

Union Electric

One Ameren Plaza
1901 Chouteau Avenue
PO Box 66149
St. Louis, MO 63166-6149
314.621.3222

February 26, 2001

U.S. Nuclear Regulatory Commission
Attn: Document Control Desk
Mail Station P1-137
Washington, DC 20555

Gentlemen:

ULNRC-04396



DOCKET NUMBER 50-483
CALLAWAY PLANT
MISSOURI STATE OPERATING PERMIT
WATER POLLUTION CONTROL PROGRAM

Please find enclosed the Missouri State Operating Permit Water Pollution Control Program for construction or land disturbance activities at Callaway Plant. This permit is in addition to our NPDES permit and is submitted in accordance with Callaway Plant Operating License NPF-30, Appendix B, Section 3.2.

Very truly yours,

A handwritten signature in cursive script, reading "A. C. Passwater".

A. C. Passwater
Manager, Corporate Nuclear Services

PMB/mlo
Attachment

COO1

cc: M. H. Fletcher
Professional Nuclear Consulting, Inc.
19041 Raines Drive
Derwood, MD 20855-2432

Regional Administrator
U.S. Nuclear Regulatory Commission
Region IV
611 Ryan Plaza Drive
Suite 400
Arlington, TX 76011-8064

Senior Resident Inspector
Callaway Resident Office
U.S. Nuclear Regulatory Commission
8201 NRC Road
Steedman, MO 65077

Mr. Jack Donohew (2)- **OPEN BY ADDRESSEE ONLY**
Office of Nuclear Reactor Regulation
U.S. Nuclear Regulatory Commission
1 White Flint, North, Mail Stop OWFN 7E1
11555 Rockville Pike
Rockville, MD 20852-2738

Manager, Electric Department
Missouri Public Service Commission
P.O. Box 360
Jefferson City, MO 65102

STATE OF MISSOURI
DEPARTMENT OF NATURAL RESOURCES
MISSOURI CLEAN WATER COMMISSION



MISSOURI STATE OPERATING PERMIT WATER POLLUTION CONTROL PROGRAM

In compliance with the Missouri Clean Water Law, (chapter 644 R.S. Mo. as amended, hereinafter, the Law), and the Federal Water Pollution Control Act (Public Law 92-500, 92nd Congress) as amended,

Permit No.: MO-R109490
Owner: Union Electric Company
Address: P.O. Box 66149, MC 602
St. Louis, MO 63166-6149

Continuing Authority: Same
Same

Facility Name: Ameren UE, Callaway Power Plant
Facility Address: Jct. Hwy. CC & O
Fulton, MO 65251

Legal Description: SW ¼, SW ¼, Sec 13, T46N, R8W
Callaway County

Receiving Stream: Unnamed trib to Mud Creek (u)
Basin and USGS Reach: Missouri River and Central Tributaries (10300102-08-08)

is authorized to discharge from the facility described herein, in accordance with the effluent limitations and monitoring requirements as set forth herein.

FACILITY DESCRIPTION All Outfalls, SIC 1629
Construction or land disturbance activity (e.g., clearing, grubbing, excavating, grading, and other activity that results in the destruction of the root zone). Also applies to land disturbance activities near valuable resource waters.

This permit authorizes only wastewater, including storm waters, discharges under the Missouri Clean Water Law and the National Pollutant Discharge Elimination System, it does not apply to other regulated areas. This permit may be appealed in accordance with Section 644.051.6 of the Law

May 9, 1997
Effective date

April 21, 2000
Issue date *PS*

January 2, 2002
Expiration date
MO 780-1481 (7-94)

John A. Young

John A. Young
Director, Division of Environmental Quality

Ed Knight

Ed Knight
Director of Staff, Clean Water Commission

APPLICABILITY

1. This general permit **authorizes** the discharge of storm water and certain non-storm water discharges from land disturbance sites that disturb a cumulative total of five (5) or more acres over the life of the project or which is part of a larger common plan of development or sale that will disturb a cumulative total of five or more acres over the life of the project. This general permit also **authorizes** the discharge of storm water and certain non-storm water discharges from smaller projects where the department has exercised its discretion to require a permit [10 CSR 20-6.200 (1)(B)].

A Missouri State Operating Permit that specifically identifies the project must be issued before any site vegetation is removed or the site disturbed.

Any site owner/operator subject to these requirements for storm water discharges and who disturbs land prior to permit issuance from MDNR is in violation of both State and Federal laws.

2. This permit **authorizes** non-storm water discharges from the following activities provided that these discharges are addressed in the permittee's specific Storm Water Pollution Prevention Plan (SWPPP) required by this general permit:
 - a. De-watering activities if there are no contaminants other than sediment present in the discharge,
 - b. Flushing water hydrants and potable water lines,
 - c. Water only (i.e., without detergents or additives) rinsing of streets and buildings, and,
 - d. Site watering to establish vegetation.
3. This general permit **does not authorize** the placement of fill materials in flood plains, the obstruction of stream flow, directing storm waters across private property not owned or operated by the permittee, or changing the channel of a defined drainage course. This general permit is intended to address only the quality of the storm water runoff and minimize off-site migration of sediments and other water contaminants.
4. This general permit **does not authorize** any discharge to waters of the state of sewage, wastewaters, or pollutants such as:
 - a. Hazardous substances or petroleum products from an on-site spill or improper handling and disposal practices,
 - b. Wash and/or rinse waters from concrete mixing equipment including ready mix concrete trucks. Such pollutants can and should be addressed in the Storm Water Pollution Prevention Plan, but they **cannot** be discharged to waters of the state,
 - c. Wastewater generated from air pollution control equipment or the containment of scrubber water in lined ponds, or
 - d. Grey waters.
5. MDNR reserves the right to deny coverage under this general permit to applicants for storm water discharges from land disturbance activities at sites that have contaminated soils that will be disturbed by the land disturbance activity.
6. If at any time the Missouri Department of Natural Resources determines that the quality of waters of the state may be better protected by requiring the owner/operator of the permitted site to apply for a site specific permit, the department may require any person to obtain a site specific operating permit [10 CSR 20-6.010 (13) and 10 CSR 20-6.200(5)].

The department may require the permittee to apply for and obtain a site specific or different general permit if:

- a. The permittee is not in compliance with the conditions of this general permit;
- b. The discharge no longer qualifies for this general permit due to changed site conditions and regulations; or
- c. Information becomes available that indicates water quality standards have been or may be violated.

The permittee will be notified in writing of the need to apply for a site specific permit or a different general permit. When a site specific permit or different general permit is issued to the authorized permittee, the applicability of this general permit to the permittee is automatically terminated upon the effective date of the site specific or different general permit, whichever the case may be.

APPLICABILITY (Continued)

7. Any owner/operator authorized by a general permit may request to be excluded from the coverage of the general permit and apply for a site specific permit [10 CSR 20-6.010 (13) and 10 CSR 20-6.200(5)].
8. This permit is not transferable to other owners or operators.

APPLICABILITY TO VALUABLE RESOURCE WATERS

1. Storm water discharges to streams or stream segments defined as Valuable Resource Waters must be identified under the following conditions:
 - a. Storm water discharges within 1000 feet of:
 - i. Streams identified as a losing stream,
 - ii. Streams or lakes listed as an outstanding national or state resource water,
 - iii. Reservoirs or lakes used for public drinking water supplies (class L1), or
 - iv. Streams, lakes or reservoirs identified as critical habitat for endangered species.
 - b. Storm water discharges:
 - i. Within 100 feet of a permanent stream (class P) or major reservoir (class L2), or
 - ii. Within two stream miles upstream of biocriteria reference locations.
 - c. Storm water discharges where:
 - i. Any of the disturbed area is defined as a wetland (Class W), or
 - ii. The storm water discharges to a sinkhole or other direct conduit to groundwater.
2. This permit applies to discharges to Valuable Resource Waters provided that the particular sections that are identified as pertaining to these waters are adhered to.
3. Streams and stream segments that meet these criterion are identified and/ or defined in 10 CSR 20, Chapter 7 (Water Quality).

EXEMPTIONS FROM PERMIT REQUIREMENTS

1. Facilities that discharge all storm water runoff directly to a combined sewer system are exempt from storm water permit requirements.
2. Linear, strip or ribbon construction, or maintenance operations as identified in 10 CSR 20-6.200 (1)(B).
3. Sites that disturb less than five acres of total land area that are not part of a common plan or sale and that do not cause any violations of water quality standards and are not otherwise designated by the department as requiring a permit.
4. Agricultural storm water discharges and irrigation return flows. For purposes of this permit, land disturbance activities from Class I Concentrated Animal Feeding Operations (CAFO) are not considered an agricultural activity and therefore **not** exempted.

REQUIREMENTS AND GUIDELINES

1. **General:** The primary requirement of this permit is the development and implementation of a Storm Water Pollution Prevention Plan (SWPPP) that
- Incorporates required practices identified below,
 - Incorporates erosion control practices specific to site conditions, and
 - Provides for maintenance and adherence to the plan.

For new applicants, before removing any site vegetation, disturbing earth, or submitting an application, the permittee shall develop a SWPPP that is specific to the land disturbance activities at the site. This plan must be developed before a permit can be issued and made available as specified under ARECORDS@. However, the plan should not be submitted to the department unless specifically requested.

For re-issued permits, the permittee shall implement a plan within 60 days of the date of issuance of this permit.

The permittee shall fully implement the provisions of the SWPPP required under this part as a condition of this general permit throughout the term of the land disturbance project.

The purpose of the SWPPP is to ensure the design, implementation, management, and maintenance of ABest Management Practices@ (BMPs) in order to reduce the amount of sediment and other pollutants in storm water discharges associated with the land disturbance activities; comply with the Missouri Water Quality Standards; and ensure compliance with the terms and conditions of this general permit.

The permittee shall select, install, use, operate, and maintain the BMPs in accordance with the concepts and methods described in either of the following two documents:

- Storm Water Management for Construction Activities: Developing Pollution Prevention Plans and Best Management Practices**, (Document number EPA 832-R-92-005) published by the United States Environmental Protection Agency (USEPA) in September 1992.
- Protecting Water Quality: A field guide to erosion, sediment and storm water best management practices for development sites in Missouri**, published by the Missouri Department of Natural Resources in November 1995.

The permittee is not limited to the use of these guidance manuals. Other commonly accepted publications may be used for guidance and must be referenced in the SWPPP if used. In addition, the permittee is not limited to the use of BMPs identified in these manuals. However, any alternative BMPs should be justified by site conditions and described in the SWPPP.

2. **SWPPP Requirements:** The following information and practices shall be provided for in the SWPPP.

- Site Description.** In order to identify the site, the SWPPP shall include the facility and outfall information provided in the Application Form. The SWPPP shall have sufficient information to be of practical use to contractors and site construction workers to guide the installation and maintenance of BMPs.
- Drainage areas:** The following guidelines are for protection of drainage areas and shall be addressed in the SWPPP.
 - Clearing and grubbing within 50 feet of a defined drainage course should be avoided. If the disturbed area is near a Valuable Resource Water as defined under AApplicability to Valuable Resource Waters@, clearing and grubbing within 50 feet of a defined drainage course must be avoided to protect water quality functions unless replacement vegetation is sufficient to protect water quality and is specified in the SWPPP.

2. SWPPP Requirements (Continued)

b. Drainage areas: (continued)

- ii. Where changes to defined drainage courses occur as part of the project, clearing and grubbing within 50 feet of the defined drainage course should be delayed until all materials and equipment necessary to protect and complete the drainage change are on site.
- iii. Changes to defined drainage courses shall be completed as quickly as possible once the work has been initiated. The area impacted by the land disturbance of the drainage course change is to be revegetated or protected from erosion as soon as possible. Areas within 50 feet of defined drainage ways should be recontoured as needed and revegetated, seeded, or otherwise protected within five (5) working days after grading has ceased.
- iv. Work in defined drainages or water courses and their associated wetlands may require a permit from the U.S. Army Corps of Engineers pursuant to Section 404 of the federal Clean Water Act.

- c. Description of Best Management Practices: The SWPPP shall include a description of the BMPs that will be used at the site. The SWPPP shall provide the following general information for each BMP which will be used one or more times at the site:
- i. Physical description of the BMP,
 - ii. Site and physical conditions that must be met for effective use of the BMP,
 - iii. BMP installation/construction procedures, including typical drawings, and
 - iv. Operation and maintenance procedures for the BMP.

The SWPPP shall provide the following information for each specific instance where a BMP is to be installed:

- i. Whether the BMP is temporary or permanent,
- ii. Where, in relation to other site features, the BMP is to be located,
- iii. When the BMP will be installed in relation to each phase of the land disturbance procedures to complete the project, and
- iv. What site conditions must be met before removal of the BMP if the BMP is not a permanent BMP.

- d. Disturbed Areas: Slopes for disturbed areas must be defined in the SWPPP. Where soil disturbing activities cease in an area for more than 14 days, the disturbed areas shall be protected from erosion by stabilizing the area with mulch or other similarly effective erosion control BMPs. If the slope of the area is greater than 3:1 or if the slope is greater than 3% and greater than 150 feet in length, then the disturbed areas shall be protected from erosion by stabilizing the area with mulch or other similarly effective erosion control BMPs if activities cease for more than seven days. These requirements do not apply to the interior slopes of a sedimentation basin or the areas that clearly drain thereto.

- e. Installation: The permittee shall ensure the BMPs are properly installed at the locations and relative times specified in the SWPPP. Peripheral or border BMPs to control runoff from disturbed areas shall be installed or marked for preservation before general site clearing is started. Storm water discharges from disturbed areas which leave the site shall pass through an appropriate impediment to sediment movement, such as a sedimentation basin, sediment traps, silt fences, etc. prior to leaving the land disturbance site. Bench marks shall be referenced for proper installation and operation and maintenance of drainage course changes.

- f. Temporary and Permanent Non-Structural BMPs: The SWPPP shall require existing vegetation to be preserved where practical. The time period for disturbed areas to be without vegetative cover is to be minimized to the extent practical.

Examples of non-structural BMPs which the permittee should consider specifying in the SWPPP include: preservation of trees and mature vegetation, protection of existing vegetation for use as buffer strips (especially along drainage courses), mulching, sodding, temporary seeding, final seeding, geotextiles, stabilization of disturbed areas, preserving existing stream channels as overflow areas when channel straightening or shortening is allowed, soil stabilizing emulsions and tackifiers, mulch tackifiers, stabilized site entrances/exits, and other appropriate BMPs.

2. SWPPP Requirements (Continued)

- g. Temporary and Permanent Structural BMPs: Examples of structural BMPs that the permittee should consider specifying in the SWPPP include: diverting flows from undisturbed areas away from disturbed areas, silt (filter fabric or straw bale) fences, earthen diversion dikes, drainage swales, sediment traps, rock check dams, subsurface drains (to gather or transport water for surface discharge elsewhere), pipe slope drains (to carry concentrated flow down a slope face), level spreaders (to distribute concentrated flow into sheet flow), storm drain inlet protection and outlet protection, reinforced soil retaining systems, gabions, temporary or permanent sediment basins, and other appropriate BMPs.
- h. Sedimentation Basins. The SWPPP shall require a sedimentation basin for each drainage area with 10 or more acres disturbed at one time. The sediment basin shall be sized to contain 0.5 inch of sediment from the drainage area and to be able to contain a 2-year, 24-hour storm. The sediment shall be cleaned out of the basin and otherwise maintained as needed until the drainage area is stabilized. This requirement does not apply to flows from areas where such flows are properly diverted around both the disturbed areas and the sediment basin. Discharges from the basin shall not cause scouring of the banks or bottom of the receiving stream.

Where use of a sediment basin of this size is impractical, the SWPPP shall evaluate and specify other similarly effective BMPs to be employed to control erosion and sediment delivery. The SWPPP shall require the basin be maintained until final stabilization of the area served by the basin.

The SWPPP shall require both temporary and permanent sedimentation basins to have a stabilized spillway to minimize the potential for erosion of the spillway or basin embankment.

- i. Additional Site Management BMPs: The SWPPP shall address other BMPs, as required by site activities, to prevent contamination of storm water runoff. Such BMPs include:
- i. Solid and hazardous waste management including: providing trash containers and regular site clean up for proper disposal of solid waste such as scrap building material, product/material shipping waste, food containers, and cups; and providing containers and proper disposal of waste paints, solvents, and cleaning compounds, etc.;
 - ii. Provision of portable toilets for proper disposal of sanitary sewage;
 - iii. Storage of construction materials away from drainage courses and low areas; and
 - iv. Installation of containment berms and use of drip pans at petroleum product and liquid storage tanks and containers.
- j. Permanent Storm Water Management: The SWPPP shall include a description of the measures that will be installed during land disturbance to control pollutants in storm water discharges that will occur after land disturbance activity has been completed. These could include drainage channels or systems; outlet control devices, detention basins, oil water separators, catch basins, etc. This general permit does not require the permittee or the permittee's contractors to operate or maintain these measures beyond the date of MDNR's Letter of Termination.

- 3. Amending/Updating the SWPPP:** The permittee shall amend and update the SWPPP as appropriate during the term of the land disturbance activity. The permittee shall amend the SWPPP, at a minimum, whenever the:
- a. Design, operation, or maintenance of BMPs is changed;
 - b. Design of the construction project is changed that could significantly affect the quality of the storm water discharges;
 - c. Permittee's inspections indicate deficiencies in the SWPPP or any BMP;
 - d. MDNR notifies the permittee of deficiencies in the SWPPP;
 - e. SWPPP is determined to be ineffective in significantly minimizing or controlling erosion and sedimentation (e.g., there is visual evidence, such as excessive site erosion or excessive sediment deposits in streams or lakes);
 - f. Non-Filterable Residues (NFR) from a storm water outfall exceed 45 mg/l;
 - g. Total Settleable Solids from a storm water outfall exceed 2.5 ml/L/hr. unless the disturbed area is near a Valuable Resource Water as defined under 'Applicability to Valuable Resource Waters'. Total Settleable Solids from a storm water outfall in these areas shall not exceed 0.5 ml/L/hr.
 - h. MDNR determines violations of Water Quality Standards may occur or have occurred.
- 4. Site Inspections:** The permittee shall ensure the land disturbance site is inspected on a regular schedule and within a reasonable time period (not to exceed 72 hours) following heavy rains. Regularly scheduled inspections shall be at a minimum once per month. For disturbed areas that have not been finally stabilized, all installed BMPs and other pollution control measures shall be inspected for proper installation, operation and maintenance. Locations where storm water leaves the site shall be inspected for evidence of erosion or sediment deposition. Any deficiencies shall be noted in a report of the inspection and corrected within seven calendar days of the inspection. The permittee shall promptly notify the site contractors responsible for operation and maintenance of BMPs of deficiencies.
- A log of each inspection shall be kept. The inspection report is to include the following minimum information: inspector's name, date of inspection, observations relative to the effectiveness of the BMPs, actions taken or necessary to correct deficiencies, and listing of areas where land disturbance operations have permanently or temporarily stopped. The inspection report shall be signed by the permittee or by the person performing the inspection if duly authorized to do so.
- 5. Proper Operation and Maintenance:** The permittee shall at all times maintain all pollution control measures and systems in good order to achieve compliance with the terms of this general permit.
- The need to halt or reduce the permitted activity in order to maintain compliance with general permit conditions shall not be a defense to the permittee in an enforcement action.
- 6. Notification to All Contractors:** The permittee shall notify each contractor or entity (including utility crews and city employees or their agents) who will perform work at the site of the existence of the SWPPP and what action or precautions shall be taken while on site to minimize the potential for erosion and the potential for damaging any BMP. If additional land is disturbed or any BMP damaged, then the permittee shall cause to have the disturbance or damage repaired.

OTHER DISCHARGES

- 1. Hazardous Substance and Oil Spill Reporting:** Refer to Section B, #14 of Part I of the Standard Conditions that accompany this permit.
- 2. Removed substances:** Refer to Section B, #6 of Part I of the Standard Conditions that accompany this permit.
- 3. Change in discharge:** In the event soil contamination or hazardous substances are discovered at the site during land disturbance activities, the permittee shall notify MDNR in writing.

SAMPLING REQUIREMENTS AND EFFLUENT LIMITATIONS

Discharges shall not violate General Water Quality Standards 10 CSR 20-7.031(3).

Non-filterable Residues (NFR) shall not exceed a maximum of 45 mg/l for each storm water outfall.

Settleable Solids shall not exceed a maximum of 2.5 ml/L/hr. for each storm water outfall, unless the disturbed area is near a Valuable Resource Water as defined under Applicability to Valuable Resource Waters. Settleable Solids from a storm water outfall in these areas shall not exceed 0.5 ml/L/hr.

There are no regular sampling requirements in this permit. However, the department may require sampling and reporting as a result of illegal discharges, compliance issues, complaint investigations, or other such evidence of off-site contamination from activities at the site. If such an action is needed, the department will specify in writing any additional sampling requirements, including such information as location, extent, and parameters.

RECORDS

1. The permittee shall retain copies of this general permit, the SWPPP and all amendments for the site named in the State Operating Permit, results of any monitoring and analysis, and all site inspection records required by this general permit. The permittee shall retain these records at a site which is readily available from the permitted site until final stabilization of a site is achieved. The local office of the permittee, their contractor or consultant is considered to be readily available from the project site if it is located in the same county as the project site. The records shall be accessible during normal business hours. After final stabilization the records may be maintained at the location of the permittee's main office. The records shall be retained for a period of at least three years from the date of the Letter of Termination.
2. The permittee shall provide a copy of the SWPPP to MDNR, USEPA, or any local agency or government representative if they request a copy in the performance of their official duties.

The permittee shall provide those who are responsible for installation, operation, or maintenance of any BMP a copy of the SWPPP.

The permittee, their representative, and/or the contractor(s) responsible for installation, operation, and maintenance of the BMPs shall have a current copy of the SWPPP with them when on the project site.

TRANSFER OF OWNERSHIP

1. Individual Lot or Lots: Federal and Missouri storm water regulations (10 CSR 20-6.200) require a storm water permit and erosion control for five acres or more disturbed as part of a common plan or sale. That language means the individual lots (commercial, industrial, or residential) when sold to an entity for construction (unless sold to an individual for purposes of building their own private residence) are also subject to storm water regulations because they are part of the common sale.

The existing permittee who intends to transfer ownership of a lot or parcel of the overall permitted area is still responsible for the terms of this permit and erosion control on that site unless the new owner applies for and receives this or other Missouri State Operating Permit for storm water discharges from land disturbance activities. If the current permittee is to retain the permit and responsibility for control of sediment and other pollutants at the site, then the owner should obtain a copy of an Individual Lot Certification (ILC) from MDNR. The ILC should be properly completed and signed and retained with the SWPPP.

2. Entire Tract: If the entire tract is sold, then this permit should be terminated and the new owner should submit an application for a new permit immediately.

TERMINATION

This permit shall be terminated when the project is stabilized. The project is considered to be stabilized when perennial vegetation, pavement, buildings, or structures using permanent materials cover all areas that have been disturbed. With respect to areas that have been vegetated, vegetative cover shall be at least 70% of fully established plant density over 100% of the disturbed area.

In order to terminate the permit, the permittee shall notify MDNR by submitting Form H, included with the State Operating Permit. The permittee shall complete Form H and mail it to MDNR at the address noted in the cover letter of this permit.

Page 1 of this permit specifies the expiration date of this permit. The "issue date" is the date the State Operating Permit is issued to the applicant. The "expiration date" may or may not coincide with the date when the authorized project or development is scheduled for completion.

If the project or development completion date will be after the expiration date of this general permit, then the permittee must reapply to the department for the permit to be re-issued. The permittee will receive notification of the expiration date of the permit 180 days before the expiration date listed on page 1 of this permit. In order for the permit to be re-issued, the permittee should submit the appropriate application form(s) at least 90 days before the expiration of the permit if land disturbance activity is expected to continue past the expiration date of this general permit (supersedes Standard Condition #17, Duty to Reapply.)

DUTY TO COMPLY

The permittee shall comply with all conditions of this general permit. Any noncompliance with this general permit constitutes a violation of Chapter 644, Missouri Clean Water Law, and 10 CSR 20-6.200. Noncompliance may result in enforcement action, termination of this authorization, or denial of the permittee's request for renewal.

MAILING ADDRESS

The permittee shall send all written correspondence and forms, which are to be submitted to MDNR to the address listed in the cover letter that accompanies this permit.