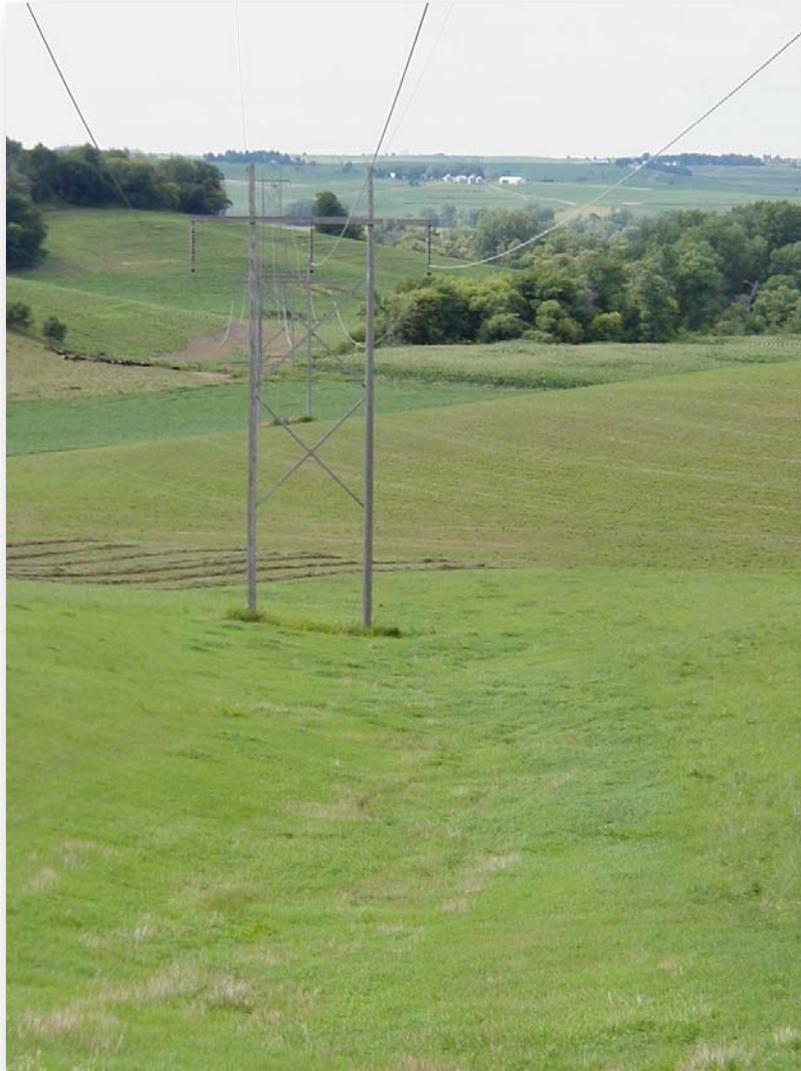


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# *Western Area Power Administration Annual Site Environmental Report 2007*

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United States Department of Energy  
Western Area Power Administration  
Natural Resources – A7400  
12155 W. Alameda Parkway  
Lakewood, Colorado 80228  
DOE NO. WP/16151-22

**Contents**

Executive Summary ..... 3

Introduction ..... 4

Compliance Status ..... 6

    Comprehensive Environmental Response, Compensation, and Liability Act  
    (CERCLA)..... 6

    Superfund Amendments and Reauthorization Act (SARA)..... 6

    Resource Conservation and Recovery Act (RCRA)..... 6

    Toxic Substances Control Act (TSCA)..... 7

    Federal Insecticide, Fungicide, and Rodenticide Act (FIFRA) ..... 8

    Federal Facilities Compliance Act (FFCA)..... 8

    National Environmental Policy Act (NEPA)..... 8

    Clean Air Act (CAA) ..... 9

    Clean Water Act (CWA)..... 10

    Endangered Species Act (ESA)..... 11

    Migratory Bird Treaty Act (MBTA)..... 11

    National Historic Preservation Act (NHPA) ..... 12

    Executive Order 11988, "Floodplain Management" and Executive Order 11990,  
    "Protection of Wetlands" ..... 12

    Executive Order 13101/13123 /13148/13149 "Greening of the Government..." ..... 13

Environmental Management System..... 13

    Self-Assessments or Audits..... 13

    Existing Permits ..... 14

    Waste Minimization, Pollution Prevention, and Affirmative Procurement..... 14

Appendix A: Spill Prevention Control and Countermeasure Plans and EPCRA Tier II  
Reporting for Western in 2007 ..... 16

Appendix B: 2007 SF<sub>6</sub> Emissions Report to the Environmental Protection Agency ..... 24

    Appendix C: List of 2007 Permits..... 26

    Appendix D: 2007 Pollution Prevention and Waste Minimization Report..... 29

    Recycling Questions ..... 31

Solid Waste Prevention Questions..... 31  
Appendix E: 2007 Affirmative Procurement Report ..... 33

## Executive Summary

This Annual Site Environmental Report summarizes the accomplishments of Western Area Power Administration (Western) and provides the status of its environmental program for the 2007 calendar year.

Western complies fully with regulations from the Council on Environmental Quality and prepares National Environmental Policy Act documentation to assess the environmental impacts of its planned actions. Western was working on or completed 75 categorical exclusions, 15 environmental assessments, 12 environmental impact statements, and 3 findings of no significant impact. Two records of decision were issued. Under the Endangered Species Act, Western was working on or completed 21 Section 7 consultations and received seven Biological Opinions as a result of the consultations.

Western continued to implement its Environmental Management System (EMS) as the Environmental Policy was updated to reflect the guidelines set forth in the new Executive Order 13423. The Management Review was completed early in the year and areas for improvement were identified.

Western prepares Spill Prevention, Control, and Countermeasure (SPCC) plans as required by the Clean Water Act at sites where potential oil spills could occur. Western has 257 Tier II facilities with 142 SPCC plans in place in 13 states. Western revised 56 of its current plans and prepared two new plans.

Western recycled over three times the amount of materials from the previous year with 7595 metric tons of woodpoles and crossarms, mineral oil dielectric fluid, capacitors, transformers, concrete/asphalt, in addition to many other items such as paper products and scrap metals. Western also removed and recycled 0.32 metric tons of polychlorinated biphenyl (PCB) contaminated equipment. Western significantly increased the percentage of purchases containing recovered materials from 51.7 percent to 87.6 percent from the previous year. Over \$2.2 million in purchases went to materials with recovered content with a large portion in construction materials and in paper and non-paper office products.

## Introduction

Western Area Power Administration (Western) was established December 21, 1977, under the U.S. Department of Energy (DOE) Organization Act (Section 302 of Public Law 95-91). Western markets Federal electric power in 15 western states, encompassing a 1.3 million-square-mile geographic area (Figure 1).

Western operates and maintains more than 17,000 miles of transmission, 300 substations and various other power facilities in its service territory. Western markets about 10,000 megawatts of power generated at 56 hydroelectric power-generating plants in the western United States that are operated by the U.S. Bureau of Reclamation (Reclamation), the U.S. Army Corps of Engineers, and the U.S. Section of the International Boundary and Water Commission. Western also markets the United States' entitlement from the Navajo coal-fired power plant near Page, Arizona.

In Fiscal Year 2007, Western sold 35.3 billion kilowatt hours of electricity and generated \$1,173.4 million in gross operating revenues. Western sells power to 670 wholesale power customers, who, in turn, provide service to millions of retail consumers. Western's customers include rural cooperatives, municipalities, public utility districts, Federal and State agencies, irrigation districts, Native American tribes, and project use customers. Customers are located in Arizona, California, Colorado, Iowa, Kansas, Minnesota, Montana, Nebraska, Nevada, New Mexico, North Dakota, South Dakota, Texas, Utah, and Wyoming.

Western is managed from its Corporate Services Office in Lakewood, Colorado; four Regional Customer Service Offices located in Billings, Montana (Upper Great Plains Region); Phoenix, Arizona (Desert Southwest Region); Loveland, Colorado (Rocky Mountain Region); and Folsom, California (Sierra Nevada Region); and the Colorado River Storage Project Management Center (CRSP), in Salt Lake City, Utah, as shown in Figure 1. Through its power marketing and transmission program, Western secures revenues to recover operating, maintenance, and purchase power expenses to repay the Federal investment in generation and transmission facilities.

Western's environmental program spans a broad range of environmental concerns due to the varied geographical locations and types of activities routinely performed. Western falls within the jurisdiction of six Environmental Protection Agency (EPA) regions, as well as the 15 State and numerous local jurisdictions where Western's facilities are located.

Western's facilities generate hazardous and non-hazardous waste as a byproduct of maintaining electrical equipment, warehouses, and maintenance and office facilities. Western's substations and maintenance facilities house equipment containing dielectric oil, hazardous gasses, petroleum, and other pollutants that may affect water, soil, and air resources. Western's transmission lines cross a variety of ecosystems such as forests, wetlands, grasslands, and deserts. Maintaining these transmission lines could affect sensitive biological and cultural resources. Western's Environmental Policy

Statement directs employees to prevent, control, and abate environmental pollution at their facilities and when possible, enhance the environment.

Western also provides environmental review for interconnections under its Open Access Transmission Tariff (63 FR 521).

This Annual Site Environmental Report meets the requirements of DOE Order 231.1A, Environment, Safety and Health Reporting.

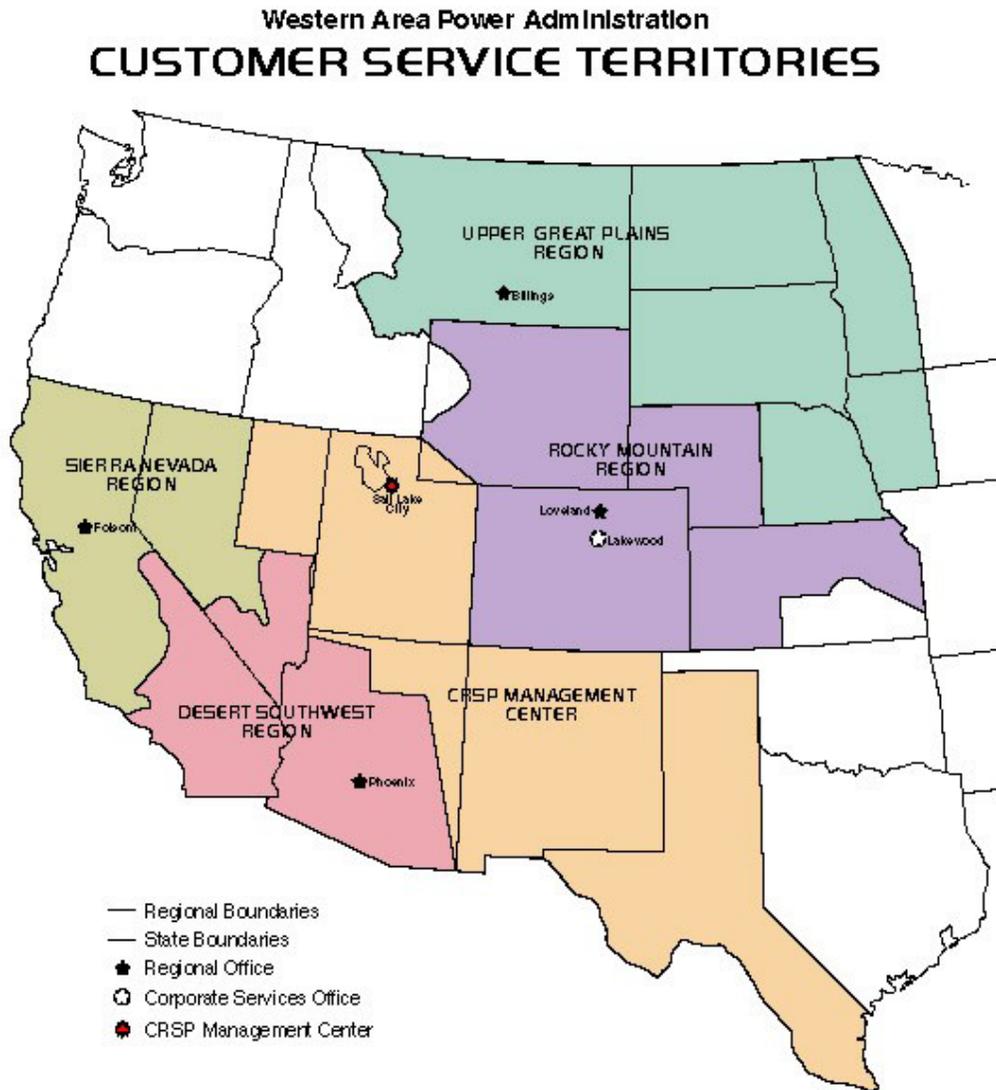


Figure 1. Western Area Power Administration Service Territories and Regions.

## Compliance Status

This section provides an overview of Western's compliance status for calendar year 2007.

### Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA)

This Act, referred to as Superfund, was designed to help ensure cleanup of inactive hazardous waste sites. CERCLA provided authorization for the EPA to respond to and remedy polluted sites.

The Federal Agency Hazardous Waste Compliance Docket (Docket) is a list of facilities under Federal control that have the potential for environmental releases that could adversely affect human health or the environment. Western had two sites remaining on the Docket in 2007, the Liberty Substation in Buckeye, Arizona, and the Foundry Site in Gering, Nebraska. Both sites are listed as Non-National Priorities List (NPL) sites which include sites removed from the proposed NPL, sites withdrawn from the final NPL, sites being addressed as part of another NPL site, and all other non-NPL sites. Site assessments conducted in the 1990s show that these sites pose no risk to human health or the environment. Western continues to work with EPA to have these facilities removed from the Docket.

### Superfund Amendments and Reauthorization Act (SARA)

This Act revised and extended CERCLA. The SARA Title III amendments contain requirements for the Emergency Planning and Community Right-to-Know Act (EPCRA). EPCRA encourages and supports emergency planning efforts at the State and local levels. Additionally, it provides public and local governments with information concerning potential chemical hazards present in their communities by requiring facilities to disclose hazardous substances they use or store.

Western conducts annual inventories of chemicals at facilities throughout its service area. The information gathered is used to prepare Sections 311 and/or 312 (Tier I and II) reports to State and local emergency response entities. In 2007, Western submitted Tier II reports for 257 facilities, listed in [Appendix A](#). This list includes 50 facilities in California where Hazardous Material Business Plans are used to meet Tier II reporting requirements. These inventories are also used to verify that Western does not manufacture, process, or otherwise use threshold quantities of the chemicals identified in Section 313 of EPCRA (Tier III), and thus does not report under that section.

### Resource Conservation and Recovery Act (RCRA)

RCRA defines and regulates nonhazardous and hazardous solid wastes.

Nonhazardous wastes include municipal solid waste, industrial nonhazardous wastes, commercial nonhazardous wastes, universal waste and some semi-solid and liquid wastes. These solid wastes also include special wastes such as infectious wastes, construction wastes, household wastes, and oil and gas wastes. Hazardous wastes are defined as listed wastes in 40 CFR Part 261 and wastes that exhibit characteristics of reactivity, ignitability, corrosivity, or toxicity. RCRA, later amended by the Hazardous and Solid Waste Amendments (HSWA), regulates hazardous waste operations by

establishing standards for hazardous waste generation, transportation, treatment, storage, or disposal.

HSWA-based regulations affect most Western facilities, which are classified as conditionally exempt, small-quantity generators of hazardous waste. HSWA also impacts Western operations by prohibiting the land disposal of hazardous wastes and by setting standards for used-oil management, underground storage tanks (UST), and recycling hazardous wastes. Western has increased recycling of these types of wastes, and continues to look for opportunities to recycle. In 2007, Western continued recycling materials from its facilities under the Universal Waste Rule. Western also has three USTs, one each in Arizona, Colorado, and South Dakota, which require annual permits to comply with State regulations. Western complies with the EPA's UST upgrade and monitoring requirements for these facilities.

Western had 6 hazardous material spills in 2007. Western takes immediate action to clean up spills as required by TSCA, RCRA, or the CWA, and notifies the appropriate State and Federal agencies for spills above reportable limits. Western also routinely cleans up small leaks and drips around oil-filled equipment on an as-needed basis. Waste from spills is recycled, placed in a landfill or at a RCRA-permitted facility.

#### 2007 Hazardous Material Spills

Facility	State	Contaminant/ Amount
Yellowtail Substation	Montana	20 gallons transformer oil (10 PPM PCB)
Morris Substation	Minnesota	10 to 15 gallons Non-PCB dielectric mineral oil
Shiprock Substation	New Mexico	15 to 20 gallons Non-PCB transformer oil
Fargo Line Crew Yard	North Dakota	1 to 5 gallons hydraulic oil
Underwood Substation	South Dakota	20 gallons Non-PCB mineral oil
Vernal Substation	Utah	15 to 20 gallons Non-PCB mineral oil

#### Toxic Substances Control Act (TSCA)

The TSCA regulations prohibit the manufacture, processing, and distribution of polychlorinated biphenyls (PCB) in commerce, except as exempted by EPA. The EPA, through the TSCA regulations, also regulates the use, marking, and disposal of PCBs. Some States regulate PCB disposal and handling through their state RCRA Programs. The TSCA regulations also prescribe requirements for Western's radon, lead-based paint, and asbestos concerns.

Western continued the removal and proper disposal of mineral oil, dielectric fluid, soil, and equipment containing PCBs from facilities during 2007.

Western disposed of 0.315 metric tons of TSCA wastes (equipment, debris, and soil) in 2007. Low-level PCB contaminated oils were burned for energy recovery at EPA-permitted facilities or were chemically treated and recycled. Oils with higher concentrations of PCBs were disposed of at EPA-certified incinerators. Contaminated equipment carcasses were decontaminated and sold as scrap when possible. Items too heavily contaminated for recycling as scrap were disposed of at permitted PCB waste landfills or incinerators.

### **Federal Insecticide, Fungicide, and Rodenticide Act (FIFRA)**

FIFRA directs EPA to register pesticides to ensure that, when used according to label instructions, they will not present unreasonable risks to human health or the environment. Pesticides include insecticides, anti-foulants, fungicides, rodenticides, disinfectants, and plant growth regulators. Depending on pesticide properties and use patterns, pesticides can leach through soils and contaminate groundwater. This is especially true where the water table is close to the surface, and/or soils are highly permeable.

Pesticides are used by Western to control plant and animal pests and for wood preservation. Western has two manuals for implementation of FIFRA, the "Integrated Vegetation Management (IVM) Environmental Guidance Manual" and the "Pest Control Manual." Western's IVM program promotes the use of combined methods to control unwanted vegetation. IVM combines biological, cultural, physical, and chemical tools to minimize economic, health, and environmental risks. IVM de-emphasizes the exclusive use of chemical control. No significant FIFRA activities occurred in 2007.

### **Federal Facilities Compliance Act (FFCA)**

The FFCA includes explicit authority to the Administrator of the EPA to commence administrative enforcement actions against any department, agency, or instrumentality of the executive, legislative, or judicial branch of the Federal government that is in violation of requirements under RCRA. The FFCA also allows states to assess fines against Federal facilities for RCRA violations. No FFCA actions were undertaken against Western in 2007.

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

NEPA requires all Federal Agencies or Agencies spending Federal monies to consider the potential environmental effects of proposed actions during planning stages. Agencies must prepare documentation regarding these considerations and provide recommendations for Federal actions that may significantly affect the environment. NEPA documentation includes Categorical Exclusions (CXs), Environmental Assessments (EAs), Records of Decision (RODs), Findings of No Significant Impact (FONSI), and Environmental Impact Statements (EISs). Western's NEPA activities are reported annually to DOE in January and the summary of the 2007 NEPA actions is as follows:

**2007 Summary of NEPA Actions**

<b>NEPA Action</b>	<b>Total</b>
CXs completed	75
EAs completed	4
EAs in progress	11
EISs completed	3
EISs in progress	9
RODs issued	2
FONSIs issued	3

**Clean Air Act (CAA)**

The CAA was promulgated “to protect and enhance the quality of the Nation’s air resources so as to promote public health and welfare and the productive capacity of its population.” The EPA is required to set National Ambient Air Quality Standards (NAAQS) that define clean air levels. The EPA set standards for six “criteria” pollutants: carbon monoxide, lead, ozone, nitrogen oxides, sulfur dioxide, and particulate matter. The EPA also established New Source Performance Standards (NSPS), National Emission Standards for Hazardous Air Pollutants (NESHAPS), and standards for mobile sources. NESHAPS have been established for beryllium, mercury, vinyl chloride, benzene, arsenic, asbestos, radon, and other radio nuclides. Air quality standards are achieved by the States through State Implementation Plans (SIPs). The SIPs establish emission limits and compliance schedules for pollution sources.

Several potential sources of air emissions that are regulated under the CAA exist at Western facilities. These emissions include dust during construction activities, friable asbestos during building renovation or demolition, and volatile organic compounds from gasoline dispensing facilities. Additionally, Western has taken steps to control emissions of greenhouse gasses from its facilities and operations, including the phase-out of ozone depleting substances and reducing vehicle emissions through the use of alternative fuels. Western also purchases green energy to reduce greenhouse gasses.

In 2007, Western sampled for asbestos-containing material in its Rocky Mountain Region and Upper Great Plains Region. In Colorado, Utah, Wyoming, and New Mexico, seven buildings were screened for asbestos and lead paint. The facilities sampled were all slated for demolition or are no longer in use. Before disposal, all of these buildings will be sampled for asbestos content by a State Certified Asbestos Building Inspector and either certified as asbestos-free or asbestos abatement will be performed before moving or demolishing the buildings.

Western has diesel and gasoline dispensing facilities at four locations. These facilities are permitted under State regulations and are inspected annually to ensure tank integrity so that the tanks do not have leaks that could result in releases of volatile organic compounds.

The phaseout of ozone-depleting substances affects Western's operations associated with refrigeration and air conditioning, solvent use, and fire protection. As equipment is

replaced, ozone-depleting substances are recovered from air conditioning, refrigeration systems, and fire suppression systems before final disposal or dismantling. The Corporate Services Office and most of the Regional offices have phased out halon-containing fire extinguishing equipment for all but a few uses. One facility in Watertown, South Dakota, still contains a halon-based, large fire suppression system. The Rocky Mountain Region has trained all personnel to have air conditioners evacuated and certified empty and that all Freon has been recycled before arranging for the recycling of air conditioners.

Western has approximately 750 SF<sub>6</sub> gas-filled circuit breakers in use. In 2007, Western continued evaluating equipment, locating several leaks, and either immediately repaired them, or scheduled repairs or replacement. Tracking systems have been developed at three Regional offices to track the amount of SF<sub>6</sub> gas leaking to the atmosphere from Western's equipment, and a database is being finalized to improve the ease of tracking. An annual SF<sub>6</sub> emissions reduction report is prepared and distributed internally and externally, including a report to the EPA. A copy of this report is included in [Appendix B](#).

### **Clean Water Act (CWA)**

The CWA regulates the discharge of pollutants into waters of the United States from any point source including industrial facilities and sewage treatment facilities. The CWA also regulates storm water runoff from certain industrial sources, requires reporting and cleanup of oil and hazardous substance spills in waters of the United States, protects waters of the United States, requires a permit to adversely affect wetlands, and requires spill prevention plans for sites that store oil and other petroleum products. The EPA established a requirement to have a National Pollutant Discharge Elimination System (NPDES) permit for the discharge of storm water from facilities with point sources. Storm water pollution prevention plans are prepared as part of the NPDES permit for maintenance and construction activities that disturb more than one acre.

Western continues to evaluate facilities to meet Spill Prevention, Control, and Countermeasure Plans (SPCC) requirements under the CWA. SPCC plans are developed for all new facilities and updated every 5 years for existing facilities. In 2007, Western had 142 SPCC plans in 13 states. SPCC plans are periodically reviewed for necessary revisions based on new site-specific information, construction or other modifications to the sites, or revised inventories of oil-filled equipment. In 2007, Western updated 56 SPCC plans and prepared two new SPCC plans. The Sierra Nevada and Desert Southwest Regions have combined SPCC plans with their Hazardous Waste Business Plans for California.

The Mineral Oil Spill Evaluation System (MOSES) software developed by the Electric Power Research Institute (EPRI) assists in determining the need for secondary containment and SPCC plans at Western's facilities. In 2007, Western evaluated two facilities for potential water impacts using the MOSES model.

In 2007, the Sierra Nevada Region continued monitoring groundwater at the Elverta Maintenance Facility for methyl tertiary-butyl ether (MTBE). The groundwater was

contaminated from a spill of gasoline during removal of a UST in 1997. Western submitted four quarterly monitoring reports to the Sacramento County Environmental Management Department (SCEMD) in 2007. Sampling results indicate that the MTBE level in one well continued to be elevated. Based on the monitoring results, the SCEMD requested that one well be re-drilled from a 2-inch diameter to a 4-inch diameter. Western continues to work closely with SCEMD to arrive at an acceptable level of remediation for the site and to prepare a Corrective Action Plan for the clean-up of the site.

Western also evaluated four facilities in the Rocky Mountain Region for potential water impacts. Results identified that the new Animas River Substation near Durango, Colorado requires secondary containment and a SPCC plan. In addition, the Torrington Substation in Wyoming was analyzed for the addition of a new transformer and determined that existing containment was adequate. The replacement of three single phase transformers with one multi-phase transformer at the Flaming Gorge Switchyard was analyzed and determined that additional containment was needed and the SPCC will need to be revised to reflect the change. The other two sites, New Melones Substation in California, and Delivery 23 Substation in Colorado, did not require secondary containment or a SPCC Plan.

#### **Endangered Species Act (ESA)**

The ESA was established to protect aquatic and land animals, and plant species that are likely to become endangered in the foreseeable future (threatened) or are in danger of extinction (endangered). Federal agencies are required to ensure that any of their associated actions do not adversely impact threatened or endangered species (T&E). Section 7 of the ESA requires Federal agencies to determine if listed species or their habitat may be affected. If a potential affect is determined, then the agency must consult with the U.S. Fish and Wildlife Service (USFWS), or National Marine Fisheries Wildlife Service, whichever is appropriate. State-listed species should also be considered when contemplating an action.

In 2007, Western was working on or had completed 21 Section 7 consultations under the ESA. Western received seven Biological Opinions (BO) as the result of formal consultations, maintained one Programmatic BO for Western, and operated under one other Agency's Programmatic BO.

#### **Migratory Bird Treaty Act (MBTA)**

The MBTA (16 USC. 703-712) prohibits the taking, possessing or transporting of any migratory bird, nest, egg, or part of a migratory bird without a permit. The protected species are listed in the Code of Federal Regulations (CFR) Part 50 § 10.13. This includes 836 species.

In 2007 Western began the process of revising its Avian Protection Plan (APP). The APP provides a mechanism for tracking bird loss and helps in defining troubled equipment and implementing corrective actions. Western also supported a line marking device study in its Upper Great Plains Region. This study will help to evaluate the efficacy of devices designed to reduce bird collisions with overhead lines.

### **National Historic Preservation Act (NHPA)**

All Federal agencies have responsibilities under the National Historic Preservation Act (NHPA) of 1966. Under Section 106 of the Act, all Federal agencies will take cultural resources into account during agency project planning. The intent is to ensure that Agency actions do not inadvertently disturb or destroy significant cultural resources. Cultural resources can include, but are not limited to, prehistoric and historic archaeological materials and sites located on or below the ground surface, historic structures (buildings, sites, structures, or objects) that are more than 50 years old, cultural and natural places, and sacred objects important to a group or groups of Native Americans. A compliance process was established by the President's Advisory Council on Historic Preservation (36 CFR 800) that, if followed, ensures compliance with provisions of the Act. The Act and the regulations do not mandate an outcome, only that an agency considers the effect its actions may have on significant resources.

Western complies with the NHPA by performing cultural and historical resource inventories for construction, maintenance, and interconnection activities. These inventories include record searches for previously identified resources and, where necessary, on-site surveys. Western engaged in consultations and coordination with 90 Tribes during the conduct of preservation and cultural compliance and government-to-government consultations in 2007. In areas where significant cultural resources are identified, monitors assure that cultural and/or historical resources are not disturbed. Native American monitors worked with Western staff on several projects.

In Arizona, California, Colorado, Nebraska, Utah, and Wyoming, Western and the SHPOs have agreed on Section 106 measures for routine maintenance activities through programmatic agreements. These agreements streamline the consultation process for projects with a "no effect" determination. On large projects, Western and other affected parties, along with the SHPOs and Native American Tribes enter into project specific programmatic agreements. These agreements outline actions to be taken during construction activities to comply with cultural and historical resource preservation laws. No new programmatic agreements were executed in 2007.

In 2001, Western received a claim for damages to cultural resources from the Quechan Indian Tribe. This issue had yet to be resolved in 2007.

### **Executive Order 11988, "Floodplain Management" and Executive Order 11990, "Protection of Wetlands"**

Under DOE's Floodplain and Wetland Regulations (10 CFR Part 1022), EO 11988 and EO 11990, Western evaluates the impact of its actions on floodplains and wetlands. These evaluations are usually performed as part of the NEPA impact analysis for projects. In 2007, Western completed a floodplain/wetland evaluation for the San Luis Rio Colorado Project (DOE/EIS-0395), with the ROD published on 10/12/07 (72 FR 58074), and for the Trinity Public Utilities District Direct Interconnection Project (DOE/EIS-0389), with the ROD published on 01/18/08 (73 FR 5184).

**Executive Order 13101/13123 /13148/13149 “Greening of the Government...”**

EO 13101, Greening the Government through Waste Prevention, Recycling and Federal Acquisition, mandates that Federal agencies establish systems, schedules, plans, and goals for waste prevention, recycling, and acquisition. Western responds to this EO through pollution prevention plans, reports, and affirmative procurement actions. EO 13123, Greening the Government through Efficient Energy Management, requires Federal agencies to efficiently manage energy to minimize impacts to the environment. Western has established goals and procedures to minimize internal use of energy, maximize the use of green energy and evaluate various sources of energy to determine relative environmental impacts. EO 13148, Greening the Government through Leadership in Environmental Management, requires Federal agencies to improve environmental performance through the use of management systems and aggressive pollution prevention initiatives; it also requires Federal agencies to comply with EPA and State and local environmental regulations. EO13149 requires Federal agencies to exercise leadership to reduce petroleum consumption through fuel efficiencies, alternative fuel vehicles, and transportation strategies. Western leases alternative fuel vehicles and stocks renewable-based fuels at some locations.

**Environmental Management System**

Western’s Environmental Management System (EMS) guides Western’s activities to ensure implementation of environmental requirements and to encourage the achievement of continuous improvement.

In early 2007, Western updated its Environmental Policy to reflect the elements of Executive Order 13423. The goals, objectives, and targets for 2007 were approved for implementation. The Records Management Program Plan was drafted and the Planning and Protection Program Plan was finalized.

Western finished its first Management Review of the EMS in early 2007. The Management Review covered all aspects of the EMS and identified areas for improvement. Western’s senior managers determined the EMS continued to be suitable to Western’s mission, culture, and strategic plan. Items for improvement will be incorporated into 2008 or future performance plans.

Western completed an OMB EMS scorecard questionnaire in late 2007. Agency ratings were based on responses to seven questions. Western’s EMS received a “green” rating with green meaning high, yellow meaning medium, and red meaning low. The first formal cycle of EMS training was completed in early 2007 and another cycle of training will commence in early 2009.

**Self-Assessments or Audits**

Western established an environmental auditing/inspection program in 1980. The major purposes of the auditing program are:

- Discover noncompliance with applicable local, State, and Federal regulations.
- Reduce environmental risks.
- Improve communication with facility staff.
- Improve overall environmental performance.
- Provide assistance and discuss compliance alternatives for problem areas.
- Accelerate development of good environmental management practices.
- Ensure worker safety when working with hazardous materials.
- Provide management with a tool for evaluating the priority of compliance issues.

In 2007, environmental staff conducted 246 facility inspections to ensure facilities conform to Federal, State, and local environmental laws and regulations. Six instances of non-conformance were noted, and corrective actions have been completed or are in process.

### Existing Permits

Western is required to obtain a variety of permits, including those for above-ground and underground storage tanks, PCB transportation and storage, hazardous waste storage, gasoline dispensing, and pollution discharge elimination system permits for point source and storm water discharge. A full list of permits obtained is listed in [Appendix C](#). The table below summarizes the list by type and number.

**Summary of 2007 Permits by Type**

Type of Permit	Number
404 Permit (Clean Water Act)	2
Migratory Bird Treaty Act/Eagle Protection Act	2
Hazardous Waste Transportation	3
Underground Storage Tanks	2
Hazardous Materials	75
Water Quality	1
Air Quality	4
Fuel Dispensing	6
<b>Total</b>	<b>95</b>

### Waste Minimization, Pollution Prevention, and Affirmative Procurement

#### Recycling

In 2007, Western recycled 7595.6 metric tons of waste material, including paper products, scrap metal, oils, batteries, utility poles, transformers, concrete and other materials. SF<sub>6</sub> breakers have replaced oil-filled circuit breakers at several sites. The oil

and metal from these replacements have been recycled. Quantities of hazardous waste and recycled and reused waste were collected and are reported in Western's 2007 Annual Report on Waste Generation and Pollution Prevention Progress in [Appendix D](#).

#### Polychlorinated Biphenyl (PCB) Wastes

Since 1977, Western has reduced the use of PCBs and minimized waste generation through retro-filling equipment and processing to remove PCBs and reusing the oil. Although PCBs have not been completely eliminated, Western continues PCB removal as opportunities are found and budget considerations permit. In 2007, Western disposed of 0.32 metric tons of PCB-contaminated waste. Changes in EPCRA Section 313 regulations, regarding persistent bio-accumulative toxics, have added impetus to this removal.

#### Affirmative Procurement

EO 13101, Greening the Government through Waste Prevention, Recycling and Federal Acquisition, requires Federal agencies to purchase products listed by the EPA that contain post consumer recycled content materials. These affirmative procurement categories include paper products, construction materials, and non-paper office supplies.

An annual report is submitted to DOE for all listed non-GSA purchased products. Government Service Administration (GSA) reports Western's GSA purchases directly. A summary report is included in [Appendix E](#). In fiscal year 2007, Western reported \$2,214,490 in purchases of products containing recovered material content, which represents 87.6 percent of all EPA designated item type purchases.

## Appendix A: Spill Prevention Control and Countermeasure Plans and EPCRA Tier II Reporting for Western in 2007

Facility Name	County	Tier II	SPCC	Revised 2007	New SPCC
<b>Arizona</b>					
Coolidge Substation		Yes			
Gila Substation	Yuma	Yes			
Griffith Substation	Mohave	Yes			
Liberty Substation	Maricopa	Yes			
North Havasu Substation	Mohave	Yes			
Phoenix Operations and Maintenance Facility	Maricopa	Yes			
Pinnacle Peak Substation	Maricopa	Yes			
Test Track Substation	Pinal	Yes			
Tucson Substation	Pima	Yes			
Welton-Mohawk		Yes			
<b>California<sup>1</sup></b>					
Airport Substation	Shasta	HMBP	Yes	Yes	
Arvin Edison Metering Unit	Kern	HMBP			
Banta Carbona Metering Unit	San Joaquin	HMBP			
Bear Springs Microwave Facility	Shasta	HMBP			
Berryessa Peak Microwave Facility	Yolo	HMBP			
Big Valley Microwave Facility	Lassen	HMBP			
Blythe Substation	Riverside	HMBP			
Carr Substation	Shasta	HMBP			
Coleman Fish Hatchery Substation	Shasta	HMBP		Yes	
Corning Microwave Facility	Tehama	HMBP		Yes	
Corning Substation	Tehama	HMBP			
Coyote Substation	Santa Clara	HMBP			
Davis Microwave Facility	Yolo	HMBP			
Elverta Maintenance Facility/Substation	Sacramento	HMBP	Yes		
Folsom Substation	Sacramento	HMBP	Yes	Yes	
Happy Camp Microwave Facility	Modoc	HMBP			
Highland Peak Microwave Facility	Contra Costa	HMBP			
Hooker Creek Microwave Facility	Tehama	HMBP			
Howard Ranch Microwave Facility	Merced	HMBP			

<sup>1</sup> SPCC Plans are included in Hazardous Material Business Plans required by the State of California. Business Plans developed for California meet the EPCRA reporting requirements and separate Tier II reports are not required. Western has 60 facilities in California that submit Business Plans.

Facility Name	County	Tier II	SPCC	Revised 2007	New SPCC
Keswick Substation	Shasta	HMBP	Yes	Yes	
Lawrence Livermore Substation	Alameda	HMBP			
Logan Creek Microwave Facility	Glenn	HMBP			
Manzanita Lake Microwave Facility	Shasta	HMBP			
Maxwell Substation	Colusa	HMBP			
Mount Oso Microwave Facility	Stanislaus	HMBP			
New Melones Substation	Calaveras	HMBP			
O'Banion Substation	Sutter	HMBP			
Olinda Substation	Shasta	HMBP			
O'Neill Pumping Plant	Merced	HMBP			
Pacheco Substation	Merced	HMBP			
Parker Dam Substation	San Bernardino	HMBP	Yes		
Pleasant Valley Substation	Fresno	HMBP			Yes
Pixley Microwave Facility	San Joaquin	HMBP			
Redding Maintenance Facility	Shasta	HMBP	Yes	Yes	
Roseville Substation	Placer	HMBP	Yes		
Round Mountain Microwave Facility	Tehama	HMBP			
Rumsey Microwave Facility	Yolo	HMBP			
Sacramento Power Operations Facility/Substation	Sacramento	HMBP	Yes		
San Luis Gianelli Pumping Plant	Merced	HMBP			
Shasta Substation	Shasta	HMBP			
Sites Microwave Facility	Colusa	HMBP			
Skeggs Point Microwave Facility	San Mateo	HMBP			
Stampede Metering Units	Sierra	HMBP			
Sugarloaf Microwave Facility	Napa	HMBP			
Timber Mountain Microwave Facility	Modoc	HMBP			
Tracy Substation & Maintenance Facility	Alameda	HMBP	Yes	Yes	
Vollmer Peak Microwave Facility	Contra Costa	HMBP			
Whiskeytown Substation	Shasta	HMBP			
Widow Mountain Microwave Facility	Lassen	HMBP			
Wintu Substation	Shasta	HMBP		Yes	
<b>Colorado</b>					
Animas River Substation	LaPlata	Yes	Yes		Yes
Ault Substation	Weld	Yes			
Bald Mountain Microwave	Larimer	Yes			
Bears Ears Substation	Moffat	Yes			
Blue Mesa Substation	Gunnison	Yes	Yes		
Brighton Substation	Weld	Yes			
Brush Maintenance Office and	Morgan	Yes			

Facility Name	County	Tier II	SPCC	Revised 2007	New SPCC
Beaver Creek Substation					
Brush Substation	Morgan	Yes			
Cathedral Bluff Microwave	Rio Blanco	Yes			
Curecanti Substation	Montrose	Yes	Yes		
Deer Peak Microwave	Custer	Yes			
Derby Hill Substation	Larimer	Yes			
Dove Creek Pumping Plant Substation	Dolores	Yes			
Estes Park Substation	Larimer	Yes	Yes		
Flatiron Substation	Larimer	Yes	Yes		
Fleming Substation	Logan	Yes	Yes		
Fort Morgan West Substation	Morgan	Yes			
Frenchman Creek Substation	Phillips	Yes	Yes		
Granby (Farr) Pumping Plant Switchyard	Grand	Yes	Yes		
Granby Substation	Grand	Yes			
Great Cut Pumping Plant Substation	Montezuma	Yes	Yes		
Haxtun Substation	Phillips	Yes			
Hayden Substation	Routt	Yes			
Holyoke Substation	Phillips	Yes			
Hoyt Substation	Morgan	Yes			
Hygiene Substation	Boulder	Yes			
Island Lake Microwave Site	Mesa	Yes			
Julesburg Substation	Sedgwick	Yes			
Kiowa Creek Substation	Morgan	Yes			
Kremmling Substation	Grand	Yes			
Limon Substation	Lincoln	Yes			
Magnetic Mountain Microwave	Rio Blanco	Yes			
Midway Substation	El Paso	Yes			
Montrose Craft Training Center	Montrose	Yes	Yes		
Montrose Maintenance Office	Montrose	Yes	Yes		
Nunn Substation	Weld	Yes			
Pole Hill Substation	Larimer	Yes	Yes		
Poncha Springs Substation	Chaffee	Yes	Yes		
Poudre Substation	Larimer	Yes	Yes		
Prospect Valley Substation	Weld	Yes			
Rifle Substation	Garfield	Yes	Yes		
Rocky Mountain Region - Power Marketing and Operations Center	Larimer	Yes	Yes		
Salida Substation	Chaffee	Yes			
Sheeps Knob Microwave Site	Montrose	Yes			
Sterling Substation	Logan	Yes	Yes		

Facility Name	County	Tier II	SPCC	Revised 2007	New SPCC
Wauneta Substation	Yuma	Yes			
Weld Substation	Weld	Yes	Yes		
Wiggins Substation	Morgan	Yes			
Willow Creek Pumping Plant Switchyard	Grand	Yes	Yes		
Woodrow Substation	Washington	Yes			
Wray Substation	Yuma	Yes			
Yuma Substation	Yuma	Yes			
<b>Iowa</b>					
Creston Substation	Union	Yes	Yes	Yes	
Dennison Substation	Crawford	Yes	Yes	Yes	
Sioux City (230-kV yard) Substation	Plymouth	Yes	Yes	Yes	
Sioux City (345-kV yard) Substation	Plymouth	Yes	Yes	Yes	
Spencer Substation	Clay	Yes	Yes	Yes	
<b>Minnesota</b>					
Granite Falls Substation	Chippewa	Yes	Yes	Yes	
Morris Substation	Stevens	Yes	Yes	Yes	
<b>Montana</b>					
Bole Substation	Teton	Yes	Yes		
Circle Substation	McCone	Yes	Yes		
Conrad Substation	Ponder	Yes	Yes		
Crossover Substation	Big Horn	Yes	Yes		
Custer Substation	Yellowstone	Yes	Yes		
Dawson County Substation	Dawson	Yes	Yes	Yes	
Fallon Pump	Prairie		Yes		
Fallon Relift	Prairie		Yes		
Frazer Substation	Valley		Yes		
Glendive Substation	Dawson	Yes	Yes		
Glendive Pump 1	Prairie		Yes		
Glendive Pump 2	Prairie	Yes	Yes		
Havre Substation	Hill	Yes	Yes		
Miles City 1 Substation	Custer	Yes	Yes		
Miles City 2 Substation	Custer	Yes	Yes		
Miles City 4 Substation (Miles City Converter)	Custer	Yes	Yes		
O'Fallon Creek Substation	Prairie	Yes	Yes		
Rainbow Substation	Cascade	Yes	Yes		
Richland Substation	Richland	Yes	Yes		
Rudyard Substation	Hill	Yes	Yes	Yes	
Savage Pump	Richland		Yes		
Savage Substation	Richland		Yes		
Shelby Substation	Toole	Yes	Yes		

Facility Name	County	Tier II	SPCC	Revised 2007	New SPCC
Shelby Substation #2	Toole	Yes	Yes		
Shirley Substation	Custer	Yes	Yes		
Terry Pump	Prairie		Yes		
Terry Tap	Prairie		Yes		
Tiber Dam Substation	Liberty	Yes	Yes	Yes	
Valley Pump Substation	Valley		Yes		
Whatley Substation	Valley	Yes	Yes		
Wolf Point Substation	Roosevelt	Yes	Yes		
Yellowtail Substation	Big Horn	Yes	Yes		
<b>Nebraska</b>					
Alliance Substation	Box Butte	Yes			
Bridgeport Substation	Morrill	Yes	Yes		
Chadron Substation	Dawes	Yes			
Chappell Substation	Deuel	Yes			
Dunlap Substation	Dawes	Yes			
Gering Substation and Maintenance Facility	Scotts Bluff	Yes	Yes	Yes	
Grand Island Substation	Merrick	Yes	Yes	Yes	
Kimball Substation	Kimball	Yes			
Ogallala Substation	Keith	Yes			
Sidney Substation	Cheyenne	Yes			
Stegall Substation	Scotts Bluff	Yes			
Virginia Smith Converter Station	Cheyenne	Yes			
<b>New Mexico</b>					
Shiprock Substation	San Juan	Yes			
Waterflow Substation	San Juan	Yes	Yes		
<b>Nevada</b>					
Mead Substation	Clark	Yes			
<b>North Dakota</b>					
Belfield Substation	Stark	Yes	Yes		
Bisbee Substation	Towner	Yes	Yes		
Bismarck Substation	Burleigh	Yes	Yes		
Buford-Trenton Substation	Williams	Yes	Yes		
Carrington Substation	Foster	Yes	Yes		
Custer Trail Substation	Morton	Yes	Yes		
Denbigh Tap	McHenry	Yes			
DeVaul Substation	Grant	Yes	Yes		
Devil's Lake Substation	Ramsey	Yes	Yes		
Edgeley Substation	LaMoure	Yes	Yes		
Fargo Substation	Cass	Yes	Yes		
Foreman Substation	Sargent	Yes	Yes		
Hilken Switching Station	Burleigh	Yes			

Facility Name	County	Tier II	SPCC	Revised 2007	New SPCC
Killdeer Substation	Dunn	Yes	Yes		
Jamestown Substation	Stutsman	Yes	Yes		
Lakota Substation	Nelson	Yes	Yes		
Leeds Substation	Benson	Yes	Yes		
Penn Tap	Ramsey	Yes			
Rolla Substation	Rolette	Yes	Yes		
Rugby Substation	Pierce	Yes	Yes		
Snake Creek Substation	McLean	Yes	Yes		
Valley City Substation	Barnes	Yes	Yes		
Ward Substation	Ward	Yes			
Washburn Substation	McLean	Yes	Yes		
Watford Substation	McKenzie	Yes	Yes		
Williston Substation	Williams	Yes	Yes	Yes	
<b>South Dakota</b>					
Armour Substation	Charles-Mix	Yes	Yes	Yes	
Beresford Substation	Union	Yes	Yes	Yes	
Bonesteel Substation	Gregory	Yes	Yes	Yes	
Brookings Substation	Brookings	Yes	Yes	Yes	
Eagle Butte Substation	Ziebach	Yes	Yes	Yes	
Ellsworth Air Force Base Substation	Rapid City	Yes	Yes	Yes	
Faith Substation	Meade	Yes	Yes	Yes	
Flandreau Substation	Moody	Yes	Yes	Yes	
Fort Thompson Substation	Buffalo	Yes	Yes	Yes	
Gregory Substation	Gregory	Yes	Yes	Yes	
Groton Substation	Brown	Yes	Yes	Yes	
Huron Substation	Beadle	Yes	Yes	Yes	
Irv Simmons Substation	Stanley		Yes	Yes	
Martin Substation	Bennett	Yes	Yes	Yes	
Maurine Substation	Meade	Yes	Yes	Yes	
Midland Substation	Haakon	Yes	Yes	Yes	
Mission Substation	Todd	Yes	Yes	Yes	
Mount Vernon Substation	Davison	Yes	Yes	Yes	
Newell Substation	Meade	Yes	Yes	Yes	
New Underwood Substation	Pennington	Yes	Yes	Yes	
Philip Substation	Haakon	Yes	Yes	Yes	
Pierre Substation	Hughes	Yes	Yes	Yes	
Rapid City Substation	Pennington	Yes	Yes	Yes	
Sioux Falls Substation	Minnehaha	Yes	Yes	Yes	
Summit Substation	Roberts	Yes	Yes	Yes	
Tyndall Substation	Bon Homme	Yes	Yes	Yes	
Wall Substation	Pennington	Yes	Yes	Yes	
Watertown 345-kV Yard	Codington	Yes	Yes	Yes	

Facility Name	County	Tier II	SPCC	Revised 2007	New SPCC
Watertown Substation 115/230-kV	Codington	Yes	Yes	Yes	
Watertown Substation (Static Variance)	Codington	Yes	Yes	Yes	
White Substation	Brookings	Yes	Yes	Yes	
Wicksville Substation	Pennington	Yes	Yes	Yes	
Winner Substation	Tripp	Yes	Yes	Yes	
Witten Substation	Tripp	Yes	Yes	Yes	
Woonsocket Substation	Jerauld	Yes	Yes	Yes	
<b>Utah</b>					
Cliff Ridge Microwave	Uintah	Yes			
Flaming Gorge Switchyard	Daggett	Yes	Yes		
Tyzack Substation	Uintah	Yes	Yes		
Vernal Substation	Uintah	Yes	Yes		
<b>Wyoming</b>					
Alcova Switchyard	Natrona	Yes	Yes		
Archer Substation	Laramie	Yes			
Badwater Substation	Fremont	Yes	Yes		
Basin Substation	Big Horn	Yes			
Big George Substation	Park	Yes			
Boysen Substation	Fremont	Yes			
Casper Field Office	Natrona	Yes			
Casper Mountain Microwave Site	Natrona	Yes			
Casper Substation	Natrona	Yes	Yes		
Cheyenne Substation	Laramie	Yes			
Copper Mountain Substation	Fremont	Yes	Yes		
Garland Substation	Park	Yes			
Glendale Substation	Park	Yes	Yes		
Glendo Substation	Platte	Yes	Yes		
Heart Mountain Substation	Park	Yes	Yes		
Limestone Substation	Platte	Yes	Yes		
Lingle Substation	Goshen	Yes	Yes		
Lovell Substation	Big Horn	Yes			
Lusk Rural Substation	Niobrara	Yes			
Lusk Town Substation	Niobrara	Yes	Yes		
Lyman Substation	Goshen	Yes			
McCullough peak Microwave Site	Park	Yes			
Medicine Bow Substation	Carbon	Yes			
Meeteetse Substation	Park	Yes			
Miracle Mile Substation	Carbon	Yes			
Muddy Ridge Substation	Fremont	Yes			
North Cody Substation	Park	Yes			
Pilot Butte Substation	Fremont	Yes	Yes		

Facility Name	County	Tier II	SPCC	Revised 2007	New SPCC
Pinebluffs Substation	Laramie	Yes			
Raderville Substation	Natrona	Yes			
Ralston Substation	Park	Yes			
Snowy Range Substation	Laramie	Yes			
Spence Substation	Natrona	Yes			
Thermopolis Substation	Hot Springs	Yes			
Torrington Substation	Goshen	Yes			
Warren Air Force Substation	Laramie	Yes			
Whiterock Substation	Platte	Yes			
<b>TOTAL</b>		<b>257</b>	<b>142</b>	<b>56</b>	<b>2</b>

## Appendix B: 2007 SF<sub>6</sub> Emissions Report to the Environmental Protection Agency

### WESTERN AREA POWER ADMINISTRATION SF<sub>6</sub> EMISSIONS REPORT TO UNITED STATES ENVIRONMENTAL PROTECTION AGENCY FOR CY 2007

March 31, 2008

#### INTRODUCTION:

In 2007, Western Area Power Administration (Western) has continued to make progress in their SF<sub>6</sub> emission reduction program. Three of Western's four regions are tracking emissions, and by next year, all of Western's regions will be reporting and tracking emissions. Western is committed to reducing emissions to protect the environment and to provide top service to our customers through minimization of electrical outages.

#### SUMMARY OF SF<sub>6</sub> EMISSIONS

Western in 2007: For the three regions reporting for Western Area Power Administration, the total emissions were 1,712 pounds. The total nameplate capacity is 136,972 pounds. The leakage rate is 1,712/136,972 or 1.2 % (See attached EPA protocol spreadsheet).

Western has reduced its SF<sub>6</sub> emissions by 36 percent since 2006, and by 52 percent since 2005. This can be attributed to better maintenance and handling practices as well as updating and replacement of existing SF<sub>6</sub> filled electrical equipment.

#### NEW CALIFORNIA REPORTING REQUIREMENTS

SB 32 or otherwise called the "California Global Warming Solutions Act of 2008," requires the mandatory reporting of Greenhouse gases (GHG) from specific industry sectors to the California Air Resources Board (CARB) annually. SB 32 requires that electric generating facilities, retail providers, and marketers report SF<sub>6</sub> changes in inventory, purchases/acquisitions, sales/disbursements, changes in total nameplate capacity of equipment, and total annual emissions.

The updated Western Pollution Prevention (P2) plan requires that Western participate in environmental partnership programs such as the Environmental Protection Agency (EPA) SF<sub>6</sub> emissions reduction program and EPRI research programs to meet SF<sub>6</sub> emission reduction goals. The plan also requires that Western's Sierra Nevada Region (SNR) submit a SF<sub>6</sub> annual report to Western's Corporate Services Office (CSO) summarizing the actions taken during the year to ensure containment of SF<sub>6</sub> in Western's electrical equipment. The emissions report will then be sent to CARB from SNR and to the EPA through Western's CSO. Tracking for this effort started January 1, 2008, by Western's SNR.



## Appendix C: List of 2007 Permits

NAME	ISSUING AGENCY	STATUS	EXPIRATION DATE
<b>404 Permit (Clean Water Act)</b>			
Mead-Davis	Nevada Division of Environmental Protection, USACOE	Open	Annually
Trinity PUD	USACOE	Open	Annually
<b>Migratory Bird Treaty Act/Eagle Protection Act</b>			
Removal of bird nests (Arizona)	USFWS	Ongoing	Open
Removal of bird nests (California)	USFWS	Ongoing	Open
<b>Hazardous Waste</b>			
Hazardous Waste Hauler Registration	California Department of Toxic Substances Control	Renewed	Open
Hazardous Waste Hauling Permit	Minnesota Pollution Control Agency	Ongoing	Annually
Hazardous Waste Transporter Permit	North Dakota Department of Health	Ongoing	Annually
<b>Permit to Operate</b>			
Underground Storage Tank (2 total)	Arizona Department of Environmental Quality	Ongoing	Annually
Diesel Tank for Backup Generator	Colorado State Inspector of Oil	Ongoing	Annually
<b>Hazardous Materials Permit</b>			
Hazardous Materials Business Plans (separate permits for 49 facilities)	Various Counties: Alameda (2), Calaveras (1), Colusa (2), Contra Costa (2), Fresno (1), Glenn (1), Kern (1), Lassen (2), Merced (4), Modoc (2), Napa (1), Placer (1), \Sacramento (3), San Bernardino (1), San Joaquin (2), San Mateo (1), Santa Clara (1), Shasta (11), Sierra (1), Stanislaus (1), Sutter (1), Tehama (4), Yolo (3)	Ongoing	Annually

<b>NAME</b>	<b>ISSUING AGENCY</b>	<b>STATUS</b>	<b>EXPIRATION DATE</b>
Hazardous Waste Generation Permit (separate permits for 21 facilities)	Arizona State Department of Environmental Quality	Ongoing	Annually
HazMat Storage Permit	Nevada State Fire Marshall	Ongoing	Annually
Blythe Substation HazMat Handler's Permit	Riverside County Department of Environmental Health	Ongoing	Annually
Parker Dam Substation HazMat Management Permit	San Bernardino County Fire Department	Ongoing	Annually
Amargosa Substation Waste Management Permit	Clark County Health District	Ongoing	Annually
Henderson Substation Waste Management Permit	Clark County Health District	Ongoing	Annually
<b><i>Water Quality</i></b>			
Septic Tank Permit	Nevada Bureau of Water Pollution Control	Ongoing	Annual
<b><i>Clean Air Permits</i></b>			
Facility Permit – Sacramento Power Operations Facility	Sacramento Metropolitan Air Quality Management District, California	Ongoing	Annually
Air Quality Permit – Logan Creek Microwave Facility	Glenn County Air Pollution Control District, California	Ongoing	Annually
Air Quality Permit – O'Banion Substation	Feather River Air Quality Management District, California	Ongoing	Annually
Air Quality Permit – Phoenix	Maricopa County, Arizona	Ongoing	Annually
<b><i>Diesel Dispensing</i></b>			
Facility Permit – Tracy Substation	Bay Area Air Quality Management District	Ongoing	Annually
Facility Permit – Redding Maintenance Facility	Shasta County Air Quality Management District	Ongoing	Annually
Facility Permit – Elverta Maintenance Facility	Sacramento Metropolitan Air Quality Management District	Ongoing	Annually

<b>NAME</b>	<b>ISSUING AGENCY</b>	<b>STATUS</b>	<b>EXPIRATION DATE</b>
<b><i>Gasoline Dispensing</i></b>			
Facility Permit – Tracy Maintenance Facility	Bay Area Air Quality Management District	Ongoing	Annually
Facility Permit – Redding Maintenance Facility	Shasta County Air Quality Management District	Ongoing	Annually
Facility Permit – Elverta Maintenance Facility	Sacramento Metropolitan Air Quality Management District	Ongoing	Annually

## Appendix D: 2007 Pollution Prevention and Waste Minimization Report

### Recycling Data Report (by site) for 2007 Year

Displaying Sites: Western Area Power Administration

#### Western Area Power Administration for 2007

Approved By: josh  
 Date Approved: 12/28/2007

Recycle Category	Quantity in metric tons (mt)
<b>Paper Products:</b>	
Office and Mixed Paper	68.03 mt
Corrugated cardboard	36.76 mt
Phone Books	2.22 mt
Newspapers/Magazines	3.74 mt
<b>Scrap Metals:</b>	
Stainless steel	0 mt
Copper	588.47 mt
Iron/Steel	432.82 mt
Aluminum	62 mt
Aluminum Cans	0.67 mt
Lead	3.87 mt
Zinc	0 mt
Other: (see discussion)	0 mt

below)	
<b>Precious metals:</b>	
Silver	0 mt
Gold	0 mt
Platinum	0 mt
Other: (see discussion below)	0 mt
<b>Other Items:</b>	
Antifreeze	1.27 mt
Engine oils	8.62 mt
Toner cartridges	2.23 mt
Batteries	34.74 mt
Tires	3.2 mt
Food waste	0 mt
Concrete/Asphalt	640.37 mt
Fluorescent Bulbs	1.98 mt
Ballasts	2.4 mt
Glass	0 mt
Plastic	0.12 mt
Styrofoam	0 mt
Transformers	161.46 mt
Wood (chips, compost)	0 mt
*Other: (see discussion below)	4170.1 mt
*Explanation for other amounts:	
Woodpoles and crossarms 3940.29, Mineral Oil Dielectric Fluid 202.64, Capacitors 6.1, Porcelain/ceramic 17.6, Freon 0.01, Paint 0.17, Soil (landfarmed) 3.18, solvent 0.11	
<b>Sanitary Waste</b>	
Routine	1375.5 mt
Cleanup/Stabilization	0 mt

<b>Electronics Recycling:</b>				
	<b>Desktop Computers # of units</b>	<b>CRT Monitors # of units</b>	<b>LCD Monitors # of units</b>	<b>Laptop Computers # of units</b>
Transfer or Donate for Reuse:	106	0	31	30
Sent for Recycling:	35	74	0	8
Sent for Disposal (e.g., Waste-to-Energy, Landfill Facilities):	0	0	0	0

<b>Electronics Recycling:</b>	
Transfer or Donate for Reuse:	11 mt
Sent for Recycling:	0 mt
Sent for Disposal:	0 mt

### Recycling Questions

- How many offices/sites was your organization responsible for operating in FY 2006 ? 41
- How many of these offices/sites had an active office products recycling program in FY 2006? 20
- How many residential housing units did your organization/site operate in FY 2006? 0
- How many of these residential housing units had an active household products recycling program in FY 2006? 0
- How many demolition projects were managed by and/or contracted by your organization in FY 2006? 2
- How many of these demolition projects included the recovery of construction materials in FY 2006? 2

### Solid Waste Prevention Questions

Report solid waste prevention efforts for the facilities for which your organization is responsible.

Did you institute new solid waste prevention practices in FY 2006? Yes

Explanation: 1) The Folsom Office (Sierra Nevada Region) now sends copper scraps to Elverta for eventual recycling. This effort was initiated by Jeff Black, a C&I Technician in Don Clifton's group. 2) The Folsom Office started separating recyclables from the regular trash by providing

recycling buckets for plastics and aluminum. This effort was initiated by Scotty Brown, the Facility Manager in coordination with the City of Folsom to separate the recyclables before they get to their facility.

## Waste Generation Data Report for 2007 Year

### Western Area Power Administration for 2007 /PSO: PM

**Approved By:**       joshs  
**Date Approved:**    12/28/2007

Waste Type	Routine Waste	Cleanup/Stabilization Waste	Total Waste
High Level Waste	0 m3	0 m3	0 m3
Transuranic Waste	0 m3	0 m3	0 m3
Mixed Transuranic Waste	0 m3	0 m3	0 m3
Low Level Waste	0 m3	0 m3	0 m3
Mixed Low Level Waste	0 m3	0 m3	0 m3
RCRA Waste	0.9 mt	0 mt	0.9 mt
State Regulated Waste	6.05 mt	0 mt	6.05 mt
TSCA Waste	0.315 mt	0 mt	0.315 mt
Mixed TSCA Waste	0 mt	0 mt	0 mt

Explanation of 20% differences				
PSO	Waste Type	Explanation	2006	2007
PM	RRCRA	RCRA waste has been reduced to a very low level at Western. The changes from year to year will always vary somewhat due to work area cleanouts and other variables involving routine maintenance.	1.21	0.9
PM	RSTATE	Our regional office in California reports certain PCB waste as State regulated. This number will always be variable dependent upon the number of projects and maintenance activities for a given year. PCBs are routinely removed from our facilities as part of a systematic program to eventually remove all PCBs.	14.31	6.05
PM	RTSCA	This number will always be variable dependent upon the	11.66	0.32

	number of projects and maintenance activities for a given year. PCBs are routinely removed from our facilities as part of a systematic program to eventually remove all PCBs.		
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## Appendix E: 2007 Affirmative Procurement Report

### Power Administration-Western Area FY 2007 Data

Product Category Item	*Total Purchases	*Total Purchases with Recovered Content	*% with Recovered Content	*Adjusted Total	*Adjusted %
<b>Construction</b>	<b>\$1,861,646</b>	<b>\$1,840,333</b>	<b>n.a.%</b>	<b>\$1,861,646</b>	<b>n.a.%</b>
Building Insulation Products	\$0	\$0	n.a.%	\$0	n.a.%
Carpet	\$6,652	\$6,361	95.6%	\$6,652	100.0%
Carpet Cushion	\$0	\$0	n.a.%	\$0	n.a.%
Cement and Concrete	\$1,853,711	\$1,833,874	98.9%	\$1,853,711	100.0%
Consolidated and Reprocessed Latex Paint	\$544	\$0	0.0%	\$544	100.0%
Floor Tiles	\$641	\$0	0.0%	\$641	100.0%
Flowable Fill	\$0	\$0	n.a.%	\$0	n.a.%
Laminated Paperboard	\$0	\$0	n.a.%	\$0	n.a.%
Modular Threshold Ramps	\$0	\$0	n.a.%	\$0	n.a.%
Nonpressure Pipe	\$98	\$98	100.0%	\$98	100.0%
Patio Blocks	\$0	\$0	n.a.%	\$0	n.a.%
Railroad Grade Crossing Surfaces	\$0	\$0	n.a.%	\$0	n.a.%
Roofing Materials	\$0	\$0	n.a.%	\$0	n.a.%
Shower and Restroom Dividers/Partitions	\$0	\$0	n.a.%	\$0	n.a.%
Structural Fiberboard	\$0	\$0	n.a.%	\$0	n.a.%
<b>Landscaping</b>	<b>\$227</b>	<b>\$66</b>	<b>29.1%</b>	<b>\$227</b>	<b>100.0%</b>
Compost	\$0	\$0	n.a.%	\$0	n.a.%
Garden and soaker hoses	\$199	\$38	19.1%	\$199	100.0%
Hydraulic Mulch	\$0	\$0	n.a.%	\$0	n.a.%

Landscaping Timbers	\$0	\$0	n.a.%	\$0	n.a.%
Lawn and Garden Edging	\$28	\$28	100.0%	\$28	100.0%
<b>Non-Paper Office</b>	<b>\$345,510</b>	<b>\$198,297</b>	<b>57.4%</b>	<b>\$345,510</b>	<b>100.0%</b>
Binders	\$14,242	\$10,745	75.4%	\$14,242	100.0%
Office Furniture	\$65,472	\$53,695	82.0%	\$65,472	100.0%
Office Recycling Containers	\$589	\$589	100.0%	\$589	100.0%
Office Waste Receptacles	\$606	\$288	47.5%	\$606	100.0%
Plastic Clip Portfolios	\$0	\$0	n.a.%	\$0	n.a.%
Plastic Clipboards	\$0	\$0	n.a.%	\$0	n.a.%
Plastic Desktop Accessories	\$353	\$353	100.0%	\$353	100.0%
Plastic Envelopes	\$25	\$0	0.0%	\$25	100.0%
Plastic File Folders	\$0	\$0	n.a.%	\$0	n.a.%
Plastic Presentation Folders	\$0	\$0	n.a.%	\$0	n.a.%
Plastic Trash Bags	\$11,253	\$8,774	78.0%	\$11,253	100.0%
Printer Ribbons	\$2,892	\$1,942	67.2%	\$2,892	100.0%
Solid Plastic Binders	\$0	\$0	n.a.%	\$0	n.a.%
Toner Cartridges	\$250,077	\$121,910	48.7%	\$250,077	100.0%
<b>Paper and Paper Products</b>	<b>\$161,882</b>	<b>\$130,491</b>	<b>80.6%</b>	<b>\$161,882</b>	<b>100.0%</b>
Bristols	\$5,795	\$4,026	69.5%	\$5,795	100.0%
Coated Printing Papers	\$149	\$0	0.0%	\$149	100.0%
Commercial/Industrial Sanitary Tissue	\$19,845	\$13,441	67.7%	\$19,845	100.0%
Miscellaneous Paper Products (Tray Liners)	\$12,453	\$8,131	65.3%	\$12,453	100.0%
Newsprint	\$14,471	\$10,658	73.7%	\$14,471	100.0%
Paperboard and Packaging Products	\$2,355	\$1,170	49.7%	\$2,355	100.0%
Uncoated Printing and Writing Papers	\$106,814	\$93,065	87.1%	\$106,814	100.0%
<b>Park and Recreation</b>	<b>\$3,342</b>	<b>\$1,917</b>	<b>57.4%</b>	<b>\$3,342</b>	<b>100.0%</b>
Park Benches and Picnic Tables Containing Recovered Aluminum, Steel, Concrete, or Plastic	\$1,878	\$1,878	100.0%	\$1,878	100.0%
Plastic Fencing	\$39	\$39	100.0%	\$39	100.0%
Playground Equipment Containing Recovered Plastic, Steel, or Aluminum	\$1,425	\$0	0.0%	\$1,425	100.0%

Playground Surfaces	\$0	\$0	n.a.%	\$0	n.a.%
Running Track	\$0	\$0	n.a.%	\$0	n.a.%
<b>Transportation</b>	<b>\$0</b>	<b>\$0</b>	<b>n.a.%</b>	<b>\$0</b>	<b>n.a.%</b>
Channelizers	\$0	\$0	n.a.%	\$0	n.a.%
Delineators	\$0	\$0	n.a.%	\$0	n.a.%
Flexible Delineators	\$0	\$0	n.a.%	\$0	n.a.%
Parking Stops	\$0	\$0	n.a.%	\$0	n.a.%
Traffic Barriers	\$0	\$0	n.a.%	\$0	n.a.%
Traffic Cones	\$0	\$0	n.a.%	\$0	n.a.%
<b>Vehicular</b>	<b>\$86,258</b>	<b>\$5,804</b>	<b>6.7%</b>	<b>\$86,258</b>	<b>100.0%</b>
Re-refined Lubricating Oil	\$13,515	\$5,787	42.8%	\$13,515	100.0%
Rebuilt Vehicular Parts	\$5,843	\$0	0.0%	\$5,843	100.0%
Reclaimed Engine Coolants	\$1,702	\$17	1.0%	\$1,702	100.0%
Retread Tires	\$65,199	\$0	0.0%	\$65,199	100.0%
<b>Miscellaneous</b>	<b>\$68,220</b>	<b>\$37,583</b>	<b>55.1%</b>	<b>\$68,220</b>	<b>100.0%</b>
Awards and Plaques	\$30,158	\$28,265	93.7%	\$30,158	100.0%
Bike Racks	\$435	\$0	0.0%	\$435	100.0%
Blasting Grit	\$65	\$0	0.0%	\$65	100.0%
Industrial Drums	\$1,801	\$1,801	100.0%	\$1,801	100.0%
Manual-Grade Strapping	\$538	\$327	60.8%	\$538	100.0%
Mats	\$16,074	\$0	0.0%	\$16,074	100.0%
Pallets	\$0	\$0	n.a.%	\$0	n.a.%
Signages	\$17,492	\$7,189	41.1%	\$17,492	100.0%
Sorbents	\$1,657	\$0	0.0%	\$1,657	100.0%
<b>TOTALS:</b>	<b>\$2,527,085</b>	<b>\$2,214,491</b>	<b>87.6%</b>	<b>\$2,527,085</b>	<b>100.0%</b>

\* Explanations for % with Recovered Content, Adjusted Total, and Adjusted %

**% with Recovered Content** = (Total purchases with recovered content/Total of all purchases)

**Adjusted total** = (Total purchases)-(Nonconform number)

**Adjusted %** = (Adjusted total) / (Total purchases)