety Management Systems (ISMS) were required for DOE Federal workplaces. Several subagencies fully implemented their systems and are experiencing improvements in their safety performance. Greater senior management involvement in safety performance measures has increased their awareness of and expectations for improvements within their subagencies. In addition, in 2008 HSS began the journey to become certified as a Voluntary Protection Program (VPP). This effort will provide a leadership model for other DOE federal offices to follow.

Safety, Health, and Return-to-Employment (SHARE) Initiative - DOE tracks the numbers and types of cases submitted to Office of Workers' Compensation Program (OWCP). DOE concentrated on improving safety performance initiatives in the expectation that case numbers and severity would decrease as a result. Most subagencies improved their rates.

Motor Vehicle/Seat Belt Safety - Following three serious winter weather highway crashes, the DOE DASHO sent a memorandum to every DOE Federal employee, urging them to make driving safely a priority. Some field operations continued their highly successful driver safety programs. DOE will use these models in support of FY 2009 goals for improved motor vehicle safety. Seat belt usage is well established; therefore, no additional initiatives are planned.

Employee Support - DOE provides Department-wide orientation and site-specific training and assistance through mechanisms such as ISM, FEOSH and technical committees, programs or means to address employee concerns, and oversight inspections. DOE is a leader in providing advanced training in disaster response and recovery operations associated with the detection, containment, control, and cleanup of nuclear and radiological releases.

Accomplishments and Goals - To meet FY 2008 goals, DOE continued implementing ISMS for Federal employees, provided training and inspections to improve injury/illness reporting, and communicated safety performance and expectations. DOE reduced its injury case rates in FY 2008 through the local actions of subagencies in support of the DOE mission. Looking ahead, DOE plans to take a more comprehensive strategic approach to strengthen leadership, enhance safety communications and training, and improve management systems to provide feedback on program performance consistent with the guiding principles of ISMS. DOE will revise its directives to clarify requirements for conducting and reporting self-assessments. Training and awareness activities will be strengthened through the sharing of information and technical support by the FEOSH Committee, and several feedback mechanisms will be improved so that contributing and casual factors for injuries can be identified and addressed.

DETAILED REPORT

Information in each section of this report is provided for DOE overall and for several of its major subagencies. The report reflects Federal employee safety and health program activities conducted by corporate or “staff” offices, which support the entire department; at the Washington, DC and Germantown, MD Headquarters offices; and at the field operations offices; and when applicable, by contracted employees. DOE utilized the format specified in the October 16, 2008, U.S. Department of Labor (DOL) Memorandum to Designated Agency Safety and Health Officials, from the Assistant Secretary for Occupational Safety and Health. Except where noted in section I.C., all numbers and figures in this report are for the fiscal year October 1, 2007, through September 30, 2008.

DOE’s overarching mission 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.

The Chief Health, Safety and Security Officer is the DASHO and reports directly to the Deputy Secretary. HSS provides safety feedback and improvement functions for Federal and contracted employees in support of subagency occupational safety and health programs. Specifically, HSS supports the corporate departmental FEOSH program (DOE HSS FEOSH) and also implements its own program for HSS Federal workers.

There are approximately 14,755 Federal civilian employees directly subject to OSHA. Contract workers comprise the overwhelming majority of the DOE workforce. There are approximately 110,000 full-time equivalent contractors. Most work at DOE field operations and national laboratories under contract with the subagencies. Those employees are subject to a comprehensive Worker Safety and Health Program directed at DOE contractors via Federal regulation 10 CFR 851.

Major DOE subagencies include the Under Secretary for National Nuclear Security Administration (NNSA) and Nuclear Energy, the Office of the Under Secretary, and the Office of the Under Secretary for Science. NNSA consists of nearly 1,800 Federal employees, of which 650 are assigned to the OST. Various missions are managed by Program Offices such as EM, the Offices of Legacy Management, Nuclear Energy, and Energy Efficiency and Renewable Energy, which report to the Office of the Under Secretary. Approximately 1,822 Federal employees are in this organization. The Office of Science consists of about 820 Federal employees. The departmental staff and support offices, such as the Office of Management (MA), the PMAs, and HSS report to the Deputy Secretary. MA supports the subagencies with facilities management support in Headquarters offices. Approximately 5,000 employees are stationed at DOE

Headquarters. The PMAs have nearly 4,000 Federal employees, with 2,600 in the BPA and 1,200 in the WAPA. An organizational chart is included as Appendix II.

The PMAs maintain high voltage transmission lines and right of ways, substations, and microwave towers. Another significant high hazard population of Federal workers is the OST, within NNSA. This is a paramilitary workforce that transports special nuclear material. NNSA also has a national security and emergency response mission related to radiological releases.

Federal workers are supported by contractor workers for emergency response. DOE facility and field operation emergencies may include nuclear, chemical, and/or biological releases with the potential for onsite and offsite consequences. All department facilities have security forces who are emergency first responders. Some facilities also have contracted fire departments onsite, while others rely on offsite response.

I. STATISTICS

A. *Injury and Illness Statistics*

a. **Injury and illness rates**

The total number of DOE workers' compensation cases increased over the prior year by 101 cases. This large jump, compared to DOE's relatively steady 5-year claims history, was caused by a single contagious skin disease that spread throughout one organization. When it was discovered among a group of employees who work closely together, 149 employees were sent to medical clinics over a one-month period for preventative evaluation and treatment. None resulted in lost work days, and no further cases of this disease were reported for the rest of the year. Absent this outbreak, the DOE claims experience in FY 2008 would have been 283 cases, 48 cases fewer than in FY 2007, and the total case rate would have been 1.92 instead of 2.93. Thirty-three new claims were made in FY 2008 for injuries that occurred in prior years: 22 for injuries and illnesses that occurred in FY 2007, and 12 that occurred prior to FY 2007. Nine were hearing loss cases from 1970 to 2004.

The data on the table following are extracted from the OSHA website, except as footnoted:

Table 1.1. Injury and Illness Statistical Summary

	FY 2007	FY 2008	Change
Number of Federal Civilian Employees, including full-time, part-time, seasonal, intermittent workers	14,668	14,755	+87

	FY 2007	FY 2008	Change
Number of Federal Civilian Employees that Perform Emergency Response and Disaster Recovery Operations , including full-time, part-time, seasonal, intermittent workers	560 ¹	645 ¹	+85
Number of Supervised Contractors that Perform Emergency Response and Disaster Recovery Operations , including full-time, part-time, seasonal, intermittent workers	6,000 ¹	6,000 ¹	-9
Number of Volunteers that Perform Emergency Response and Disaster Recovery Operations , including full-time, part-time, seasonal, intermittent workers	0	0	0
Total Cases Injury/Illness (number of injury/illness cases-no lost-time, first aid, lost-time and fatalities)	331	432	+101
a. Total Injury/Illness Cases Related to Emergency Response and Disaster Recovery Operations (number of injury/illness cases-no lost-time, first aid, lost-time and fatalities)	0 fatalities 2 Federal injury/illness cases 18 contractor injury/illness cases ²	0 fatalities 0 Federal injury/illness cases 5 contractor injury/illness cases ²	-15
Total Case Rate (rate of all injury/illness cases per 100 employees)	2.26	2.93	+0.67
Lost Time Cases (number of cases that involved days away from work)	119	109	-10
a. Lost Time Cases Related to Emergency Response and Disaster Recovery Operations (number of cases that involved days away from work)	4 All were contractors ²	2 Both were contractors ²	-2
Lost Time Case Rate (rate of only the injury/illness cases with days away from work per 100 employees)	0.81	0.74	-0.07
Lost Work Days (number of days away from work)	4,444	2,154 ³	-2,290
a. Lost Work Days Related to Emergency Response and Disaster Recovery Operations (number of days away from work)	258 (contractor days)	30 (contractor days)	-228
Lost Work Day Rate (per 100 employees)	30.3	14.6	-15.7

Source: http://www.osha.gov/dep/fap/statistics/fedprgms_stats08_fina1.html on 11/5/2008

¹ Approximate number of supervised contractor personnel who may respond to national level emergencies. These include response to radiological materials in a terrorist attack; and the response to a release from DOE site or transportation operations to the surrounding community.

² From DOE CAIRS database for OSHA-recordable injuries and illnesses, using the activity code, "Emergency response." Occupations included security guard, firefighter, technician, medical personnel, criminal investigator, and miscellaneous.

³ Computed by multiplying the published rate of 14.6 by 147.55.

b. Emergency response and disaster recovery operations

In support of its critical mission, DOE maintains highly trained, elite protective forces and technical experts in security, emergency response, and disaster recovery operations. Emergency management operations are in large part staffed by field operations contractors, but may be managed directly by Federal staff in some cases.

DOE Program Offices/Headquarters

NNSA, with its unique expertise in nuclear weapons and nuclear material, plays a key role in the U.S. Government's comprehensive effort to combat terrorism. Using sophisticated laboratories and equipment, NNSA may deploy teams of Headquarters and field managers and contractor personnel to respond to and resolve nuclear and radiological terrorist incidents, including support to other government agencies, and deploying search, analysis and medical teams. The following are highlights of NNSA's key activities in the area of emergency response and disaster recovery operations:

- Participated in 76 national and international exercises in 2008 to maintain its elite response standards.
- Deployed multiple field teams to conduct 34 high profile special events and 47 emergency responses around the world in support of the Department of Homeland Security, Federal Bureau of Investigation and Department of State. These include: the State of the Union Address, Super Bowl, United Nations General Assembly, 2008 Beijing Olympics, Democratic and Republican Conventions, and numerous deployments and search operations.
- Worked with emergency response organizations in over 60 countries and 9 international organizations to address potential radiological emergencies and nuclear incidents. The international cooperation involves technical exchanges, mutual training events, jointly conducted exercises and emergency management assistance.
- Provided technical training on aerial radiation monitoring for police departments in the cities of Chicago; New York; Washington, DC; and Los Angeles and the Los Angeles County Sheriff's Department.

DOE is an international leader in emergency medical response to radiation incidents through its Radiation Emergency Assistance Center/Training Site (REAC/TS). REAC/TS provides 24/7 availability to deploy emergency medical services at radiation incidents anywhere in the world. The Center also provides advice and consultation on radiation emergency response.

At DOE Headquarters, MA partnered with NNSA to conduct three "Vital Eagle" exercises in FY 2008. These tabletop exercises are used to train the Headquarters Incident Command Team (ICT) on a wide variety of threats in conjunction with

Occupant Emergency Plans. Since 2002, MA and NNSA have conducted 20 Vital Eagle exercises with scenarios including terrorist acts, natural disasters, epidemics, fires, chemical releases, hostage situations, and demonstrations. These "no fault" tabletop exercises are designed to openly discuss the Department's response to an emergency situation and ensure that DOE's Occupant Emergency Program (OEP) incorporates an "all hazards" approach. The latest Vital Eagle exercises simulated flooding in the Washington, DC area, a terrorist act at one of DOE's leased facilities, and an active shooter inside one of the buildings. Guests from numerous agencies and departments, including the White House, the U.S. House of Representatives, the U.S. Senate, the Federal Bureau of Investigation, the Smithsonian Institution, the U.S. Postal Service, the Department of Homeland Security, and the General Services Administration have participated in the exercises along with both Headquarters chapters of the National Treasury Employees Union and Program Office Representatives. These exercises have been used as models for other agencies.

To help prepare employees for emergency situations, MA conducted two whole-building evacuations and one shelter-in-place exercise in each Headquarters building in FY 2008. Monthly evacuation exercises were conducted in each of the Headquarters Child Development Centers.

To enhance the emergency preparedness of all Headquarters personnel and visitors, a new DOE Alert emergency text messaging system was installed in FY 2008 allowing the Headquarters ICT to keep employees informed during an emergency. MA is working with the General Services Administration on additional capital improvement projects such as installing sprinkler systems and enhancing the fire alarm systems at both the Forrestal building and Germantown complex. These are multi-year fire protection projects for over two million square feet of office space.

Field Offices

Contractor protective forces and firefighters protect DOE facilities across the Nation. During FY 2008, four fires at DOE facilities in Kansas City, Sandia National Laboratories, Oak Ridge Y-12, and Idaho National Laboratory (INL) were classified as Operational Emergencies – occurrences that require an increased alert status for onsite personnel and, in specified cases, for offsite authorities. One fire resulted in first aid injuries, the rest were injury-free. Another 42 fire events were reported in the DOE tracking system, the Occurrence Reporting and Processing System (ORPS). These included brush and wild fires, fires within machinery and electrical components, cafeteria grease fires, trash fires, hot work fires, microwave fires, and laboratory fires within hoods or gloveboxes.

Two Operational Emergencies were associated with radiological contamination, but no personnel were injured or exposed above allowable limits. Another 44

radiological events reported in ORPS were rated moderate or minor. Engineering controls, detection equipment and well-trained personnel work together to ensure that releases are detected rapidly and controlled before personnel are overexposed.

Separating emergency response injury data is difficult with DOE's current reporting systems. Emergencies are normally reported in ORPS, but ORPS is primarily designed to identify occurrences, and reports may not contain accurate injury data. The DOE injury/illness recordkeeping database, Computerized Accident Injury Recordkeeping System (CAIRS), contains an activity code for "emergency response," but misinterpretations of this code result in inaccurate reporting. For example, many cases classified as an emergency response activity were actually emergency response exercises. The emergency response injuries identified for this report were manually extracted to delete training-related injuries. Although the data collection systems at DOE were not designed to provide an accurate count of emergency response-related injuries, the absence of catastrophic events and the relatively low significance level of all but four DOE fires support the injury numbers cited in this report. Other emergency events at DOE included medical emergencies and alarm responses. Some emergency response injuries were associated with these events. To better understand the injury rates of emergency response personnel, DOE will modify CAIRS reporting codes under DOE Order 231.1A, *Environment, Safety and Health Reporting*.

c. Facilities with high injury and illness rates

Three DOE organizations sustained the highest injury and illness rates for the entire Department. These are OST, BPA, and WAPA. Their injuries most often are a result of field activities and are not associated with the facilities themselves.

Historically, OST has had the highest injury rates in DOE. The four PMAs have also had rates higher than the norm. This was true in FY 2008, but these organizations are improving and are now closer to the DOE average. In fact, the Southwestern Power Administration (SWPA) improved its injury rate from 4.07 in FY 2007 to 0.68 in FY 2008, so it is no longer on the list of facilities with high injury and illness rates.

Headquartered in Albuquerque, NM, OST personnel are assigned to several locations throughout the country. Most of the injuries in this elite protective forces organization occur during rigorous physical and tactical training exercises. This year those injuries were reduced; however, OST sent 149 members of their protective forces to medical clinics when an outbreak of a contagious skin infection was discovered among some of its personnel. Its Oak Ridge, TN personnel were seen in the clinics from March 31 to April 8, 2008, followed by Albuquerque, NM from April 14-20, 2008, and lastly by Amarillo, TX from April 21-23, 2008. Sending such large numbers to medical services was a proactive decision to identify and treat all affected personnel and was effective in

immediately controlling the outbreak. There were no claims for this disease for the rest of the year. OST protective forces revised their hygiene practices as a result of the outbreak.

Because of this incident, the DOL reporting category named "Albuquerque Operations"⁴ had the most OWCP claims in FY 2008, totaling 245, or 56.7 percent of the total DOE cases. Ninety-six cases did not involve the skin disease. This compares favorably to FY 2007, where Albuquerque Operations submitted 110 claims. The DOE CAIRS data show that most of the injuries were strains and sprains that occurred during physical and tactical training. DOE and NNSA take these injuries seriously and tasked the OST internal oversight group to conduct an internal self-assessment of the OST Worker Safety and Health Program. Their November 19, 2007 report recommended:

- reviews and improvements in injury/illness reporting and trending;
- interventions for injury prevention including involvement by an exercise physiologist;
- updates to program and procedural documents;
- establishment of a safety recognition awards system;
- improved footwear;
- partnering with other security forces to address training injuries and explore behavior based safety initiatives;
- training in accident investigation and
- development of lessons learned from recent injury data.

Implementation began later in FY 2008 and will continue throughout FY 2009. NNSA Senior Environment, Safety and Health Advisor staff conducted two assist visits during the first and second quarters of FY 2008 to review OST initiatives for improving safety performance. Personnel were issued new boots with ankle supports to reduce the incidence of ankle injuries during field exercises. Early indications are that the use of the new footwear and increased efforts to identify and remove physical hazards in the field prior to beginning an exercise have contributed to a reduction of injuries during operational exercises.

OST exercise physiologists will develop approved exercise strategies to provide an intervention for fitness training injuries. Additionally, the use of standard running shoes will be investigated to address knee and foot injuries incurred while training. Current plans are for the DOE HSS Office of Corporate Safety Analysis to visit and provide further causal analysis support to OST in the area of fitness training injuries.

⁴ The DOL reporting category, Albuquerque Operations, is no longer a DOE organizational element. DOE and DOL need to work together to update DOE organizational alignments, while not losing historical records.

Power Marketing Administrations

BPA had 96 workers' compensation cases, mostly strains associated with either material handling or slips and falls. Five were cases of hearing loss dating back to 1970–2007. This is the same number of cases claimed in FY 2007.

WAPA submitted 40 OWCP cases – 10 less than in FY 2007. Strains, lacerations, contusions, and unclassified traumatic injuries predominated due to myriad causes. WAPA began a behavior-based safety program with training and a variety of reminder communications and is instituting a pilot stretch program to help prevent musculoskeletal injuries.

B. Fatalities and Catastrophic Incidents

DOE had no catastrophes in FY 2008, but experienced two Federal employee deaths in separate motor vehicle accidents. A BPA employee was killed in a motor vehicle crash on January 28, 2008 and a WAPA employee, who was a passenger in a government vehicle, was killed in a collision with another government vehicle on July 1, 2008. Another employee was injured in this crash. All were wearing seatbelts.

No fatalities were associated with catastrophes, as shown in the following table:

Table 1.2. FY 2008 Fatalities and Catastrophic Events

Fatalities/ Catastrophic Events	Cause - FY 2008	In response to an emergency? (Y/N)
1	Motor vehicle	No
2	Motor vehicle	No

Fatality and Catastrophic Accident Investigations

The BPA fatality was investigated and it was determined that the driver suffered a fatal heart attack while driving and then crashed the government vehicle. For the WAPA vehicle fatality, a formal accident investigation report (defined by DOE directives), issued August 29, 2008, recommended additional driver training and research into reducing driving hazards. This will be implemented in FY 2009.

C. Office of Workers' Compensation Programs Costs

The table below contains chargeback costs, as reported to DOE by the Department of Labor.

Table 1.3. Office of Worker's Compensation Program Costs

	CBY 2007 (\$)	CBY 2008 (\$)
Total Chargeback	9,924,641	9,578,729
Total Continuation of Pay (COP)	220,472	151,911
Total Chargeback + COP	10,145,113	9,730,640

Chargeback for Cases that occurred in the CBY	508,276	481,598
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The chargeback year for OWCP is from July 1 through June 30. The cost figures above are based on the chargeback year data. All other numbers and figures in this report are for the fiscal year October 1, 2007, through September 30, 2008. The chart above includes chargeback costs of \$3,040,188 incurred by BPA in FY 2008.

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

a. Tracking accidents

As in prior years, the predominant serious injury is sprains and strains. A continuing problem is poor quality reporting of injury types and causes in OWCP claims and in the DOE CAIRS database. Many traumatic injuries are not classified as to type. Slips, trips, and falls and material handling are the activities associated with the more serious injuries. By contrast, the 2007 focus on the quality of OST reporting yielded improvements in the data.

Table 1.4. Significant Trends and Major Causes or Sources of Lost Time Disabilities

FY 2008 Major Trends			Description
Nature (i.e., sprains, contusions, etc.)	% of Total	% of Cost ⁵	
Insect bites (114), traumatic virological/ infective/ parasitic disease (38), and traumatic skin disease (7)	36.8	\$18,727.84 4.8%	Most of these cases (149 of 159) were from a single insect-borne skin disease that was reported over a one-month period.
Strain, not back strain (74)	17.2	\$116,800.67 30.2%	
Traumatic injury - unclassified (68)	15.7	\$69,378.11 17.9%	This is a problem in accurate reporting.
Back strain, (29)	6.7	\$54,435.50 14.1%	
Contusion, bruise, abrasion (27)	6.3	\$9,383.47 2.4%	
Cause of Injury (i.e., slips, handling tools, etc.)			
Unclassified (129)	30.1	\$72,605.32	This is a problem in accurate

⁵ The cost for FY 2008 was calculated from OWCP data, based on the date the case was received at OWCP. Two reports were summed: FY08Q4 and FY09Q1, using only those cases received in FY 2008. Claims submitted in FY 2008 totaled \$386,949 in costs paid in FY 2008.

		19.4%	reporting.
Animal, insect bites (115)	26.6	\$17,352.38 4.6%	
Other falls (38)	8.8	\$45,364.05 12.1%	
Other manual handling and equipment (26)	6.0	\$26,259.05 7.0%	

b. Controlling trends

DOE Program Offices/Headquarters

The Department tracks and analyzes data on injuries and illnesses. Department-wide, as well as organization-specific trends are analyzed to measure improvements and opportunities for improvement. HSS briefs the Deputy Secretary of Energy quarterly on these trends; the Assistant Secretary and Deputy Assistant Secretaries are briefed periodically on their respective organizations' trends. Reporting timeliness has been a significant topic reviewed in these briefs, as incomplete data hampers trend analyses and creates the inaccurate impression of recent improvement. Concerns about data accuracy prompted HSS to conduct three onsite assessments of reporting accuracy among field organizations in FY 2008.

Program Offices also take actions to 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. At DOE Headquarters, occupational injury and illness reports may not be correctly tallied as some employees are treated by the central health unit without identifying which program office they belong to. The program roles and responsibilities will be clarified in DOE O 440.1B, *Worker Protection Program for DOE (including the National Nuclear Security Administration) Federal Employees*, to stress reporting requirements.

The Office of Environmental Management (EM) analyzes injury and illness data monthly and has not identified any adverse EM-wide or site-specific trends related to EM Federal employees. EM has provided field elements with a Criteria Review and Approach Document to assess occupational injury and illness recordkeeping practices and records. Field elements have been encouraged to perform cross checks with DOL/OWCP FECA data to ensure OSHA recordable cases are reported in DOE CAIRS. EM Headquarters and HSS have been working to establish CAIRS organizational codes for reporting Federal employee injuries at EM's smaller sites. All potential EM Headquarters recordable injuries and first aids are reported for further investigation and input to CAIRS, if necessary.

EM's ISMS provides a formal, organized process whereby people plan, perform, assess, and improve the safe conduct of work. EM's ISMS includes a Lessons Learned program and feedback and improvement measures. The maturity of tracking and trending practices vary across the EM complex. For example, Carlsbad Field Office (CBFO) has a fully functioning ISMS; while one of EM's smaller sites in Moab, Utah is adapting some existing procedures for lessons learned to include tools for looking at incident tracking and trending.

The Office of Science (SC) derives operating experience information from the Science Management System (SCMS) to prevent accidents. All SC field offices have gone through ISMS Effectiveness Reviews, and there are no negative trends evident in the injury/illness record for the past several years. Like EM, Science has made concentrated efforts to improve the ergonomic conditions of their office environments. SC field office managers encourage their staffs to report injuries when they occur. Feedback and improvement efforts at SC sites are ongoing.

Field Offices

Many Field offices, such as the Savannah River Operations Office (DOE-SR) and the Idaho Operations Office, have taken aggressive steps to turn the recordable incident rate back toward zero. Slips and falls and ergonomic illnesses continue to be the common recordable entries. While these remain fairly constant, the trends from the combination of recordable cases, near misses and first aid cases provides the impetus for focused efforts to reduce exposures in these areas. First aid cases are considered in the analysis to provide data points for more meaningful trending. Program improvement efforts are also extracted from self-evaluations and in-house self-assessments.

Power Marketing Administrations

The SWPA rate for OSHA recordable incidents for FY 2008 is zero, but one workers' compensation claim was filed. Soft tissue injury has historically been a trend, and training efforts intensified in FY 2008. WAPA has developed a new database for accidents from 2000 forward to make trending easier and more accurate at the local level.

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 Worker Safety and Health Program rule for DOE contractors as Federal regulation 10 CFR 851 on February 9, 2006. Full enforcement authority began on February 9, 2007; therefore, FY 2008 was the first full year of implementation. The rule goes beyond OSHA compliance to require submission of a DOE-approved, site-specific safety and health plan for work to continue. The rule guarantees every

contract worker the right to stop work if conditions are believed to be imminently dangerous.

For the second year in a row, DOE contractors experienced a lower total recordable case rate than DOE Federal employees (1.25 vs. 1.44), based on CAIRS data. DOE contractor Days Away, Restricted, or Transferred (DART) rates were also lower (0.55 vs. 0.72). DOE contractors have implemented ISMS specific to their work sites over the past dozen years.

Because most DOE contractors are not regulated by OSHA, DOE implemented a Voluntary Protection Program (VPP) similar to the OSHA VPP, which has been active since January 1994. In FY 2008, there were 26 DOE VPP sites. In addition, there are four DOE contractor sites that maintain Star status under the OSHA VPP. Each of the VPP sites share their excellence with outreach and mentoring programs both within and outside of DOE.

Contractors contribute to a safe DOE workplace by maintaining facilities in safe operable condition and by requiring safe work practices. Many Federal DOE employees work in contractor workspaces and are protected by contractor safety and health programs at operating facilities and national laboratories. The cooperative efforts of DOE and its contractors identify and correct workplace hazards at Government-owned, contractor-operated facilities. Contractor initiatives to improve safety directly impacting Federal employees include training, participation in safety committees, engineering and administrative controls, and access to contractor medical clinics. Complex-wide, a significant percentage of injuries are the result of slips, trips and falls. A sampling of cooperative safety achievements follows:

- Idaho Operations Office and its site FEOSH Committee worked with the relevant contractors to improve snow and ice removal, parking lot lighting, and signage and pavement markings. These activities resulted in a significant decrease in the number weather related slips, trips and falls across INL.
- Savannah River Site's contractor provides facility specific training and general safety training, as well as facility specific equipment to Federal employees during oversight activities. There were no injuries this past year.
- Richland Operations Office's (RL) Hanford contractor actively participates in the DOE VPP Program, and their accident and injury/illness rates are very low. Hanford contractors also participate in the annual DOE-sponsored Safety EXPO, showcasing many Hanford Project safety exhibits and programs.
- The Office of River Protection FEOSH Program Manager participates in Hanford contractor safety committees involving hoisting and rigging,

electrical safety, respiratory protection, ISMS reviews, and occupational medicine.

- The Portsmouth and Paducah Project Offices participate in two local safety committees. The Paducah Gaseous Diffusion Plant participates in the Safety Team of Paducah Committee. The Portsmouth Gaseous Diffusion Plant participates in the Joint Safety Committee. Both Committees are designed to share safety ideas, decisions, incidents, and lessons learned.

In general, the DOE complex uses only a few volunteers who provide particular functions and events for Federal employees, e.g., blood bank, Combined Federal Campaign, science fairs, and active programs for summer student interns, college co-op students and visiting professors.

II. OSH INITIATIVES - SHARE & MOTOR VEHICLE AND SEAT BELT SAFETY

A. *SHARE- Safety, Health, and Return-to-Employment Initiative*

a. SHARE analysis

The Tables below summarize DOE's SHARE performance.

Table 2.1. Five-Year Performance in Meeting SHARE Goals⁶

● Goal 1: Total Case Rates (TCR)

FY03 Baseline	FY04 Perf	FY05 Perf	FY06 Perf	FY07 Perf	FY08 Target	FY08 Proj TCR	FY08 Q4 Cum TCR	FY08 Q3 Cum TCR	FY08 Q2 Cum TCR	FY08 Q1 TCR
2.14	2.37	1.96	2.03	2.26	1.77	2.93	2.93	2.40	0.92	0.39

● Goal 2: Lost Time Case Rates (LTCR)

FY03 Baseline	FY04 Perf	FY05 Perf	FY06 Perf	FY07 Perf	FY08 Target	FY08 Proj LTCR	FY08 Q4 Cum LTCR	FY08 Q3 Cum LTCR	FY08 Q2 Cum LTCR	FY08 Q1 LTCR
0.73	0.73	0.73	0.67	0.81	0.63	0.74	0.74	0.55	0.39	0.14

⁶ From <http://www.dol.gov/esa/owcp/dfec/share/getxls.asp?id=0160> on December 12, 2008.

● **Goal 3: Timely Filing of Claims (TFC)**

FY03 Baseline	FY04 Perf	FY05 Perf	FY06 Perf	FY07 Perf	FY08 Target	FY08 Cum TFC	FY08 Q4 TFC	FY08 Q3 TFC	FY08 Q2 TFC	FY08 Q1 TFC
47.5	56.4	61.3	62.4	66.6	60.6	45.7	70.9	23.1	59.3	75.9

● **Goal 4: Lost Production Days (LPD)**

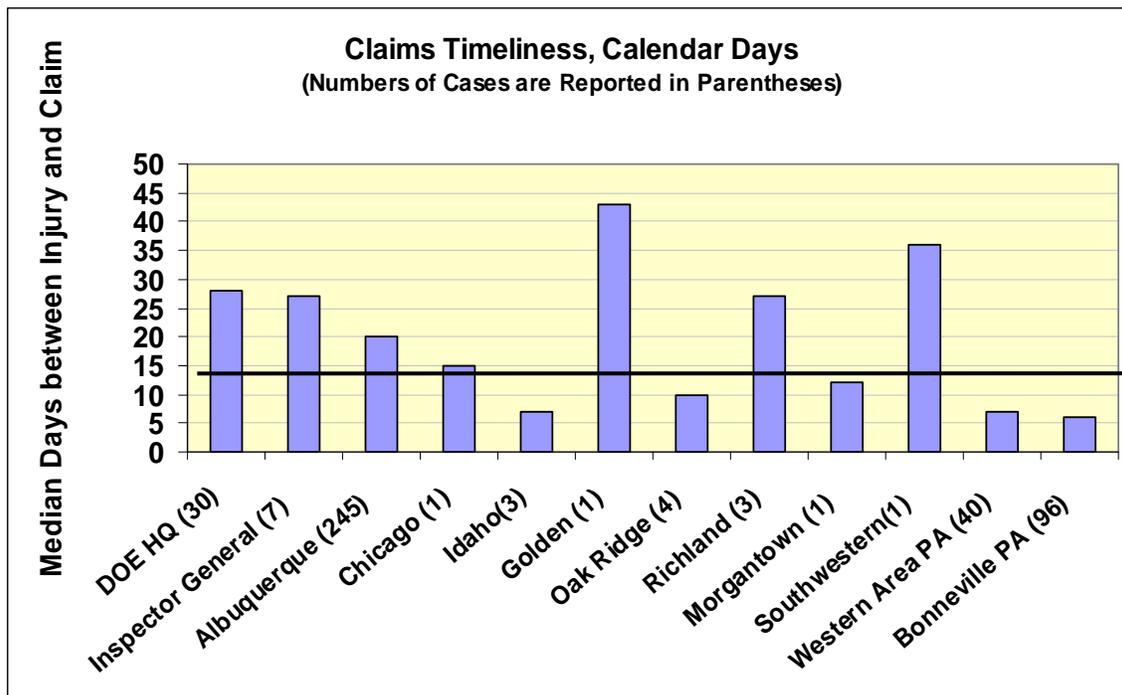
FY06 New Baseline	FY07 Perf	FY08 Target	FY08 Cum LPD	FY08 Q4 LPD	FY08 Q3 LPD	FY08 Q2 LPD	FY08 Q1 LPD
22.1	30.3	21.7	14.6	12.8	15.3	15.5	14.9

Goal 1: DOE failed to meet the FY 2008 target for total case rates. The biggest contributor to this gap was the contagious skin disease detected within OST. Most of those who submitted a claim for this illness did not have it, but were medically screened and provided preventative treatments. Without this incident, the DOE rate would have been 1.92 instead of 2.93. This still misses the target, but is the lowest rate DOE has achieved during FY 2003–FY 2008.

Goal 2: DOE improved its lost time case rate from FY 2007, but did not achieve the target goal. Many of the lost time injuries were strains or traumatic injuries associated with falls or materials handling. Local initiatives to prevent these types of injuries include stretching programs at BPA and awareness campaigns at DOE Headquarters.

Goal 3: After four years of timeliness improvements, DOE slipped in FY 2008, falling to the lowest on-time claims filing rate since FY 2003. Two organizations, WAPA and BPA, maintained or improved their timely filing. Together, they filed 136 claims with a median time of 7 days. The other two locations with the largest numbers of claims, DOE Headquarterse and Albuquerque, submitted more than half of their claims after 20 days. The sharp fall off in timeliness is largely attributable to the 149 OST skin disease cases that were claimed more than 10 days after the incident. Analysis of the timeliness by location is shown in the graph below:

Figure 2.1. FY 2008 DOE OWCP Claims Timeliness, based on OWCP Reporting Categories



Goal 4: DOE experienced a sharp reduction in lost production days to a rate of 14.6, meeting its SHARE goal of 21.7 – half of last year’s rate. Reducing lost time case rates (Goal 2) directly impacts the lost production day rate, but the modest improvements in lost day case rates this year cannot account for the entire drop. Further analysis at the subagency level is needed to determine the cause of this decrease.

b. SHARE Programs/Initiatives

DOE continually strives to provide safe working conditions for all of its employees. DOE’s injury rates are less than two-thirds that of the Federal Government average, despite its role in handling highly dangerous weapons and nuclear and radiological materials. Procedures dictate safe work practices.

The DOE FEOSH program in HSS has revitalized interactive communications with field FEOSH representatives to explore safety issues across the Department. Quarterly teleconferences address topics submitted by the representatives.

HSS periodically provides updates and analyses of safety performance to senior DOE management including the Deputy Secretary. These presentations address trends and provide top management insights into

safety performance issues. Further, the reports serve to keep senior management aware of progress in meeting the Department's SHARE goals.

One initiative for FY 2009 is an employee safety perception survey, currently being piloted among 600 HSS employees and contractors. HSS management has committed to work with employee representatives to address areas of weakness that the survey may reveal. Another initiative is to prepare revisions to DOE Orders that address roles and responsibilities and recordkeeping.

DOE will share the results of the claims timeliness with each of its program offices and encourage them to be more proactive in requiring employees to report all work-related injuries and illnesses. The program offices will also work with their claims offices to discover and correct sources of inefficiency.

B. Motor Vehicle / Seat Belt Safety

a. Number of motor vehicle accidents experienced by employees in FY 2008

DOE is aware of 18 motor vehicle accidents involving Federal employees. The OWCP data contain 11 injury claims associated with motor vehicle accidents. The DOE reporting systems are used inconsistently to report motor vehicle accidents. CAIRS previously included a reporting requirement for motor vehicle accidents along with their cost, but eliminated the requirement about ten years ago. ORPS is used for reporting if the motor vehicle accident impacts DOE operations, but is not used consistently to report offsite accidents. As a result, DOE does not have consistent motor vehicle accident data. Clarification in CAIRS reporting codes will be addressed in the DOE Order 213.1A rewrite in FY 2009. The numbers reported here were extracted from the OWCP, ORPS, CAIRS databases, plus inputs submitted by DOE program offices for the purpose of this report.

DOE Program Offices/Headquarters

Six motor vehicle accidents were reported in FY 2008 involving DOE Headquarters personnel. Five of the six occurred in the Washington metropolitan area, with two of the six on DOE property. Two of the six accidents resulted in OWCP claims. MA is researching online defensive driving courses, which could be available to Headquarters employees in the second quarter of FY 2009. EM is aware of only one motor vehicle accident involving an EM Federal employee. SC reported no motor vehicle accidents in FY 2008.

Field Offices

A serious bus accident at INL in January 2008 injured many contractor workers. Whiteout snow conditions contributed to the four-vehicle crash. The bus service,

used by both Federal employees and contractors, eliminates many cars on these roads during the long commutes from town out to the laboratory.

NNSA's OST submitted two motor vehicle accident injury claims.

EM's Moab, Utah Uranium Mill Tailings Remedial Action (UMTRA) reported one incident in March 2008, where a Federal employee encountered icy road while driving on the expressway and slid into the concrete dividing barrier. The car received extensive damage, but there were no injuries.

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WAPA had one fatality due to a two-vehicle accident. The employee was a passenger in a WAPA vehicle; the driver of the other vehicle was also injured. The road they were traveling on was very dusty, and the following vehicle did not see the vehicle in front stop at a stop sign and collided into it. Both driver and passenger were wearing seat belts. Conclusions and Judgments of Need based on the accident report have been sent to each region to develop corrective action plans. Needs included enhancing current driver training programs and researching means to reduce driving hazards. A second accident occurred on September 24, 2008, resulting in one injury.

BPA submitted five OWCP claims for injuries and one fatality sustained in motor vehicle accidents. These were separate events.

The table below summarizes motor vehicle accidents and associated costs. The number of accidents was extracted from DOE ORPS and CAIRS data. Injuries are extracted from these data, plus OWCP claims. DOE does not have a central rollup database for vehicle costs or liability claims.

Table 2.2. Motor Vehicle Accidents, FY 2007-08

	FY 2007	FY 2008	Change
Number of motor vehicle accidents experienced by employees	14	18	+4
Number of accidents resulting in personal injury	12	11	-1
Number of accidents resulting from emergency response and disaster recovery operations		0	0
OWCP costs of accidents	\$23,563	\$3,440	-\$20,123
Vehicle repair costs due to accidents	N/A	N/A	
Amount of liability claims against the agency due to accidents	N/A	N/A	

b. Mechanisms in place to track the percentage of seat belt usage by employees

DOE requires seat belt usage when driving on DOE property and when operating a vehicle on official business. Two surveys in the late '90s showed Federal employee seat belt usage was 89 percent and 93 percent and improving. Motor pool and site security law enforcement personnel reports point to seat belt

usage currently at 98 percent or higher. A formal survey has not been conducted recently due to this high confidence of conformance. Seat belt use is emphasized throughout DOE as part of other general safety promotion efforts throughout Headquarters and field safety programs.

c. Efforts taken to improve motor vehicle safety and seat belt usage

Shortly after a commuter bus at INL suffered a crash with serious contractor injuries and a separate icy weather motor vehicle crash killed a contractor with Oak Ridge National Laboratory, the Chief Health, Safety and Security Officer issued a Department-wide memorandum acknowledging these injuries and loss, and challenging all employees to resolve to be safer drivers. The memorandum also listed tips for driving safely.

Some program offices, such as the Office of Legacy Management (LM), require Federal and contractor personnel who operate government vehicles to take a National Safety Council Defensive Driving Course. The course emphasizes use of appropriate safety equipment such as seat belts.

BPA is conducting a 4-hour course on safe driving for all of its motor vehicle operators in 2009. BPA is also conducting a survey of driver attitudes for all motor vehicle operators and will follow up with any who do not score in the "Safe Zone" of the survey.

Field Offices

RL established a team tasked with pursuing a Hanford traffic safety enforcement process similar to processes used at other DOE sites. The team contacted other DOE sites and found several sites using traffic reader boards equipped with traffic radar devices and cameras to record date, time, speed and license plate information of traffic violators. The collected data is provided to the appropriate contractor for disciplinary action.

CBFO has an established Vehicle Safety Program to protect drivers and passengers in government-owned or leased motor vehicles and powered industrial equipment (i.e., fork trucks, tractors, platform lift trucks, and other similar specialized equipment).

At the EM Separations Process Research Unit (SPRU) in New York, motor vehicle safety initiatives included installation of crosswalks at SPRU office trailer and contractor work areas, installation of warning signs at contractor work areas, and use of radar speed signs.

Idaho Operations Office participated with its contractors in a Define, Observe, Intervene, and Test activity focusing on vehicle speeds in parking lots and around office buildings, and on seat belt awareness and usage. Baseline seat belt use was established in the initial "observation," and once the intervention

occurred (i.e., a seatbelt awareness education blitz), the retest showed a significant increase in seat belt usage. The education efforts that followed resulted in a significant decrease in vehicle speeds, increased awareness of pedestrian traffic, and improved performance relating to vehicles yielding to pedestrians.

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At SWPA, back up alarms have been installed on all large vehicles and trucks, and all work vehicles have seat belts. Standard operating procedures are in place stating requirements for safe backing of vehicles. WAPA will follow up on the recommendations made in the accident investigation report on its motor vehicle fatality.

III. EMPLOYEE SUPPORT

HSS spearheaded the requirement that DOE Federal subagencies and field offices implement ISMS specific to their workplaces. This requirement drives scope of work definition, hazard recognition, hazard controls, work performance within controls, and feedback and continuous improvement. ISMS are widely credited with the consistent reduction in contractor injuries and illnesses since its inception over ten years ago. FY 2008 was the first full year of implementation for Federal employee organizations, and implementation has been uneven across the Department. Subagencies who have achieved full implementation, including EM, NE, and LM, are taking ownership of their safety programs and improving their performance.

HSS sponsors the FEOSH committee with representatives from across the DOE. Members exchange information and bring that information back to their organizations. The HSS website provides timely guidance and information on a wide variety of safety and health topics.

At DOE Headquarters, overall responsibility for the occupational safety and health for all personnel is the responsibility of the MA, which provides safety and health support services for areas such as site-specific new employee occupational safety and health orientation training; inspection and correction of identified safety and health facility deficiencies; review of plans and specifications for safety and health concerns for office renovations or moves; overall coordination of the OEP\; and testing for indoor air or potable water quality problems.

A. OSH Training

DOE HSS FEOSH provides new employee safety orientation (online) training. In FY 2007, all DOE Federal employees were required to complete this training. HSS will develop annual training refreshers to serve as both a refresher and to provide more in depth information about selected safety topics. The FY 2009 update will address safe driving and pandemic flu. The DOE Office of Illness

and Injury Prevention Programs developed and provided pandemic influenza training throughout DOE.

DOE does not have a central training database to allow Department-wide roll-ups of safety training. Each DOE organization is responsible for identifying training needs and providing training for its personnel.

The National Training Center (NTC) is the DOE training center for Safeguards and Security (S&S), Safety, Foreign Interaction, and Counterintelligence. NTC also hosts the Professional Development Program for S&S and Safety. On a space-available basis, the NTC provides training for other Federal, state, and local government agencies. The safety training program (STP) is designed to complement the DOE Technical Qualification Program and the associated DOE safety-related qualification standards. The intent of the STP is to foster a technically capable Federal workforce from a safety perspective, by recruiting, training, and retaining qualified safety professionals. Current course offerings include: Senior Technical Safety Manager Applications, Conduct of Operations, Accident Analysis Techniques, Safety Basis Document Preparation, Human Performance Fundamentals, Hazard Identification, Airborne Release Fractions and Respirable Fractions, Senior Technical Safety Manager Overview, DOE Oversight Awareness, and DOE Oversight Implementation.

DOE Program Offices/Headquarters

NNSA provides emergency manager and emergency responder training through the Emergency Operations Training Academy (EOTA). EOTA provides state-of-the-art training and education for NNSA to enhance the readiness of personnel in the emergency operations community.

MA has conducted over 200 hours of training for DOE Headquarters office employees including 14 hours (14 classes) of warden and monitor training; 144 hours (18 classes) of first aid, cardiopulmonary resuscitation, and automated external defibrillator training; 25 new employee orientation briefings; 7 special emergency preparedness classes; and 29 escape mask classes.

Headquarters program and staff office Federal employees are required to take safety and health training such as the Annual FEOSH briefing. Many offices also provide their own specially tailored training programs. LM and the Office of Policy and International Affairs (PI), for instance, offer office safety training. The Office of Energy Efficiency and Renewable Energy (EERE) has supplemented MA's efforts in providing one-on-one safety and health entrance and exit briefings for EERE personnel. LM employees are considered Headquarters employees regardless of their duty stations and must take the same mandatory training courses. In addition, LM provides ISM Core Function application briefings to its employees.

Within SC, the implementation of the SCMS will provide a better idea of where improvement can be made in employee awareness of safe work practices in the Federal environment. Training may be provided through formal courses or on-the-job training in areas such as hazard recognition.

The Office of Fossil Energy (FE) supports its Field staff through quarterly conference calls relative to occupational safety and health. At Headquarters, FE conducted "Safety Day" activities for Forrestal and Germantown employees.

Field Offices

DOE-SR has an annual training requirement, which includes general safety training. Further, technical positions require a rigorous safety module, which includes FEOSH program basics and safety topic study and testing. This is a one-time qualification training. An annual electrical briefing is available and is often mandatory if past events demonstrate a weakness in Federal employee activities or proximity to hazardous conditions. Occasionally, DOE-SR will require its Federal employees to complete certain safety classes.

RL's FEOSH Program has maintained a very responsive Ergonomics Awareness Program since 2002. During FY 2008, RL developed and administered a computer-based FEOSH training program. The training emphasizes and explains injury and illness reporting responsibilities of supervisors and employees, along with necessary investigation and accident form completion requirements. The training also explains the Richland Employee Job Task Analysis Program, the Ergonomic Assessment Program, the RL FEOSH personal protective equipment procurement process, and the Richland Federal Building Occupant Emergency Plan. Finally, the ten DOE Employee OSH Rights from the DOE Order 440.1B, *Worker Protection Program for DOE (including the National Nuclear Security Administration) Federal Employees*, are listed. A mandatory quiz followed this training, with 100 percent employee completion. Also, employees received a Safety Checklist Form to assist in performing a safety review of their workspaces.

The Carlsbad FEOSH committee provides safety briefings at all employee meetings.

SPRU provides regular training on individual safety topics at weekly staff meetings. SPRU has a required reading program that includes the FEOSH program manual. All SPRU field office staff took online FEOSH training in FY 2008. SPRU Field Office staff received indoctrination in the office FEOSH program from the SPRU FEOSH coordinator.

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Behavior-based training is provided periodically within the SWPA, along with mandatory annual safety training. SWPA increases training opportunities from

annually to quarterly to monthly if necessary. At WAPA, additional OWCP training was provided this year to claims processors, supervisors and managers. WAPA also developed and implemented a new Workers' Compensation Guide. The organization also rewrote its fall protection training program manual. Train-the-trainer classes were held in spring of 2008 for all WAPA regions. Train-the-trainer fall protection training was provided on communication tower, wood poles, and transformer.

Table 3.1. Department-wide Emergency Response and Disaster Recovery Training

	Types of Training Provided in FY 2008	Number Trained ⁷
Top management officials	1. Online safety awareness training 2. Pandemic Flu training	
Supervisors	1. Online safety awareness training 2. Pandemic Flu training	
Safety and health specialists	1. Online safety awareness training 2. Pandemic Flu training	
Safety and health inspectors	1. Online safety awareness training 2. Pandemic Flu training	
Collateral duty safety and health personnel and committee members	1. Online safety awareness training 2. Warden and monitor training 3. CPR/First aid/AED training 4. Pandemic Flu training	
Employees and employee representatives	1. Online safety awareness training	
	2. Pandemic Flu training	

B. Field Federal Safety and Health Councils

a. Involvement

While some DOE Field offices participate in safety councils, DOE involvement in the Federal Safety and Health Councils has been minimal. SWPA representatives periodically attend Federal Executive Board meetings on pandemic influenza plans. WAPA corporate services office continues to participate in the Denver Federal Safety and Health Committee.

b. Field Council support

The industrial hygienist at West Valley Demonstration Project in New York is the Western New York Federal Health and Safety Council Vice-Chair.

⁷ Each organization tracks its own training and there is no roll-up capability.

C. Other Support Activities

DOE Program Offices/Headquarters

The DOE HSS FEOSH Office has revitalized the network of FEOSH coordinators by soliciting volunteers throughout the Department and encouraging them to join. Teleconferences are held quarterly and members submit agenda items. So far, this has improved communications among field offices and Headquarters personnel. Minutes are available on the DOE intranet after each call. The DOE HSS website continues to provide timely information to the entire DOE community on topics such as VPP, substance abuse, integrated safety management systems, upcoming events, and injury reporting.

The Department sponsored or participated in multiple conferences and workshops related to safety and health throughout the year, such as:

- Joint Energy Facility Contractors Group /DOE Chemical Management Workshop;
- Hoisting and Rigging Technical Advisory Committee;
- Annual ISM Workshop;
- Annual meeting of the VPP Participants Association.

The OSH Regulatory and Policy Response Line, an HSS initiative, responds to questions from DOE Federal, contractor, and subcontractor employees regarding applicability of DOE worker safety and health standards and directives. Access is via telephone or email. Eleven questions were submitted with answers published in FY 2008 covering a broad range of topics, including air suits, laser safety, beryllium analytical laboratories, ORPS reporting, and injury recording.

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WAPA launched SafeStart™, a new behavior-based safety program, which has been implemented in all its regional divisions with the exception of WAPA's Corporate Services Office. The regions continue to teach refresher classes to field personnel on a quarterly basis. SafeStart™ reminders have been added to the WAPA Accident/Incident Report form to remind employees of the critical error reduction techniques. The campaign uses promotional items, posters and signs at entrances and exits and also offered a coloring contest based on SafeStart™ procedures for Western employee's children to promote the program.

IV. SELF-EVALUATIONS

DOE complies with 10 CFR 1960.79, *Self-evaluations of occupational safety and health program*. This annual report examines the effectiveness of DOE and subagency programs. In anticipation of this report, each DOE subagency was invited to submit an annual summary to HSS that reflected their accomplishments for FY 2008. EM an outstanding summary with significant detail and analysis by

each of its field organizations. Many subagencies submitted thorough summaries, but some submitted brief statements or ignored the request. Therefore, DOE does not fully meet the intent of the regulation.

The DOE ISMS was required to be implemented for subagency Headquarters and field offices in FY 2007. This system has feedback and continuous improvement as one of the five core functions. The subagencies have been implementing ISMS with varying degrees of success. Department leadership is aware that self-evaluation promotes improvement in safety and health performance, and that ISMS provides a structure for this. To provide a Department-wide, as well as subagency breakouts, HSS prepares performance summaries throughout the year and briefs the heads of the major subagencies on their safety performance, with data summarizing:

- total case rates;
- days away, restricted or transferred rates;
- timeliness of reporting;
- types of injuries/illnesses;
- activities being performed at the time of injury and
- electrical safety events.

These briefings motivate management to focus on adverse trends and to request technical assistance from Headquarters resources to improve trends.

HSS houses the independent oversight organization for DOE. As a corporate resource, it conducts evaluations to verify that the Department's safeguards and security interests are protected, that the Department can effectively respond to emergencies, and that site workers, the public, and the environment are protected from hazardous operations and materials. During FY 2008, DOE conducted eleven Independent Oversight Environmental, Safety and Health Evaluations. Reports are published and findings are tracked via a Corrective Action Management Program, and quarterly progress reports are published. This year, oversight activities conducted a more focused evaluation of injury/illness reporting, based on concerns regarding under-reporting.

DOE subagencies are increasing inspections of their worksites, including offices. In addition, workplace ergonomic assessments are available upon request with periodic reminders of this service. HSS published guidance on performing FEOSH program assessments.

DOE Program Offices/Headquarters

The Safety Officers for both LM and PI performed over 20 workplace inspections over the last year at various locations across the country. These inspections reviewed all elements of a rounded safety program that could impact the Federal workforce. If deficiencies are noted, they are tracked to closure in a database if

not immediately addressed. Office of Civilian Radioactive Waste Management Federal divisions conducted multiple self-assessments in FY 2008.

Many of SC's field offices conducted management, or self-evaluations of their FEOSH programs. Some used the SCMS FEOSH subject area. SC expects more of this type of use of the SCMS in the coming years as the system becomes further institutionalized.

FE performed ISM Verification Audits of all FE program offices and related sites. During the year, the organization also performed safety self-inspection of its Forrestal and Germantown operations.

All NNSA sites are compliant with FEOSH Programs that incorporate 29 CFR Part 1960 and Executive Order 12196. Annual inspections are required for all Federal employee work areas. These programs are implemented by site office or Headquarters managers and staff with focus on worker participation, effective communications, periodic inspections, continuous improvement and verification that deficiencies are corrected. The NNSA Headquarters annual inspection is normally conducted in the fourth quarter of the fiscal year. This year the inspection was delayed due to a major move of NNSA staff from Germantown to the Forrestal Building in Washington, DC. This move was initiated in August and completed in October 2008.

Field Offices

DOE-SR conducted an in-house assessment of its FEOSH program this fiscal year that resulted in a number of changes to the program. Some of the major changes included more industrial hygiene implementation; stronger statement-proof application of requirements; and clearer direction of supervisor and employee responsibilities. Further, an informal survey of a major facility occupied by Federal employees strongly points to a lack of new employee safety knowledge and uncertainty or loss of knowledge of more seasoned employees. These are being addressed in a special action plan. An annual self-assessment of the year's program goals and injury and illness trends is used to plan the coming year's activities and provide input to this annual report.

At RL, Federal employees were asked to conduct a FEOSH Office Safety Checklist safety self-assessment of their workspaces and to return the completed checklist with any noted safety problems or questions. This input will be used during the conduct the formal FEOSH Workspace Assessment by RL Safety Engineering Division safety and industrial hygiene staff.

For several years the ORP annual FEOSH inspections concentrated on office safety. Past corrective actions resulted in improvements in office emergency signage, housekeeping, workstation ergonomics, electrical safety, maintenance, and an overall increase in employee awareness of safety issues. In FY 2008, ORP

focused the annual FEOSH inspection effort on office park pedestrian safety, emergency response training, and ORP employee involvement in office safety awareness. There were no significant issues identified.

CBFO has an Integrated Evaluation Plan that sets forth the self-evaluation and self-assessments scheduled to be performed on a fiscal year basis. In addition, the CBFO has in place an ISMS that is self-assessed on a yearly basis for each preceding fiscal year. The results of the recent assessment of the CBFO ISMS for FY 2008 have not yet been reported.

SPRU FEOSH coordinator conducted two FEOSH inspections in FY 2008, and FEOSH was a subject of an overall SPRU Field Office self-assessment conducted in August 2008.

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WAPA requires at least an annual Lockout/Tagout inspection in each region. Lockout/Tagout inspection procedures are being audited by WAPA's Safety and Security Manager to ensure compliance by each regional safety and maintenance office. Two regional audits have been completed to date. The SWPA Safety Manager conducts annual Fire and Safety Inspections. Field managers ensure daily maintenance of facilities.

V. ACCOMPLISHMENTS FOR FY 2008

DOE has maintained a safe work environment and reduced its injury case rates in FY 2008. Some success has been realized in meeting goals established in FY 2007.

Leadership- HSS has piloted initiatives in cooperation with other Departmental elements in an effort to demonstrate leadership in the area of safety and health. Notably, HSS efforts include:

- an organization-wide baseline survey of safety conditions utilizing the National Safety Council's employee survey instrument;
- an organization-wide "safety break" to emphasize employee safety;
- collaborative efforts to demonstrate physical reviews of safety conditions inside of security vault areas and
- ongoing VPP efforts within HSS.

Moreover, these efforts have resulted in positive feedback from both Federal employees and the contractor workforce, and there is a significantly heightened level of management attention to employee safety and health. A safety leadership award was initiated to recognize exemplary employee efforts to improve safety and health. This year, the award was given to a Headquarters

security manager who recognized the potential dangers of a subcontractor activity that had not undergone a comprehensive work package review. DOE will continue to seek opportunities to recognize outstanding safety achievements.

Leadership- DOE progress on achieving FY 2007 ISM goals continues to move forward. Efforts during the past year by MA related to Headquarters operations have shown a need for the formal development and issuance of a work planning and execution process which requires the inclusion of safety considerations in every major task and the approval of safety officials prior to the start of work. Small scale contractual work at Headquarters buildings during the past year demonstrated that such tasks potentially have serious associated hazards. Efforts are ongoing to develop and issue a revised work planning procedure which requires planners, in coordination with safety professionals, to address potential hazards. Work control packages will require approval from safety officials prior to the start-up of any task.

Leadership- During FY 2008, the NNSA Line Oversight and Contractor Assurance System Supplemental Directive (NA-1 SD 226.1A) established the requirement for quadrennial Headquarters review of Site FEOSH program performance. Also during FY 2008, NNSA developed a FEOSH Criteria, Review and Approach Document that incorporates all OSHA and DOE Federal employee occupational safety and health requirements into a single document to support Headquarters review of the Site programs.

Training and Awareness- Improvements have been made to the DOE FEOSH orientation training and development of new annual training is ongoing. In FY 2008 the training was updated to include information on health considerations to address pandemic influenza risk and controls.

RL management increased employee awareness of the need for, and the value of, a safe and healthful work place. As a result the accident rate for RL employees has significantly improved during the past two years, compared to what it had been during the 2003-2006 time period. In addition, ORP helped to support the 2008 Hanford Safety Expo, attended by over 60,000 people.

Feedback Targeting High Injury Rate Operations- WAPA has shown a significant reduction in total recordable case rate (2.5 cases in FY 2007, to 1.7 cases in FY 2008) and lost time case rate (1.0 cases in FY 2007, to 0.2 cases in FY 2008). WAPA attributes the reduction to its new behavior-based program. SWPA is a small agency with about 150 employees, so its achievement of "zero" for the recordable incident rate for FY 2008 is significant. The incident rate for FY 2007 was 4.14 with six recordable injuries. The agency has not experienced an electrically related incident in the past 16 consecutive years.

Feedback from improved CAIRS reporting will continue to better identify the causes of security force related injuries and reveal opportunities for improvement. Indications that many of the security force injuries are related to physical training have helped the Office of Secure Transportation target specific actions to be implemented in FY 2009.

Individual accomplishments were achieved by analyzing site-specific hazards and instituting corrective actions. Examples cited above indicate the variety of approaches taken to address identified hazards and concerns. DOE is just beginning to experience the improvements that result from ISMS implementation for Federal employee organizations. These improvements are currently more site-specific than strategic, but are vital contributions to safety performance. Strategic feedback accomplishments include HSS periodic presentations to the Deputy Secretary and Under Secretaries regarding their safety performance, as reported in the CAIRS and ORPS databases, with analyses to identify injury causes and activities being performed at the time of injury events.

While these individual accomplishments are noteworthy and represent progress, they are limited in their approach and scope towards improving the overall performance of the Department.

VI. RESOURCES

DOE did not implement any significant one-time or additional permanent resources to the FEOSH program(s) in FY 2008.

VII. GOALS

DOE has identified Department-wide FEOSH program improvement goals for FY 2009 and beyond. The Department will take a strategic approach based on the guiding principals and core functions of ISM. This approach provides a structure for establishing and coordinating goals at each organizational level. The Department-wide goals for FY 2009 are:

- Strengthen leadership and improve subagency understanding of roles, responsibilities and authorities;
- Enhance employee training and awareness;
- Strengthen management systems to provide feedback on program performance.

For the Leadership goal, DOE intends to revise the worker protection directive, DOE Order 440.1B, *Worker Protection Program for DOE (Including the National Nuclear Security Administration) Federal Employees*. The revised Order will clarify that Federal employee safety program implementation roles, responsibilities and authority are line management functions. The revision will emphasize that program self evaluations and reporting must be consistent with 29 CFR 1960 and implemented on an annual basis. Information provided must support the DOE annual report to the Department of Labor.

For DOE Headquarters program offices, responsibilities for reporting injuries when employees are treated by the health unit will be addressed. Requirements will be established to better ensure that Departmental program goals are coordinated at the field and program level to address identified weaknesses. The revisions to the directive are scheduled to begin in the second quarter of FY 2009. HSS will continue to provide technical guidance and assistance to encourage each subagency to perform annual worksite inspections and workplace hazard analyses and monitor implementation and follow up.

DOE will continue to take positive action in fulfilling and sustaining its VPP goals and mentoring various VPP sites. HSS will conduct two Department-wide teleconferences with the Field and Headquarters FEOSH points of contact to discuss in detail the benefits of participation in OSHA's VPP for Federal agencies. In addition, HSS personnel will make presentations on the benefits of VPP at field safety and health conferences, and serve in supporting the ongoing HSS VPP committee at Headquarters. HSS strongly believes that this goal is vital to the continued growth of safety and health within the Department, and it will remain as a standing commitment for the FEOSH program by HSS.

Under the Training and Awareness goal, DOE intends to strengthen the FEOSH committee to serve as a resource for sharing successful implementation practices in FY 2009. DOE will continue to expand the use of its website to disseminate safety-related information and to encourage submission of articles that demonstrate new initiatives and successes in employee safety and health. The *FY 2008 Department of Energy Annual Occupational Safety and Health Report for Federal Employees to the Secretary of Labor* will be posted on the HSS website to provide every DOE employee the opportunity to monitor the Department's progress.

DOE will improve the existing corporate employee awareness training to make it an annual training requirement. In FY 2009 the training will be expanded to address changes in DOE requirements and to reinforce existing requirements. DOE will continue to endorse the Field Federal Safety and Health Councils as the key cooperative interagency organizations for the exchange of ideas and information about occupational safety and health. It continues to be a standard practice to include such endorsements during the regular teleconferences with FEOSH Committee contacts at field offices and to ask for input from these activities. HSS will provide additional workshops to improve the quality of injury/illness reporting data into CAIRS, self-assessment, and case management. Lastly, DOE will specifically encourage Headquarters and field subagency initiatives in promoting driver safety training and education.

The Feedback goal has several components. HSS will continue to examine the quality of the data being reported in CAIRS and ORPS with recommendations for improving the quality of the data reported and for increasing the use of these databases at local levels to track and trend events. These recommendations will be specifically addressed in the

revision to DOE directive Order 231.1A *Environment, Safety and Health Reporting* beginning in the second quarter of FY 2009. For example, reporting code modifications will be made to better indentify injuries associated with emergency response. Also, the event and injury codes will be modified to better address motor vehicle accidents.

Targeting efforts are underway to identify hazards and effective controls that will further reduce injuries in those subagencies and field offices with higher than average injury/illness rates. HSS will continue the work of the Office of Independent Oversight and particularly, its focus on employee safety and on recordkeeping accuracy and completeness. HSS will continue to analyze DOE's safety performance and report the status and trends to the Deputy Secretary and Under Secretaries on a quarterly basis. As needed, HSS and program office subject matter experts will be deployed to provide site-specific technical assistance.

A new project for FY 2009 is to assess the DOE Federal workforce safety culture using a survey developed by the National Safety Council. After this pilot survey is complete in January 2009, HSS will encourage each subagency to participate. HSS management has committed to work with employee representatives to address areas of weakness that the survey may disclose. The FY 2009 survey will serve as a benchmark for future surveys to measure improvements in employee perceptions regarding safety at DOE.

These three strategic goals to improve leadership, training/awareness, and performance feedback are intended to improve the overall effectiveness of the FEOSH program. As program effectiveness improves progress in meeting SHARE goals will be evident.

VIII. QUESTIONS/COMMENTS

Submit any questions or comments you have concerning your agency's OSH program and/or these reporting guidelines.

APPENDIX I – SUBAGENCY CONTACTS

Name		Official Title	Telephone	E-mail
Subagency Name:	National Nuclear Security Administration			
OSH Manager:	Frank Russo	Senior Advisor for Environment, Safety and Health	202-586-8395	frank.russo@nnsa.doe.gov
Other Contact:				
Subagency Name:	Office of Science			
OSH Manager:	Arnold Edelman	Acting Director, ES&H Division	301-903-5145	arnold.edelman@science.doe.gov
Other Contact:	Matt Cole	Fire Protection Engineer	301-903-8388	matt.cole@science.doe.gov
Subagency Name:	Office of the Under Secretary			
OSH Manager:	Cherylynne Williams	Safety and Occupational Health Manager	202-586-1005	cherylynne.williams@hq.doe.gov
Other Contact:				
Subagency Name:	Bonneville Power Administration			
OSH Manager:	Johnny McGhee	Safety and Health Manager	360-691-6726	jbmCGhee@bpa.gov
Other Contact:				
Subagency Name:	Western Area Power Administration			
OSH Manager:	Kathy Patchell	Safety and Occupational Health Manager	720-962-7295	patchell@wapa.gov
Other Contact:				
Subagency Name:	Headquarters			
OSH Manager:	Cherylynne Williams	Safety and Occupational Health Manager	202-586-1005	cherylynne.williams@hq.doe.gov
Other Contact:				

	Name	Official Title	Telephone	E-mail
Subagency Name:	Office of Environmental Management			
OSH Manager:	Terry Krietz	Safety and Occupational Health Manager	301-903-6456	terry.krietz@hq.doe.gov
Other Contact:				

Subagency Name:	Office of Nuclear Energy			
OSH Manager:	John Serocki	Industrial Hygienist	301-903-7999	john.serocki@hq.doe.gov
Other Contact:				

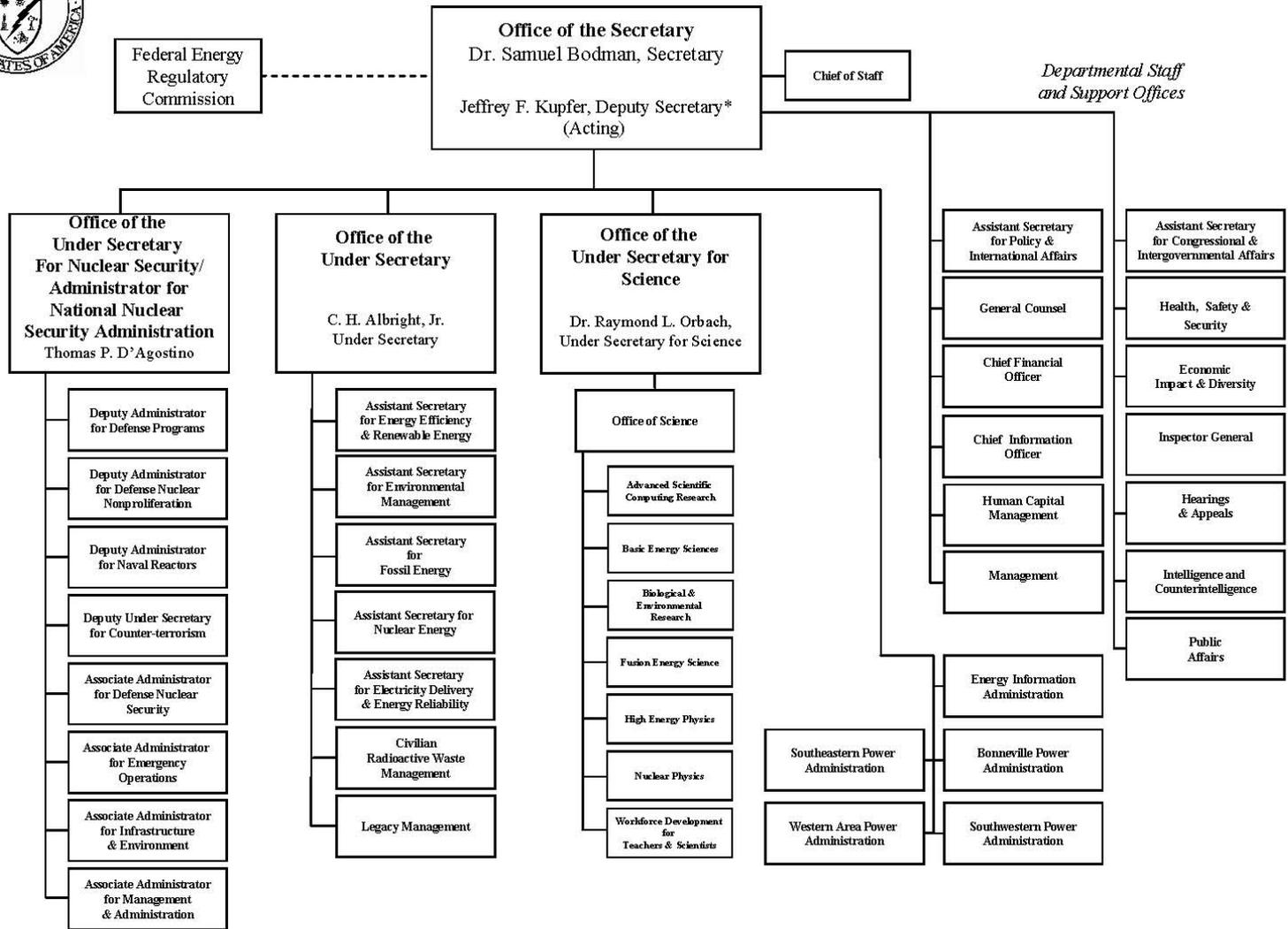
Subagency Name:				
OSH Manager:				
Other Contact:				

Subagency Name:				
OSH Manager:				
Other Contact:				

Subagency Name:				
OSH Manager:				
Other Contact:				

APPENDIX II – DOE ORGANIZATIONAL CHART

DEPARTMENT OF ENERGY



* The Deputy Secretary also serves as the Chief Operating Officer

10 Mar 08