

SOUTHWESTERN POWER ADMINISTRATION

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ANNUAL SITE ENVIRONMENTAL REPORT CY 1997

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**SOUTHWESTERN POWER ADMINISTRATION
SITE ENVIRONMENTAL REPORT
FOR CALENDAR YEAR 1997**

**TULSA, OKLAHOMA
WILLIAMS CENTER TOWER I
JANUARY 1, 1997 - DECEMBER 31, 1997**

**SOUTHWESTERN POWER ADMINISTRATION
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EXECUTIVE SUMMARY

This report provides a synopsis of Southwestern Power Administration's (Southwestern's) effectiveness in managing its operations in an environmentally responsible manner. In CY 1997, the Office of Environmental, Safety, and Health was reorganized and incorporated into the Division of Acquisition and Property. The Division of Acquisition, Property, and Environmental Management maintains responsibility for development, oversight, and implementation of environmental programs. Senior Management at Southwestern has taken actions to increase environmental awareness throughout the organization. During CY 1997, (Southwestern) was not involved in any known programs or activities that had adverse impacts on the environment. The 1997 Environmental Appraisal, a portion of Southwestern's Self-Assessment and Appraisal Program, indicated approximately 90 % compliance with Southwestern's written environmental programs. Southwestern continued to function throughout CY 1997 in an operations and maintenance posture with minor substation projects.

INTRODUCTION

The Southwestern Power Administration (Southwestern) is a Power Marketing Agency of the DOE created in 1943. Southwestern markets hydroelectric power and energy produced by 24 Federal dams operated by the U.S. Army Corps of Engineers in Oklahoma, Arkansas, Missouri, and Texas. Marketing hydroelectric power and energy, and ensuring its reliable delivery constitute the core of Southwestern's program. Southwestern maintains 1,380 miles of high-voltage transmission lines and associated substations. Support for operation and maintenance of this system is provided by an area-wide microwave communications system. Southwestern's communication system interfaces with the U. S. Army Corps of Engineers microwave system. The communications system includes telemetering, supervisory control and data acquisition (SCADA), mobile radio base station control, computer data transmission, and telephone communications. Southwestern's facilities and the Corps of Engineers generating facilities make up the Southwestern Federal Power System. Southwestern is headquartered in Tulsa, Oklahoma, with engineering and maintenance facilities located in Springfield, Missouri; Jonesboro, Arkansas; Gore and Tupelo, Oklahoma. The administrative offices in Tulsa provide a complete range of support functions including legal, financial, procurement, automatic data processing, engineering, and power marketing. Southwestern's legislative mandate is Section 5 of the Flood Control Act of 1944. This law requires Southwestern to give preference in sales to public bodies and Cooperatives, and to achieve widespread use of the power.

COMPLIANCE STATUS

Southwestern conducted its operations and maintenance activities during the calendar year with few environmental impacts or issues. The most prominent environmental issues that impacted Southwestern during CY 1997 included PCB and asbestos regulatory compliance.

The following major environmental statutes and Executive Orders impacting Southwestern are discussed below:

-- **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 EPA to respond to and remedy polluted sites. Southwestern has been identified as a potentially responsible party (PRP) at three sites in the Kansas City, Kansas/Kansas City, Missouri area. These sites have been contaminated in varying degrees with PCBs. Southwestern could qualify as a de minimis quantity generator because of the small amounts of waste that were transferred through the sites. Legal correspondence for Southwestern and other Federal Agencies continues to be handled by the Department of Justice.

-- **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.

-- **Executive Order 12856, "Federal Compliance with Right-to-Know Laws and Pollution Prevention requirements", SARA Title III, Emergency Reporting and Community Right-to-Know Act (EPCRA)**

The following Summary compliance information is provided as requested:

EPCRA 302-303: Planning Notification	Yes [] No [] Not Required [x]
EPCRA 304: EHS Release Notification	Yes [] No [] Not Required [x]
EPCRA 311-312: MSDS/Chemical Inventory	Yes [] No [] Not Required [x]
EPCRA 313: TRI Reporting	Yes [] No [] Not Required [x]

Sections 302-303: These Sections are intended to ensure State and Local communities are prepared to respond to potential chemical accidents. Southwestern does not store or use extremely hazardous substances (EHS) in amounts equal to or exceeding threshold planning quantities (TPQ). Therefore, Southwestern is exempt from EPCRA emergency planning requirements.

Section 304: This Section designates criteria under which facilities must report the release of certain substance to the environment. The reportable quantity (RQ) for each of the substances listed in either: a) list of extremely hazardous substances; or b) list of CERCLA hazardous substances. Since Southwestern did not release any of the substances in amounts exceeding the RQ, Southwestern is exempt from reporting to any SEPCs and LEPCs.

Sections 311-312: These Sections are designed to provide the public with information on hazardous chemicals in their communities by establishing certain reporting requirements. These requirements promote community awareness and facilitate emergency planning. However, Southwestern is exempt from these reporting requirements because during CY 1997 it did not have onsite for any one day: a) 10,000 lbs of hazardous chemicals; or b) the lesser of 500lbs or the TPQ for extremely hazardous substances. Therefore, Southwestern is exempt from MSDS, Tier I, and Tier II reporting requirements. Southwestern has however contacted local fire departments and provided courtesy information on Southwestern's operations, as dictated by its Community Right-to-Know Program.

Section 313: This Section is intended to inform public and government officials about routine releases of toxic chemicals to the environment. Southwestern is exempt from submitting a Toxic Chemical Release Inventory Form (Form R) to the EPA and designated State officials because it: a) it did not manufacture more than 25,000 lbs in CY 1997 of a listed toxic chemical; or b) process more than 25,000 lbs in CY 1997 of a listed toxic chemical; or c) otherwise use more than 10,000 lbs in CY 1997 of a listed toxic chemical.

-- 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, 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 (40 CFR 261) and waste that exhibit certain 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.

Southwestern has developed Waste Management, Waste Minimization, and Pollution Prevention Programs to help ensure compliance with RCRA and HSWA regulations. These programs were established and implemented to minimize the volume and toxicity of wastes; monitor the collection, transportation, processing and disposal of solid wastes; encourage recycling; assure the safety, health, and welfare of the public; and prevent pollution of the air, land, and water. Southwestern's Self-Assessment and Appraisal Program, indicated approximately 90 % compliance with its written environmental

programs. Southwestern continues to improve its identification, characterization, quantification, and documentation of RCRA waste streams. During CY 1997, Southwestern has continued the process of re-evaluating its temporary storage facilities to help ensure appropriate management of its wastes and protection of human health and the environment.

-- 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.

Southwestern continued its efforts to maintain compliance with RCRA and FFCA during CY 1997.

-- National Environmental Policy Act (NEPA)

NEPA requires that all Federal agencies, or agencies spending Federal monies, to consider the potential environmental effects of proposed actions during a proposed actions planning stages. Agencies must prepare documentation regarding these considerations; and provide recommendations for Federal actions that may significantly effect the environment. NEPA documentation includes categorical exclusions, environmental assessments, and environmental impact statements.

Southwestern maintained compliance with NEPA requirements. No NEPA documentation was required during CY 1997.

-- Clean Air Act (CAA)

The Clean Air Act 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) which 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.

Southwestern has facilities in three states: Missouri, Arkansas, and Oklahoma. In all states, the air pollution control regulations and individual pollutant levels apply to each

facility separately, not to Southwestern operations as a whole. None of Southwestern's facilities are located in non-attainment areas. Southwestern does not have any radioactive sources used for its DOE operations; therefore, does not perform any radiation dose limit or radio nuclide monitoring. Based on the regulations and possible emission sources, Southwestern has determined after reviewing applicable regulations and SIPs that its facilities are not required to permit, monitor, or report air emissions.

-- **National Emission Standards for Hazardous Air Pollutants (NESHAPs)**

Pursuant to the Clean Air Act, the EPA established National Emission Standards for Hazardous Air Pollutants (NESHAPs). Southwestern has determined that its facilities are not required to report or permit air emissions based on a review of applicable regulations and potential emissions sources.

Southwestern's compliance with potential asbestos fiber release is governed by its Asbestos Management Program. Southwestern's asbestos program is in agreement with both EPA and OSHA asbestos regulations. The asbestos program requires that exposure assessments, including personal and area air monitoring, be conducted for all OSHA Class III and IV work activities performed by trained maintenance personnel, unless Southwestern can provide evidence that a work activity would have fiber releases below the permissible exposure limit of 0.1 fibers/cubic centimeter. Records of exposure assessments are retained by the Area Office Administrative Officers.

-- **Clean Water Act (CWA)/Safe Drinking Water Act (SDWA)**

The CWA regulates the discharge of pollutants into waters of the U.S. 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 U.S. ; protects waters of the U.S.; 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 stormwater from certain point sources.

The SDWA requires EPA to establish primary drinking water regulations for any contaminants that may have an adverse effect on public health. As a result, EPA developed primary drinking water maximum contaminant levels (MCLs) and secondary MCLs.

During CY 1997, Southwestern maintained compliance with both the SDWA and CWA. Southwestern maintains a Spill Prevention, Control, and Countermeasures (SPCC) plan for oil transportation activities and at each of its electrical substations. Southwestern is not regulated by Federal storm water regulations, as discussed below. Southwestern utilizes city water at its manned facilities. At six unmanned sites, there are five non-potable wells and one potable well; these are tested by the appropriate state.

Southwestern has closed two of these wells and continues to consider the need for the remaining wells. Southwestern has determined that a full-scale groundwater monitoring program is not required. However, Southwestern will continue to identify existing and potential sources of groundwater contamination. Should any information indicate that any Southwestern activities may adversely affect the groundwater, Southwestern will implement a site-specific groundwater monitoring program.

-- **National Pollutant Discharge Elimination System (NPDES)**

As mentioned before the NPDES is the primary mechanism used by EPA to manage wastewater. NPDES permits are required for the discharge of pollutants from certain point sources into waters of the U.S.

Southwestern substation facilities have not been required to apply for NPDES permits because Southwestern's activities do not involve industrial operations as defined in the regulation (40 CFR 122); and because oil is enclosed in electrical equipment and does not come into direct contact with stormwater. This exemption applies to stormwater drainage, discharges from conduit sumps, and discharges from secondary oil containment devices. However, the State of Missouri views secondary containment structures such as oil/water separators, as wastewater treatment devices. These devices require Missouri general operating NPDES permits, according to its regulations. These operating permits have been requested for affected facilities and monitoring will be performed in accordance with their provisions. There were no NPDES permits required for construction activities during CY97. All construction projects involved land disturbance of less than 5 acres. This included areas that may have been part of a larger common plan of development or sale.

-- **Toxic Substances Control Act (TSCA)**

The TSCA regulations prohibit the manufacture, processing, and distribution of PCBs in commerce, except as exempted by EPA. The EPA, through the TSCA regulations, also regulates the use, marking, and disposal of PCBs. Some states, such as Arkansas, regulate PCB disposal and handling through their State RCRA Programs. The TSCA regulations also prescribe requirements for Southwestern concerns, such as, radon, lead-based paint, and asbestos.

Southwestern has an on-going program to reduce all PCB concentrations in its electrical equipment to below 50 ppm. Southwestern currently has no known equipment which contain 500 ppm or greater PCB. Southwestern strives to recycle or dispose of any PCB-contaminated equipment within 30 days of removal from service and declared excess to Southwestern's needs. During CY 1997, Southwestern completed an "Equipment/Oil Disposal Evaluation and Data Search" study. The intent of the study was to provide Southwestern with updated information to evaluate and select specific disposal and management alternatives for its PCB contaminated electrical equipment. Facility audit criteria, developed as part of the study, will be used in CY 1998 to evaluate and select an

appropriate facility (or facilities) to accept Southwestern's PCB-contaminated waste. The purpose of this effort was to limit Southwestern's long-term risk, while facilitating its disposal requirements at reasonable costs.

Federal agencies are required by the Indoor Radon Abatement Section of TSCA to conduct studies of radon levels in Federal buildings, and to provide the results to the EPA for its consolidated report to Congress. Radon is an odorless, invisible radioactive gaseous element formed in the decay of radium. Radium occurs naturally in the air, water, and soil. Congress may provide additional requirements for Federal agencies as part of a comprehensive radon abatement program.

Southwestern did not conduct any additional radon sampling during CY 1997. Southwestern has planned to conduct limited radon sampling at some of its field locations during CY 1998. These results will be reported as required by applicable regulations.

-- **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.

Southwestern has managed these concerns through relatively conservative means. Southwestern contracts out pest management needs at its maintenance facilities through local vendors. In addition, Southwestern contracts out portions of its vegetation management needs involving herbicide application on the transmission line rights-of-way (ROW). Guidance for the use of herbicides at substations; pole yards; microwave/radio sites; and along the transmission line ROW is largely governed by two environmental assessments. All herbicide spraying is accomplished by certified personnel. No restricted herbicides are utilized.

-- **Endangered Species Act (ESA)**

The ESA was established to protect aquatic and land animals and plant species in danger of extinction (endangered) and those that are in danger of becoming extinct (threatened). Federal agencies are required to ensure that any of their associated actions do not adversely impact threatened or endangered species (T&E). If listed species may be affected, then the agency must consult with the U.S. Fish and Wildlife Service, or National Marine Fisheries Wildlife Service, whichever is appropriate. State-listed species should also be considered when considering an action.

Southwestern has had few projects which would be impacted by this Act. However, a complete T&E species survey was conducted for the system-wide vegetation

management environmental assessments. Southwestern's system-wide T&E species list is scheduled for review on a bi-annual basis. All Maintenance and Engineering construction projects, as well as real property transfers, are evaluated for potential adverse impacts to known T&E species. There were no adverse impacts identified for Southwestern actions to any known T&E species during CY 1997.

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

All Federal agencies, including Southwestern, have responsibilities under the National Historic Preservation Act of 1966, as amended (NHPA). Under Section 106 of the Act, all Federal agencies will take cultural resources into account during agency project planning. The intent here 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; and cultural and natural places, and sacred objects important to a group or groups of Americans, such as 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 each agency consider the effects its actions may have on significant resources. Under Section 110 of the Act, each agency is required to develop and carry out a systematic program to inventory all cultural resources on lands which they own, and nominate to the National Register of Historic Places properties that meet the eligibility requirements.

The Department of Energy (DOE) has issued to all facilities and program offices, a directive and guidance to develop a cultural resource management program (CRMP). The intent is to ensure that DOE complies with the NHPA requirements. The CRMP also serves the purpose to consolidate these requirements into a single resource guide.

Southwestern began development of its Cultural Resources Management Plan (CRMP) to better evaluate potential project impacts to cultural, historical, or archaeological resources. Implementation of the CRMP will help Southwestern ensure compliance with the National Historic Preservation Act by integrating these considerations into the planning process. During CY 1997, Southwestern had no actions which affected properties that were on or eligible for the National Register of Historic Places.

-- **Executive Order 11988, "Floodplain Management"**

Southwestern had few projects which would have been impacted by this Executive Order. However, some Southwestern facilities and structures are located in or near floodplain areas. All Maintenance and Engineering construction projects, as well as real property transfers, are evaluated for potential adverse impacts to wetland areas. There were no adverse impacts to any known floodplain areas during CY 1997.

-- Executive Order 11990, "Protection of Wetlands"

This Executive Order directed federal agencies to avoid, to the extent possible, adversely impacting wetlands. This includes adverse impacts associated with the destruction or modification of wetlands, or the support (direct or indirect) of new construction in wetlands when a practical alternatives exist. The EPA and the Corps of Engineers (COE) have joint administrative duties for Federal wetlands regulations. The discharge of dredge and fill materials into waters of the U.S., including some wetlands, are regulated through a permit program largely administered by the COE. Numerous State and local governments have enacted regulations for the protection of wetlands.

Southwestern has had few projects which would be impacted by this Executive Order. However, some Southwestern facilities and structures are located in or near wetland areas. All Maintenance and Engineering construction projects, as well as real property transfers, are evaluated for potential adverse impacts to wetland areas. There were no adverse impacts identified to any known wetland areas in Southwestern's system during CY 1997.

OTHER MAJOR ENVIRONMENTAL ISSUES AND ACTIONS

Southwestern has developed and implemented all of its required Environmental Orders and has ensured that the appropriate personnel have received required training. Southwestern has resolved all issues discussed in the 1991 and 1993 DOE environmental audits and submitted its report to DOE Headquarters in 1996. In CY 1997, the Office of Environmental, Safety, and Health was reorganized into the Division of Acquisition and Property. The Division of Acquisition, Property, and Environmental Management maintains responsibility for development, oversight, and implementation of environmental programs. No major issues, such as lawsuits or violations, were identified by the Division of Acquisition, Property, and Environmental Management.

SUMMARY OF PERMITS

Gore, Oklahoma Maintenance Facility - EPA Identification Number (PCB)
Tupelo, Oklahoma Maintenance Facility - EPA Identification Number (PCB)
Springfield, Missouri Maintenance Facility - EPA Identification Number (PCB)
Jonesboro, Arkansas Maintenance Facility - EPA Identification Number (PCB)

ENVIRONMENTAL PROGRAM INFORMATION

Southwestern's environmental program development and implementation is sufficiently discussed above. Southwestern does not have, and has not had, any ongoing monitoring or surveillance programs. Individual project monitoring for asbestos concerns in maintenance or construction projects have indicated asbestos fiber releases well below the permissible exposure limit, and final cleanup clearance criteria. Southwestern had no significant spills and/or releases during CY 1997. Southwestern accomplished minor substation construction during CY 1997 without adverse impacts to the environment. Southwestern did not initiate nor complete an environmental impact statement (EIS) or environmental assessment (EA) during CY 1997.

Environmental staff have trained field personnel in the techniques of conducting self-assessments. The Maintenance Division has responsibility for conducting an environmental self-assessment on an annual basis. Field crews perform bi-monthly environmental site inspections as part of routine maintenance activities. Southwestern's environmental staff has performed a system-wide Environmental Appraisal annually. These annual environmental appraisal reports and recommendations are provided to Southwestern management.

-- **Radiological Information**

Southwestern has no radiological source emissions and therefore has no radiological information to provide for this report.

-- **Non-Radiological Information**

Southwestern is exempt from any monitoring requirements in addition to those already discussed. Southwestern does not have any continuous release reporting requirements under CERCLA because SWPA does not store, use, or release hazardous substances in quantities equal to, or greater than there reportable quantities. In addition, Southwestern has not had any unplanned reportable releases of pollutants or hazardous substances to the environment during CY 1997.

-- **Groundwater Monitoring and Protection**

Southwestern does not currently have an ongoing groundwater monitoring program. The objectives of Southwestern's Groundwater Protection Management Program for groundwater monitoring are: 1) identify existing and potential sources of groundwater contamination; and 2) establish guidelines for implementing groundwater monitoring.

Historical and current site information concerning potential groundwater contamination sources indicates that active groundwater monitoring is not warranted at this time. However, should Southwestern become aware of any information that would indicate groundwater could be adversely affected by Southwestern's activities , or if a major spill occurs and groundwater contamination is probable, then Southwestern would implement a site-specific groundwater monitoring program at that facility. The site-specific program

would consist of monitoring well sighting and installation, groundwater sampling, and reporting.

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Quality Assurance

Southwestern's Quality Assurance Program provides Headquarters and field units the capability to assure quality data is obtained during Southwestern's environmental monitoring activities. Southwestern conducts onsite audits of its analytical facilities to help ensure permits, licenses, certifications are current and applicable for required analyses. Southwestern ensures their analytical laboratories participate in inter-laboratory cross-check programs.