

November 5, 1993

FACT SHEET

UE, Labadie Power Plant

NPDES No. MO-0004812

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The Federal Water Pollution Control Act ("Clean Water Act" Section 402 Public Law 92-500 as amended) established the National Pollutant Discharge Elimination System (NPDES) permit program. This program regulates the discharge of pollutants from point sources into the waters of the United States. All such discharges are unlawful without a permit (Section 301 of the "Clean Water Act"). After a permit is obtained, a discharge not in compliance with all permit terms and conditions is unlawful. Permits in Missouri are issued by the Director of the Department of Natural Resources under an approved program, operating in accordance with federal and state laws (Federal "Clean Water Act" and "Missouri Clean Water Law" Section 644 as amended).

Union Electric Company, P.O. Box 149, St. Louis, Missouri 63166, has applied for reissuance of State Operating Permit No. MO-0004812 for its Labadie Power Plant in Labadie, Missouri. The Labadie Power Plant is a coal fired generating station providing electrical services. The Standard Industrial Classification (SIC) code is 4911.

The application for discharge permit requests authorization for seven (7) discharges. These outfalls are described below:

001 Non-contact cooling water

Water is withdrawn from the river, passed through condensers and other heat exchangers, and returned to the river.
Design flow is 1,428 MGD. Actual flow is 1,029 MGD.

002 Ash Pond

The pond provides treatment for fly ash, bottom ash and low volume waste and treated sanitary waste streams.
Design flow is 57.8 MGD. Actual flow is 25.4 MGD.

002A Sludge Holding Tank

Sludge disposal is by contract hauler.

003 Stormwater Runoff (SW001)

Storm water runoff from parking areas and drives.
Representative of four similar discharge pipes, a-d.
a. 10-inch corrugated metal pipe (cmp)
b. 24-inch cmp
c. 24-inch cmp
d. 24-inch cmp

Flow is dependent upon precipitation.

004 Stormwater Runoff (SW002)

Storm water runoff from an outdoor materials storage area.
24-inch cmp
Flow is dependent upon precipitation.

005 Stormwater Runoff (SW003)

Storm water runoff from various plant yards, plant building roof drains and the access road.
24-inch cmp
Flow is dependent upon precipitation.

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006 Stormwater Runoff (SW004)

Storm water runoff from the access road.

18-inch cmp*

Flow is dependent upon precipitation.

* Monitoring of Outfall #007 is representative of this discharge.

007 Stormwater Runoff (SW005)

Storm water runoff from the access road. Representative of six similar discharge pipes, a-f.

Each pipe is an 18-inch cmp.

Flow is dependent upon precipitation.

The Labadie Power Plant, Outfalls #001 and #002, currently discharges at an average of 1,054 MGD. The plant discharges into the Missouri River (Missouri River and Eastern Tributaries Basin), in parts of Sections 7, 18 and 19, T44N, R2E, Franklin County.

According to 10 CSR 20-7.031 Missouri Water Quality Standards, Missouri Department of Natural Resources (the Department) "defines the Clean Water Commission's water quality objectives in terms of water uses to be maintained and the criteria to protect those uses". For the portion of the Missouri River, where this outfall discharges, the Water quality Standards list the following beneficial water uses to be maintained:

Aquatic-life protection (general warm-water fishery); livestock, wildlife watering; drinking-water supply; irrigation; industrial; boating.

In order to protect these beneficial uses and the water quality of the Missouri River, effluent limitations are being established under Federal and State laws. Domestic waste discharges are limited under the Department's current Effluent Regulations, 10 CSR 20-7.015. The current department "Effluent Regulations", 10 CSR 20-7.015(2)(C) states that non-domestic water contaminant sources "shall meet the applicable control technology currently effective as published by the Environmental Protection Agency (EPA) in 40 CFR 405-571 as revised on July 1, 1987. Where there are no such standards available or applicable the department shall set specific parameter limitations using best professional judgement." Guided by the Effluent Regulations and the Water Quality Standards, the Department has established the limitations noted in the draft permit.

Effluent limitations are being established for the seven outfalls as noted above using the existing permit, BATEA guidelines (40 CFR 423), the Water Quality Standards Review Sheet as drafted by the Water Quality Management Section, and the permit writer's "best professional judgement". These limits represent BATEA requirements for this facility. Other point sources discharge from the plant site. These include the intake screen wash and strainer backwash; the clarifier strainer and stormwater runoff; and the deicing line. These discharges are river water being returned to the river and monitoring requirements are proposed for these outfalls. The stormwater runoff at the site can be grouped into four drainage categories; 1) Areas where stormwater collects and is retained on site; 2) Areas which drain to the ash pond; 3) Discharges on the plant perimeter which do not reach surface waters as discrete point sources; and 4) Direct discharges to surface water, via point sources. Monitoring requirements are only proposed for the last.

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The self monitoring requirements for this discharge were developed by the Department of Natural Resources in compliance with 10 CSR 20-7.015.

The standard conditions attached to the draft permit are applied to all state operating permittees. They reflect requirements of federal (40 CFR 122) and state law (10 CSR 20-Chapter 6) with respect to state operating permittee duties, responsibilities and liabilities.

This permit will expire five (5) years from date of issuance.

A copy of the public notice and this fact sheet are being forwarded to the applicant, the District Engineer of the U.S. Army Corps of Engineers, the U.S. Fish and Wildlife Service, the Environmental Protection Agency and the Missouri Department of Conservation. Other interested individuals may obtain a copy on request by writing to the address listed below for comment letters.

The proposed determinations of the draft permit are tentative pending the public notice process. Persons wishing to comment upon or object to the proposed determinations are invited to submit them in writing to: Department of Natural Resources, Division of Environmental Quality, (Missouri Clean Water Commission), P.O. Box 176, Jefferson City, Missouri 65102, ATTN: Daniel R. Schuette, Chief of Permit Section. Please include the application number of the draft permit in all comment letters.

Comment period opens November 5, 1993, and all comments received prior to December 6, 1993, will be considered in the formulation of all final determinations regarding this application. If response to the public notice indicates significant public interest, a public hearing may be held after due notice. Public hearing and/or issuance of the NPDES permit will be processed according to 10 CSR 20-6.020.

Copies of all draft permits, comments and other information are available for inspection and copying at the Department of Natural Resources, Division of Environmental Quality, (Missouri Clean Water Commission), P.O. Box 176, 205 Jefferson Street, Jefferson City, Missouri 65102.