

WOLF CREEK

NUCLEAR OPERATING CORPORATION

Kevin J. Moles
Manager Regulatory Affairs

January 14, 2005

RA 05-0005

U. S. Nuclear Regulatory Commission
ATTN: Document Control Desk
Washington, DC 20555

Reference: Letter dated December 30, 2004, from K. Mueldener, KDHE, to
WCNOC

Subject: Docket 50-482: Transmittal of National Pollutant Discharge Elimination
System Permit for Wolf Creek Generating Station

Gentlemen:

In accordance with Wolf Creek Generating Station (WCGS) Facility Operating License No. NPF-42, Appendix B, Section 3.2, the enclosure to this letter provides a copy of the National Pollutant Discharge Elimination System permit for WCGS. This permit is effective February 1, 2005, through December 31, 2008. This permit supersedes all previous permits and/or agreements in effect between Wolf Creek Operating Corporation and the Kansas Department of Health and Environment. There are no commitments contained in this correspondence.

If you have any questions concerning this matter, please contact me at (620) 364-4126, or Diane Hooper at (620) 364-4041.

Very truly yours,


Kevin J. Moles

KJM/rlg

Enclosure – Permit No. I-NE07-P002

cc: J. N. Donohew (NRC), w/e
D. N. Graves (NRC), w/e
B. S. Mallett (NRC), w/e
Senior Resident Inspector (NRC), w/e

2001



05-00003

K A N S A S

RODERICK L. BREMBY, SECRETARY

KATHLEEN SEBELIUS, GOVERNOR

DEPARTMENT OF HEALTH AND ENVIRONMENT

December 30, 2004

Wolf Creek Nuclear Operating Corporation
P.O. Box 411
Burlington, KS 66839

RE: Kansas Water Pollution Control
Permit No. I-NE07-PO02
Wolf Creek Nuclear

Dear Permittee:

You have fulfilled all the filing requirements for a Kansas Water Pollution Control Permit and Authorization to Discharge under the National Pollutant Discharge Elimination System (NPDES). We are pleased to forward your new permit. While it is permissible to make as many copies as needed for monitoring and reporting purposes, you need to retain the original permit for your files.

We suggest you carefully read the terms and conditions of your permit and understand these terms and conditions are enforceable under both State and Federal law.

Please notice the reporting paragraph on page 2 of your permit, where all reports are due by the 28th day of the schedule noted. Please submit reports to the Kansas Department of Health and Environment, Bureau of Water-TSS, 1000 SW Jackson St., Suite 420, Topeka, Kansas 66612-1367.

If you have any questions concerning this permit, contact Ed Dillingham at (785) 296-5513.

Sincerely,


Karl Muelhener, P.E.
Director, Bureau of Water

.pc: SE - District Office
OA - Permit File

DIVISION OF ENVIRONMENT
Bureau of Water
CURTIS STATE OFFICE BUILDING, 1000 SW JACKSON ST., STE. 420, TOPEKA, KS 66612-1367
Voice 785-296-5500 Fax 785-296.0086 <http://www.kdhe.state.ks.us/>

KANSAS WATER POLLUTION CONTROL PERMIT AND
AUTHORIZATION TO DISCHARGE UNDER
THE NATIONAL POLLUTANT DISCHARGE
ELIMINATION SYSTEM

Pursuant to the Provisions of Kansas Statutes Annotated 65-164 and 65-165, the Federal Water Pollution Control Act as amended, (33 U.S.C. 1251 et seq; the "Act"),

Owner: Wolf Creek Nuclear Operating Corporation*

Owner's Address: P.O. Box 411
Burlington, Kansas 66839
* Refer to Supplemental Condition No. 17.

Facility Name: Wolf Creek Generating Station

Facility Location: 1550 Oxen Lane, NE
Burlington, Kansas 66839

Receiving Stream: Neosho River via Wolf Creek via Wolf Creek Cooling
Impoundment, Neosho River Basin

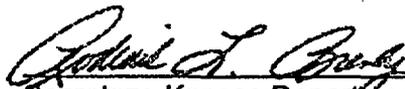
is authorized to discharge from the wastewater treatment facility described herein, in accordance with effluent limitations and monitoring requirements as set forth herein.

This permit shall become effective February 1, 2005, will supersede all previous wastewater permits and/or agreements in effect for the facility described herein between the Kansas Department of Health and Environment and the permittee, and will expire December 31, 2008.

FACILITY DESCRIPTION:

The station consists of a pressurized nuclear reactor steam supply system and an electric turbine-generator. The nuclear steam supply system is comprised of a reactor vessel and four primary coolant loops, each with a reactor coolant pump and steam generator. The net turbine generator output is a nominal 1,175 MWe. Wastewater discharge consists of circulating water, radwaste system, service and essential service water discharge via the essential service water discharge.

Continued on next page



Secretary, Kansas Department of Health and Environment

December 30, 2004
Date

FACILITY DESCRIPTION: Continued

- 001A SE ¼ Section 6, Township 21S, Range 16E: Two cell domestic waste stabilization pond is discharged on as needed basis into a slough of the Wolf Creek Cooling Impoundment (WCCI); 1.25 mgd.
- 002 NE ¼ Section 7, Township 21S, Range 16E: storm water run-off through oil water separator into WCCI and outfall 002a constituents; 0.326 mgd.
- 002A During equipment repair or inspection and/or plant outage, oily waste and other power block sumps; miscellaneous leaks and drain down from various systems routed to the power block sumps and/or storm drains; auxiliary boiler and steam generator draindowns; and groundwater, circulating, service, essential service water reroutes, are rerouted through an oil water separator;
- 003X NE ¼ Section 7, Township 21S, Range 16E: Circulation water, service water, and discharge from 003a and 003b; oxidation, oil interceptor; 704 mgd.
- 003A Radioactive wastewater processed through filters, demineralizers, and RO to the secondary liquid waste monitoring tanks A & B and/or to the A & B waste monitoring tank as batch releases to WCCI; continuous steam generator (S/G) blowdown to WCCI; 0.300 mgd.
- 003B Water treatment plant and wastewater treatment system discharge including: oily waste and other power block sumps; demineralizer regenerate; miscellaneous leaks and draindowns from various system routed to power block sumps; auxiliary boiler and S/G draindowns; groundwater; circulating, service, essential service and (biocide) treated fire protection water reroutes; and pre-sedimentation sludge and neutralized chemical cleaning back washes from RO and electrodeionization (EDI) units; treatment- oil water interceptor, neutralization, settling; 0.195 mgd - intermittent
- 004A NW ¼ Section 29, Township 21S, Range 16E: Intermittent discharge from the Wolf Creek Cooling Impoundment at the main dam; 2.9 mgd.
- 005A SE ¼ Section 6, Township 21S, Range 16E: Once a year lime sludge pond discharge of rerouted wastewater from outfall 003b during circulating water system outages, to WCCI; 5.8 mgd.
- 006A SE ¼ Section 8, Township 21S, Range 16E: Essential service water system discharge to WCCI during routine operations; oxidation; 26.5 mgd.

Eisenhower Learning Center - Three-cell non-overflowing domestic wastewater stabilization lagoon.

A. EFFLUENT LIMITATIONS AND MONITORING REQUIREMENTS

The permittee is authorized to discharge from outfall(s) with serial number(s) as specified in this permit. The effluent limitations shall become effective on the dates specified herein. Such discharges shall be controlled, limited, and monitored by the permittee as specified. There shall be no discharge of floating solids or visible foam in other than trace amounts.

Discharge Monitoring Reports (DMRs) shall be submitted monthly on or before the 28th day of the following month. In the event no discharge occurs, written notification is still required.

002 - Discharge of Oil Water Separator into Wolf Creek Cooling Impoundment

The permittee is authorized to discharge from the above named outfall in accordance with the conditions as specified herein:

1. The pH shall not be less than 6.0 standard units nor greater than 9.0 standard units.

A. **EFFLUENT LIMITATIONS AND MONITORING REQUIREMENTS** (continued)

2. The discharge shall not cause a violation of Kansas Surface Water Quality Standards, K.A.R. 28-16-28b through 28-16-28e. The permittee shall not discharge the following:
- oil or grease in concentrations which cause any visible film or sheen to form upon the surface of the receiving water;
 - oil or grease which causes a sludge or emulsion to be deposited beneath the surface of the receiving water, upon submerged substrate, or upon adjoining shorelines;
 - turbidity or color producing substances causing any change in the natural appearance of the stream or water body;
 - substances in the wastewater which cause objectionable odors in the vicinity of the receiving water;
 - floating debris, scum, foam, froth, or other floating material in other than trace amounts; or
 - materials which create deposits of sludge or fine solids causing aesthetic or environmental concerns downstream of the outfall.

The permittee shall, at a minimum, inspect the outfall and receiving stream(s) quarterly to ensure compliance with the above Water Quality Standards. The permittee shall maintain a log documenting the results of any monitoring or inspections performed and shall provide the log to KDHE staff for review upon request.

Any violation of the above general Water Quality Standards shall be reported within 24 hours of discovery, to either the Kansas Department of Health and Environment, Division of Environment at (785) 296-5517 or the appropriate KDHE District Office followed by a letter, within 5 days of discovery, explaining the cause of the water quality violation, the actions taken to correct the violation, and actions taken to prevent recurrence.

<u>Effective Date</u> Outfall Number and <u>Effluent Parameter(s) Units</u>	<u>EFFLUENT LIMITATIONS</u> <u>Final Upon Issuance</u>		<u>MONITORING</u> <u>REQUIREMENTS</u>	
	<u>Daily</u> <u>Average</u>	<u>Daily</u> <u>Maximum</u>	<u>Measurement</u> <u>Frequency</u>	<u>Sample</u> <u>Type</u>

002A - Oil Water Separator Discharge Over Weir into Culvert ⁽¹⁾

Flow - mgd		Monitor	daily	Weir
Total Suspended Solids - mg/l	30	100	Weekly	grab
Oil and Grease - mg/l	10	15	Weekly ⁽¹⁾	grab
pH - standard units	Between 6.0 and 9.0		Weekly	grab

- (1) Outfall 002A monitoring required only when discharges from power block area are rerouted into the PAB storm drains or into site oil/water separator. Daily monitoring of oil and grease is required when the discharges from power block sumps are rerouted from outfall 003B to this outfall.

A. EFFLUENT LIMITATIONS AND MONITORING REQUIREMENTS (continued)

<u>Effective Date</u> <u>Outfall Number and</u> <u>Effluent Parameter(s) Units</u>	<u>EFFLUENT LIMITATIONS</u> <u>Final Upon Issuance</u>		<u>MONITORING</u> <u>REQUIREMENTS</u>	
	<u>Daily</u> <u>Average</u>	<u>Daily</u> <u>Maximum</u>	<u>Measurement</u> <u>Frequency</u>	<u>Sample</u> <u>Type</u>
<u>003X Circulating Water System Discharge into Wolf Creek Cooling Impoundment</u> ⁽⁷⁾				
Flow - MGD		Monitor	Daily	Estimate
Total Residual Oxidant ⁽²⁾ - mg/l		0.2	Daily	grab
Whole Effluent Toxicity	See Supplemental Condition # 1			grab
pH - Standard Units	Between 6.0 and 9.0		Daily	grab
<u>003A Discharge of Radiation Waste and Steam Generator Blowdown into Circulating Water</u>				
Flow - MGD		Monitor	Weekly	Estimate
Total Suspended Solids- mg/l	30	100	Monthly	grab
<u>003B Water Treatment Plant and Wastewater Treatment System Discharge into Circulating Water System Discharge</u>				
Flow - MGD		Monitor	Weekly	Estimate
Total Suspended Solids- mg/l	30	100	Weekly	grab
Oil and Grease - mg/l	10	15	Weekly	grab
Biochemical Oxygen Demand (5 day) - mg/l		Monitor ⁽⁹⁾	Monthly	grab
Sulfate - mg/l		Monitor	Monthly	grab
Ammonia as N - mg/l		Monitor ⁽⁹⁾	Monthly	grab
Monoethanolamine - mg/l		Monitor	Monthly	grab
pH - Standard Units	Between 6.0 and 9.0		Weekly	grab
<u>004A - Cooling Impoundment Discharge to Wolf Creek</u> ⁽⁴⁾				
Flow - MGD		Monitor	Weekly ⁽³⁾	Estimate
Temperature - °F		Monitor	Weekly ⁽³⁾	grab
Chloride - mg/l		Monitor	Monthly ⁽³⁾	grab
Nitrate as N - mg/l		Monitor	Monthly ⁽³⁾	grab
Sulfate - mg/l		Monitor	Monthly ⁽³⁾	grab
pH - Standard Units	between 6.0 and 9.0		Monthly ⁽³⁾	grab
Whole Effluent Toxicity	See Supplemental Condition # 2			grab
Metals (Attachment B)		Monitor	Annually ⁽³⁾	grab

⁽²⁾ Total Residual Oxidant (TRO) shall also be monitored in the Service Water System (SWS) when the Circulating Water System (CWS) is not in service and SWS is brominated /chlorinated. During this operational mode the sampling location for TRO shall be moved

A. **EFFLUENT LIMITATIONS AND MONITORING REQUIREMENTS** (continued)

upstream of the Radwaste System discharge confluence. TRO monitoring is not required if CWS and SWS are not brominated/chlorinated. Supplemental Condition No. 6 is applicable to the CWS discharge alone and only to the CWS when combined with the SWS. Supplemental Conditions 6(a) does not apply to the SWS discharge regardless of the operating mode of the cooling systems; however, Supplemental Condition 6.b. is still applicable. All requested information is to be reported in the DMRs.

<u>Effective Date</u> <u>Outfall Number and</u> <u>Effluent Parameter(s) Units</u>	<u>EFFLUENT LIMITATIONS</u> <u>Final Upon Issuance</u>		<u>MONITORING</u> <u>REQUIREMENTS</u>	
	<u>Daily</u> <u>Average</u>	<u>Daily</u> <u>Maximum</u>	<u>Measurement</u> <u>Frequency</u>	<u>Sample</u> <u>Type</u>

005A - Lime Sludge Pond Discharge to Wolf Creek Cooling Impoundment ⁽⁵⁾

Flow - MGD		Monitor	Weekly	Estimate
Total Suspended Solids- mg/l	30	100	Weekly	grab
Oil and Grease - mg/l	10	15	Weekly	grab
pH - Standard Units	between 6.0 and 9.0		Weekly	grab

006A Service and Essential Service Water System Discharge through Essential Service Water System Piping into the Ultimate Heat Sink Area of WCCI ^{(6) (7)}

Flow - MGD		Monitor	2/week ⁽³⁾	Estimate
Total Residual Oxidant - mg/l		1.0	2/week ⁽³⁾	grab
pH - Standard Units	between 6.0 and 9.0		2/week ⁽³⁾	grab

001A Two Cell Domestic Wastewater Stabilization Pond Discharge To the Slough ⁽⁸⁾

Flow - MGD		Monitor	weekly ⁽³⁾	Estimate
Total Suspended Solids- mg/l	80	120	weekly ⁽³⁾	grab
BOD - mg/l	30	45	weekly ⁽³⁾	grab
Fecal Coliform - cells/100 ml			weekly ⁽³⁾	grab
From April 1 to October 31		200		
From November 1 to March 31		2000		
pH - Standard Units	between 6.0 and 9.0		weekly ⁽³⁾	grab

- (3) The first day of each discharge and at the stated frequency thereafter during discharge.
- (4) If by September 30 of each year the impoundment has not discharged since January 1 of that year, a sample shall be taken from the impoundment near the dam and analyzed for the indicated parameters. Permittee shall indicate the samples were "dipped" on the monitoring reports.
- (5) Discharge of monoethanolamine into the lime sludge pond will not be allowed unless prior KDHE approval is received.

A. **EFFLUENT LIMITATIONS AND MONITORING REQUIREMENTS** (continued)

- (6) The sampling location for 006 shall be at the discharge side of the heat exchanger prior to mixing with ultimate heat sink waters.
- (7) Use of any chemical additives including any oxidizing and/or non-oxidizing biocides for Asiatic clam control shall be subject to compliance with the Supplemental Condition No. 6.c and 15.
- (8) The two cells of the lagoon system shall be operated in series and the discharge shall be from the final cell only.
- (9) After the first full year of sampling, permittee may request KDHE reduce the monitoring frequency or discontinue the requirement for further monitoring of these parameters. To allow for laboratory set up, monitoring for these parameters will not be required until March 1, 2005.

B. **STANDARD CONDITIONS**

In addition to the specified conditions stated herein, the permittee shall comply with the attached Standard Conditions dated August 1, 1996.

C. **SCHEDULE OF COMPLIANCE**

None

D. **SUPPLEMENTAL CONDITIONS**

- 1. Acute Whole Effluent Toxicity (WET) testing shall be conducted annually on the effluent from outfall 003. The test procedures shall be in accordance with the EPA document, Methods for Measuring the Acute Toxicity of Effluents and Receiving Waters to Freshwater and Marine Organisms, fourth edition as published in August, 1993, (EPA/600/4-90/027F) using test organisms *Pimephales promelas* (fathead minnow) and any of the following daphnid (water flea) species: *Daphnia pulex*, *Daphnia magna*, or *Ceriodaphnia dubia* within a dilution series of 0, 25, 50, 75, 90, and 100% effluent. KDHE reserves the right to increase or decrease testing frequency based upon compliance history and toxicity testing results.
 - a. The permittee shall submit to KDHE a copy of the test report within five days of receipt of the information. KDHE reserves the right to require the permittee to take such actions as are reasonable to identify and remedy any identified or predicted toxic conditions in the receiving stream outside of the zone of initial dilution which is caused by the permittee's effluent.
 - b. The Permittee shall also test a portion of the same effluent sample used for the WET test for the substances per Attachment B.

The Permittee shall coordinate sampling for this test with other requirements of this permit and may use the test results to satisfy this and other corresponding testing requirements. The permittee shall use a laboratory approved by KDHE for Whole Effluent Toxicity testing.

D. SUPPLEMENTAL CONDITIONS (Continued)

2. Chronic Whole Effluent Toxicity (WET) testing shall be conducted on the effluent from outfall 004 once in calendar year 2005. If by September 30, 2005, the impoundment has not discharged since January 1, 2005, a sample shall be taken from the impoundment near the dam for analysis. Permittee shall indicate the sample was "dipped" on the monitoring reports.
 - a. The test procedures shall be in accordance with the EPA document, Short-Term Methods for Estimating the Chronic Toxicity of Effluents and Receiving Waters to Freshwater Organisms, third edition, July 1994, (EPA/600/4-91/002) using test organisms *Pimephales promelas* (fathead minnow) and *Ceriodaphnia dubia* (water flea) within a dilution series of 0, 25, 50, 75, and 100% effluent. KDHE reserves the right to increase or decrease testing frequency based upon compliance history and toxicity testing results.
 - b. The permittee shall submit to KDHE a copy of the test report within five days of receipt of the information. KDHE reserves the right to require the permittee to take such actions as are reasonable to identify and remedy any identified or predicted toxic conditions in the receiving stream outside of the mixing zone which is caused by the permittee's effluent.
 - c. Permittee shall coordinate sampling for this test with other monitoring requirements of this permit and may use the test results to satisfy this and other corresponding testing requirements. The permittee shall use a laboratory approved by KDHE for Whole Effluent Toxicity testing.
3. There shall be no discharge of polychlorinated biphenyl compounds.
4. All samples and flow measurements required for permit monitoring shall be taken on the same day except for miscellaneous discharges related to storm water runoff, oil storage area runoff, etc.
5. Miscellaneous discharges related to runoff are regulated by Water Quality Criteria. Runoff contained in the oil storage dike area(s) shall be visually inspected to determine if removal of oil and grease is necessary prior to discharge.
6. Except as provided in the subparagraphs "b" and "c" below:
 - a. Total residual oxidant may not be discharged from any single generating unit for more than two hours per day unless the discharger demonstrates to KDHE that discharge for more than two hours is required for macroinvertebrate control. Simultaneous multi-unit oxidation is permitted. Multi-unit oxidation must be designated in the monitoring reports.
 - b. A waiver of the total residual oxidant discharge time limit and an increase in the categorical concentration continues for the service water and essential service water systems.
 - c. Periodic oxidizing or non-oxidizing biocides treatment for Asiatic clam and Zebra

D. SUPPLEMENTAL CONDITIONS (Continued)

mussel control is permitted as described in the KDHE approved Asiatic clam control program and subsequent updates submitted and approved by KDHE

7. All radioactive components of the discharge are regulated solely by the U.S. Nuclear Regulatory Commission (NRC) under the requirements of the Atomic Energy Act and not by either the Environmental Protection Agency (EPA) under the Clean Water Act or the Kansas Department of Health and Environment under Kansas Water Pollution Control Regulations and Statutes.
8. The permittee shall develop and implement an oxidation schedule indicating the time, dosage and duration of applications for each unit. The records shall be maintained and made available for review upon KDHE or EPA request.
9. This permit shall be modified, or alternatively, revoked and reissued, to comply with any applicable effluent standard or limitation issued or approved under Sections 301 (b)(2), (C), and (D), 304 (b)(2), and 307 (a)(2) of the Clean Water Act, if the effluent standard or limitation so issued or approved:
 - a. Contains different conditions or is otherwise more stringent than any effluent limitation in the permit, or
 - b. Controls any pollutant not limited in the permit.

The permit as modified or reissued under this paragraph shall also contain any other requirements of the Act then applicable.

10. In the event the Environmental Protection Agency amends or promulgates the BPT, BAT and/or BCT effluent guideline limitations for a specific Point Source Category or any of the subcategories covering your industry, this permit will be revoked and reissued to incorporate the new limitation(s).
11. There shall be no discharge from the Eisenhower Learning Center waste stabilization lagoon system. Only domestic waste shall be directed to this lagoon system. The following requirements are applicable to all earthen lagoons:
 - a. All wastewater lagoons shall maintain a minimum of two feet of freeboard. The permittee shall measure and record weekly the depth of water in each wastewater treatment lagoon from the lowest point of overflow. A written log of all such measurements shall be maintained on site and be made available to KDHE personnel in accordance with Standard Condition No. 12 of this permit.
 - b. Permittee shall not change operations so as to introduce into the lagoons chemicals, cleaners, or any hazardous waste, not specifically identified in the permit application or specifically approved by KDHE.
 - c. Any solid waste and sludge generated from the lagoon, if disposed of in a landfill shall be in accordance with the requirements of the KDHE, Bureau of Waste Management. Land application of lagoon sludges shall be in accordance with a plan approved by KDHE Bureau of Water.

D. SUPPLEMENTAL CONDITIONS (Continued)

- d. All vegetation on the dikes and at the waters edge shall be properly maintained by regular mowing of grass and removal of cattails and woody vegetation.
 - e. The permittee shall prepare an alternate plan for emergency disposal of lagoon wastewater which shall be implemented whenever the required freeboard is not maintained.
 - f. The wastewater treatment plant shall be under the supervision of an operator who has been certified or is in the process of obtaining certification under K.S.A. 65-4501 et seq.
12. Use of earthen lagoons for the handling and treatment of industrial wastes is currently being reevaluated by KDHE. This is an ongoing effort resulting from increased emphasis, at both the state and federal level, in addressing source control as a mechanism for eliminating or minimizing the potential for groundwater contamination. The facility addressed by this permit has yet to be fully evaluated. As such, KDHE may require the installation of additional groundwater monitoring wells or other necessary improvements to the wastewater handling and disposal system. The permittee will be notified and consulted concerning any monitoring well installation requirements or possible lagoon system modifications at a later time. The installation of any monitoring wells or any modifications to the wastewater system requires prior approval by KDHE.
13. A report addressing the disposal of metal cleaning wastes is to be submitted to KDHE for approval at least 10 days or as soon as reasonably practicable before implementing metal chemical cleaning activities. Approval from the Department is required before chemical cleaning waste and wastewater can be disposed. Metal cleaning wastes are defined to be wastes derived from chemical cleaning of any metal process equipment, including boiler fireside cleaning and air preheater cleaning.
14. **Changes in Discharges of Pollutant Substances**

The permittee shall notify the Department as soon as it knows or has reason to believe:

-
- a. That any activity has occurred or will occur which would result in the discharge on a routine or frequent basis, of any pollutant which is not limited in the permit, if that discharge will exceed the highest of the following "notification levels":
 - (1) One hundred micrograms per liter (100 $\mu\text{g/l}$);
 - (2) Two hundred micrograms per liter (200 $\mu\text{g/l}$) for acrolein and acrylonitrile; five hundred micrograms per liter (500 $\mu\text{g/l}$) for 2,4-dinitrophenol and for 2-methyl-4,6-dinitrophenol; and one milligram per liter (1 mg/l) for antimony;
 - (3) Five (5) times the maximum concentration value reported for that pollutant in the permit application.

D. SUPPLEMENTAL CONDITIONS (Continued)

- b. That any activity has occurred or will occur which result in any discharge, on a non-routine or infrequent basis, of a pollutant which is not limited in the permit, if that discharge will exceed the highest of the following "notification levels":
 - (1) Five hundred micrograms per liter (500 $\mu\text{g/l}$);
 - (2) One milligram per liter (1 mg/l) for antimony;
 - (3) Ten (10) times the maximum concentration value reported for that pollutant in the permit application.
15. **Toxic Substances - Water Treatment Additives.** If the permittee utilizes or changes water treatment additives:
 - a. After the mixing zone provided by Kansas Water Quality Standards, the discharge of water treatment additives shall not be harmful to human, animal or plant life uses in the receiving water.
 - b. The permittee shall keep an ongoing log of the water treatment chemicals used, their potential concentration in the facility discharge, and the associated toxicity data for each chemical. A sample chemical additives evaluation log can be obtained from KDHE.
 - c. The permittee shall provide KDHE, upon request, toxicity tests and/or a chemical additives evaluation log the permittee uses to determine if the requirements in the paragraphs above are being achieved. In the event the data indicate the requirements in the paragraphs above are not achieved, KDHE reserves the right to amend the facility's NPDES permit to specify additional terms and conditions for toxic substances.
16. Kansas Surface Water Quality Standards will be enforced in Wolf Creek at the point of discharge from the Wolf Creek Cooling Impoundment to Wolf Creek. Discharges to waters of the State shall be guided by the current state surface water quality standards, K.A.R. 28-16-28b et seq.

17. Wolf Creek Nuclear Operation Corporation (WCNOC), a Delaware corporation, is the agent for Kansas Gas and Electric Co., Kansas City Power and Light Co. and Kansas Electric Power Cooperative, Inc. The referenced companies shall, in accordance with their Wolf Creek Generating Station Operating Agreement (dated April 15, 1986), be severally liable (in proportion with their ownership shares of the plant) for compliance with the terms and conditions stated in the permit and applicable laws.
18. When the flow through Outfall 006 consists solely of service water from the Service Water System diverted to the Essential Service Water System (other than flows recirculated directly from the Wolf Creek Cooling Impoundment), a sample collected from the Service Water System shall be considered representative of Outfall 006 for purposes of monitoring required by this permit.

D. **SUPPLEMENTAL CONDITIONS** (Continued)

19. Permittee shall maintain and modify the existing stormwater pollution prevention plan as necessary in accordance with **ATTACHMENT A**. A copy of the SWP3 shall be kept on site and be available for KDHE or EPA inspection upon request.
 20. Discharge of industrial stormwater (as defined in 40 CFR part 122.26 (b)(14)) from the facility, except for stormwater associated with construction activity disturbing 1 acre or more of soil, is authorized under this permit. Such discharges shall be in compliance with the Kansas Surface Water Quality Standards (KAR 28-16-28) and in conformance with the facility stormwater pollution prevention plan developed in accordance with **ATTACHMENT A**.
 21. Information required by the 316(b) Phase II regulations, 40 CFR Part 125.95 et seq., shall be submitted to KDHE - Bureau of Water in accordance with the dates indicated in the Phase II regulations.
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ATTACHMENT A**STORM WATER POLLUTION PREVENTION PLAN REQUIREMENTS AND GUIDELINES**

The Storm water Pollution Prevention plan (SWP2 plan) shall be specific to the industrial activities and site characteristics occurring at the location described in this permit. The permittee shall fully implement the provisions of the SWP2 plan required under this permit as a condition of this permit.

The purpose of the SWP2 plan is to ensure the design, implementation, management, and maintenance of Best Management Practices (BMPs) in order to reduce the amount of pollutants in storm water discharges associated with the industrial activities at the facility. The SWP2 plan shall evaluate BMPs from each of three major classes: managerial/administrative; structural controls and non-structural controls.

The permittee shall evaluate, select, install, utilize, operate and maintain the BMPs in accordance with the concepts and methods described in Environmental Protection Agency (EPA) document number EPA 832-R-92-006, entitled *Storm water Management for Industrial Activities - Developing Pollution Prevention Plans and Best Management Practices*, published in September, 1992¹; and the U.S. Environmental Protection Agency's *Final NPDES Storm Water Multi-Sector General Permit for Industrial Activities*; Notice dated Sept. 29, 1995, and subsequent modifications.

The SWP2 plan and any amendments shall be prepared by, or under the supervision of, and sealed by a Kansas licensed professional engineer. The SWP2 plan shall be reviewed and re-certified for compliance with accepted engineering standards for storm water pollution prevention at least once every five years. The plan shall contain, at a minimum, the following items:

1. **Pollution Prevention Team** - Specific individuals shall be identified within the facility organization as members of a Storm water Pollution Prevention Team who are responsible for developing, implementing, maintaining and revising the plan. Each member's responsibilities shall be clearly identified in the plan. The activities and responsibilities of the team shall address all aspects of the facility's storm water pollution prevention plan.
2. **Description of potential pollutant sources** - pollutant sources which may reasonably be expected to add significant amounts of pollutants to the storm water discharge shall be described. The description shall include, at a minimum:
 - a. **Site Map** - a site map identifying: the outline drainage areas of each storm water outfall; the location of significant materials exposed to precipitation; storage tanks; scrap yards and general refuse areas; fuel storage and distribution areas; vehicle and equipment maintenance and storage areas; loading/unloading areas; waste treatment, storage or disposal areas; short and long term material storage areas (including but not limited to: supplies, construction materials, plant equipment, oils, fuels, used and unused solvents, cleaning materials, paint, water treatment chemicals, fertilizers, and pesticides); landfills; construction sites; stock piles; major spills or leaks; surface water bodies and existing structural control measures to reduce pollutants in storm water runoff (such as bermed areas, grassy swales, etc.).
 - b. **Inventory of Exposed Materials** - a narrative description of significant materials handled, treated, stored, leaked, spilled or disposed of in a manner to allow exposure to storm water within the period starting three years prior to the date of this permit; existing structural and nonstructural control measures to reduce pollutants in storm water runoff; and any treatment the storm water receives. A list of significant spills and leaks of toxic / hazardous materials in exposed areas shall be maintained and kept updated.
 - c. **Sampling Data** - a summary of existing sampling data.
 - d. **Risk Identification and Summary of Potential Pollutant Sources** - A narrative description of the potential pollutant sources and pollutant parameter of concern shall be identified.

3. Measures and Controls - A description of storm water management controls appropriate for the facility which addresses the following minimum components, including a schedule for implementing such controls to the extent practical:
- a. Good housekeeping requiring the maintenance of areas in a clean, orderly manner including handling and storage areas (exposed to precipitation) for raw metals, scrap metals, fines, paints and other process areas.
 - b. Preventive Maintenance - Including timely inspection and maintenance of storm water management devices, like oil water separators, catch basins etc.
 - c. Spill Prevention and Response Procedures - Appropriate material handling procedure, storage requirements, use of equipment such as diversion valves, and procedures for cleaning up spills should be identified. Availability of the necessary equipment to implement a clean up should be addressed. The following areas should be addressed:
 - (1) Metal fabrication and finishing areas - include measures for maintaining clean, dry, orderly conditions and use of dry clean-up techniques;
 - (2) Receiving, Unloading and Storage Areas and Raw Material Storage Areas - include measures to prevent spills & leaks; easy access for spill clean-up; quick and correct identification of materials; and train employees on clean-up techniques.
 - (3) Storage of Equipment - include procedures for proper clean-up and/or covering of equipment before storing outdoors.
 - (4) Storage of Metal Working Fluids - measures to identify proper controls.
 - (5) Cleaners and Rinse Water - Include measures to control spills, build-up and disbursement of sand from sand blasting, and use of less toxic cleaners.
 - (6) Lubricating Oils and Hydraulic Fluids - include procedures for using detecting and control devices to reduce, prevent, and contain leaks and overflows.
 - (7) Chemical Storage Areas - include a program to inspect containers, and identify proper disposal and spill controls to prevent storm water contamination.
 - d. Inspections: Identification of qualified facility personnel to inspect at appropriate intervals designated equipment and storage areas for raw metal, finished product, materials and chemicals, recycling, equipment, paint, fueling and maintenance; and loading, unloading, and waste management areas. A set of tracking or follow-up procedures shall be used to ensure that appropriate actions are taken in response to the inspections. Records of inspections shall be maintained on-site for at least three years after the date of the inspection.
 - e. Employee Training: Employee training programs to inform personnel responsible for implementing activities identified in the storm water pollution prevention plan or otherwise responsible for storm water management, at all levels of responsibility, of the components and goals of the storm water pollution prevention plan. The pollution prevention plan shall consider periodic dates for such training, but in all cases training must be held at least annually.
 - f. Record keeping and Internal Reporting Procedures: A log to document a description of incidents (such as spills, or other discharges), along with other information which may impact the quality and quantity of storm water discharges needs to be developed and maintained. Reporting procedures, inspections and maintenance activities shall be developed and included in the SWP3 plan.
 - g. Non-storm water Discharges -include a certification that the discharge has been tested or evaluated for the presence of dry weather flows. The certification should include all potential significant sources of dry weather flows, all analytical data for quality and quantity of such flows, and signature of the authorized person. The plan shall identify and ensure the implementation of appropriate pollution prevention measures for the dry weather flow component(s) of the discharge.
 - h. Sediment and Erosion Control: Measures to minimize erosion in areas which, due to topography, activities, or other factors, have a high potential for significant soil erosion. At a minimum consider structural,

vegetative, and/or stabilization measures to limit erosion. Must include measures to minimize erosion related to the high volume of traffic from heavy equipment for delivery to and from the facility and for equipment operating at the facility on a daily basis such as forklifts, cranes etc.

- i. Management of Runoff: Describe and consider the appropriateness of traditional storm water management practices (practices other than those which control the generation or source(s) of pollutants) to divert, infiltrate, reuse or otherwise manage storm water runoff in a manner that reduces pollutants in storm water discharges from the site. Include that the measures that the permittee determines to be reasonable and appropriate should be implemented and maintained. The potential of various sources at the facility to contribute pollutants to storm water discharges associated with industrial activity (see Item 3.c) shall be considered when determining reasonable and appropriate measures to implement.
4. Comprehensive Site Compliance Evaluation - Qualified personnel shall conduct site compliance evaluations at least once a year. Such evaluations shall provide for:
 - a. Visual inspection of areas contributing to a storm water discharge associated with industrial activity for evidence of, or the potential for, pollutants entering the drainage system. Evaluation of measures to reduce pollutant loadings to determine whether they are adequate and properly implemented in accordance with the terms of the permit or whether additional control measures are needed. A visual evaluation of equipment needed to implement the plan, such as spill response equipment and containment drums, shall be made to determine it is functioning properly and drums are not corroded.
 - b. A report summarizing the scope of the evaluation, personnel making the evaluation, the date(s) of the evaluation, major observations relating to the implementation of the storm water pollution prevention plan, and any actions taken shall be made and retained as part of the storm water pollution prevention plan. Where a report does not identify any incidents of noncompliance, a certification that the facility is in compliance with the storm water pollution prevention plan and this permit needs to be included in the plan.
 5. Monitoring and Record Keeping Requirements.
 - a. Visual Examination of Storm Water Quality: The permittee shall perform and document at least one visual examination of a storm water discharge associated with industrial activity from each identified storm water outfall. Visual examination reports shall be maintained in the plan. Each report shall include the date and time, name of the person performing examination, nature of discharge (runoff or snow melt), visual quality of the discharge (i.e., color, odor, clarity, floating solids, suspended solids, foam, oil sheen, and other indicators of storm water pollution) and probable sources of any observed contamination.
 - b. To ensure the adequacy of the best management practices developed within the SWP2 plan, the permittee needs to periodically monitor² the storm water discharges during wet weather events for potential contaminants which may reasonably be expected to be present in the discharge. Record of all storm water monitoring reports, unless otherwise indicated in this permit, shall be kept on file.
 6. The plan shall be re-evaluated and modified in a timely manner, but in no case more than 12 weeks after:
 - a. a change in design, construction, operation or maintenance that has a significant effect on the potential for the discharge of pollutants to the waters of the State, or
 - b. the permittee's inspections (including the regular comprehensive site compliance evaluation required herein) indicate deficiencies in the SWP2 plan or any BMP; or
 - c. a visual inspection of contributing areas or a visual inspection of the storm water discharges or monitoring of the storm water discharges indicate the plan appears to be ineffective in eliminating or significantly minimizing pollutants from sources identified in the plan.

²For sampling methods and procedures please refer to NPDES STORM WATER SAMPLING GUIDANCE DOCUMENT, EPA 833-B-92-001. This document can be obtained by calling (202) 564-0746 or the National Technical Information Service (NTIS) at (800) 553-6847.

ATTACHMENT B

Quantitative limits for analysis performed for any parameter in conjunction with this permit must be less than or equal to those indicated.

HEAVY METAL DETECTION LIMITS

<u>ANALYTICAL PARAMETER</u>	<u>CAS NUMBER</u>	<u>Quantitative Limit</u>	<u>Units</u>
antimony, total	7440-36-0	10	µg/l
arsenic, total	7440-38-2	10	µg/l
beryllium, total	7440-41-7	5	µg/l
cadmium, total	7440-43-9	3	µg/l
chromium, total	7440-47-3	10	µg/l
copper, total	7440-50-8	10	µg/l
lead, total	7439-92-1	5	µg/l
mercury, total	7439-97-6	0.5	µg/l
nickel, total	7440-02-0	50	µg/l
selenium, total	7782-49-2	5	µg/l
silver, total	7440-22-4	10	µg/l
thallium, total	7440-28-0	10	µg/l
zinc, total	7440-66-6	20	µg/l

OTHERS

Total hardness as CaCO ₃			mg/l
Ammonia as N		0.2	mg/l
Effluent Temperature			°F
pH			s.u.

All metals shall be tests and reported as "total recoverable" metals.

STANDARD CONDITIONS FOR
KANSAS WATER POLLUTION CONTROL AND
NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM PERMIT.

1. Representative Sampling:

- A. Samples and measurements taken as required herein shall be representative of the nature and volume of the monitored discharge. All samples shall be taken at the location designated in this permit, and unless specified, at the outfall(s) before the effluent joins or is diluted by any other water or substance.
- B. Monitoring results shall be recorded and reported on forms acceptable to the Division and postmarked no later than the 28th day of the month following the completed reporting period. Signed and certified copies of these, prepared in accordance with KAR 28-16-59 and all other reports required herein, shall be submitted to:

Kansas Department of Health & Environment
Bureau of Water-Technical Services Section
1000 SW Jackson Street, Suite 420
Topeka, KS 66612-1367

2. Schedule of Compliance: No later than 14 calendar days following each date identified in the "Schedule of Compliance," the permittee shall submit to the above address, either a report of progress or, in the case of specific action being required by identified dates, a written notice of compliance or noncompliance. In the latter case, the notice shall include the cause of noncompliance, any remedial actions taken, and the probability of meeting the next scheduled requirements, or, if there are no more scheduled requirements, when such noncompliance will be corrected.

3. Definitions:

- A. The "daily average" discharge means either the total discharge by weight during a calendar month divided by the number of days in the month that the facility was operating or the average concentration for the month. The daily average discharge shall be determined by the summation of all measured daily discharges by weight divided by the number of days during the calendar month when the measurements were made, or by the summation of all concentrations determined during the calendar month divided by the number of samples collected and analyzed.
- B. The "daily maximum" discharge means the total discharge by weight or average concentration during a 24 hour period.
- C. The "monthly average", other than for fecal coliform bacteria, is the arithmetic mean of the value of effluent samples collected in a period of 30 consecutive days. The monthly average for fecal coliform bacteria is the geometric mean of the value of the effluent samples collected in a period of 30 consecutive days.
- D. The "weekly average", other than for fecal coliform bacteria, is the arithmetic mean of the value of effluent samples collected in a period of 7 consecutive days. The weekly average for fecal coliform bacteria is the geometric mean of the value of effluent samples collected in a period of 7 consecutive days.
- E. A "grab sample" is an individual sample collected in less than 15 minutes.

- F. A "composite sample" is a combination of individual samples in which the volume of each individual sample is proportional to the discharge flow, the sample frequency is proportioned to the flow rate over the sample period, or the sample frequency is proportional to time.
- G. The "act" means the Clean Water Act, 30 USC Section 1251 et seq.
- H. The terms "Director", "Division", and "Department" refer to the Director, Division of Environment, Kansas Department of Health and Environment, respectively.
- I. "Severe property damage" means substantial physical damage to property, damage to the treatment facilities which causes them to become inoperable, or substantial and permanent loss of natural resources which can reasonably be expected to occur in the absence of a bypass. Severe property damage does not mean economic loss caused by delays in production.
- J. "Bypass" means any diversion of waste streams from any portion of a treatment facility or collection system.
4. **Test Procedures:** All analysis required by this permit shall conform to the requirements of 33 USC Section 1314(h), and shall be conducted in a laboratory certified by this Department. For each measurement or sample, the permittee shall record the exact place, date, and time of sampling; the date of the analyses, the analytical techniques or methods used, and the individual(s) who performed the sampling and analysis and, the results. If the permittee monitors any pollutant at the location(s) designated herein more frequently than required by this permit, using approved procedures, the results shall be included in the Discharge Monitoring Report form required in 1.B. above. Such increased frequencies shall also be indicated.
5. **Records Retention:** All records and information resulting from the monitoring activities required by this permit, including all records of analyses and calibration and maintenance of instrumentation and recordings from continuous monitoring instrumentation, shall be retained for a minimum of 3 years, or longer if requested by the Division.
6. **Change in Discharge:** All discharges authorized herein shall be consistent with the terms and conditions of this permit. The discharge of any pollutant not authorized by this permit or of any pollutant identified in this permit more frequently than or at a level in excess of that authorized shall constitute a violation of this permit. Any anticipated facility expansions, productions or flow increases, or process modifications which result in a new, different, or increased discharge of pollutants shall be reported to the Division at least one hundred eighty (180) days before such change.
7. **Noncompliance Notifications:** If for any reason, the permittee does not comply with, or will be unable to comply with any daily maximum or weekly average effluent limitations specified in this permit, the permittee shall provide the Department with the following information in writing within five days of becoming aware of such condition:
- A. A description of the discharge and cause of noncompliance, and
 - B. the period of noncompliance including exact dates and times or if not corrected, the anticipated time the noncompliance is expected to continue and steps taken to reduce, eliminate and prevent recurrence of the noncomplying discharge.

The above information shall be provided with the submittal of the regular Discharge Monitoring Report form for violations of daily average or monthly average effluent limitations.

3. **Facilities Operation:** The permittee shall at all times maintain in good working order and efficiently and effectively operate all treatment, collection, control systems or facilities, to achieve compliance with the terms of this permit. Such proper operation and maintenance procedures shall also include adequate laboratory controls and appropriate quality assurance procedures. Maintenance of treatment facilities which results in degradation of effluent quality, even though not causing violations of effluent limitations shall be scheduled during noncritical water quality periods and shall be carried out in a manner approved in advance by the Division. The permittee shall take all necessary steps to minimize or prevent any adverse impact to waters of the State resulting from noncompliance with any effluent limitations specified in this permit, including such accelerated or additional monitoring as necessary to determine the nature and impact of the noncomplying discharge. When necessary to maintain compliance with the permit conditions, the permittee shall halt or reduce those activities under its control which generate wastewater routed to this facility.
3. **Immediate Reporting Required:** Any diversion from, or bypass of facilities necessary to maintain compliance with the permit is prohibited, except: where no feasible alternatives to the bypass exist and 1) where necessary to prevent loss of human life, personal injury or severe property damage; or 2) where excessive stormwater inflow or infiltration would damage any facilities necessary to comply with this permit or 3) where the permittee notifies the Director seven days in advance of an anticipated bypass. The Director or Director's designee may approve a bypass, after considering its adverse effects, if any of the three conditions listed above are met. The permittee shall immediately notify the Division by telephone [(913) 296-5517 or the appropriate KDHE District Office] of each bypass and shall confirm the telephone notification with a letter explaining what caused this spill or bypass and what actions have been taken to prevent recurrence. Written notification shall be provided to the Director within five days of the permittee becoming aware of the bypass. The Director or Director's designee may waive the written report on a case-by-case basis.
0. **Removed Substances:** Solids, sludges, filter backwash, or other pollutants removed in the course of treatment or control of wastewaters shall be disposed of in a manner acceptable to the Division.
1. **Power Failures:** The permittee shall provide an alternative power source sufficient to operate the wastewater control facilities or otherwise control pollution and all discharges upon the loss of the primary source of power to the wastewater control facilities.
2. **Right of Entry:** The permittee shall allow authorized representatives of the Division of Environment or the Environmental Protection Agency upon the presentation of credentials, to enter upon the permittee's premises where an effluent source is located, or in which are located any records required by this permit, and at reasonable times, to have access to and copy any records required by this permit, to inspect any monitoring equipment or monitoring method required in this permit, and to sample any influents to, discharges from or materials in the wastewater facilities.
3. **Transfer of Ownership:** The permittee shall notify the succeeding owner or controlling person of the existence of this permit by certified letter, a copy of which shall be forwarded to the Division. The succeeding owner shall secure a new permit. The permit is not transferable to any person except after notice and approval by the Director. The Director may require modification or revocation and reissuance of the permit to change the name of the permittee and incorporate such other requirements as may be necessary.
4. **Availability of Records:** Except for data determined to be confidential under 33 USC Section 1318, all reports prepared in accordance with the terms of this permit shall be available for public inspection at the offices of the Department. Effluent data shall not be considered confidential. Knowingly making any false statement on any such report or tampering with equipment to falsify data may result in the imposition of criminal penalties as provided for in 33 USC Section 1319 and KSA 65-170c.

5. **Permit Modifications and Terminations:** As provided by KAR 28-16-62, after notice and opportunity for a hearing, this permit may be modified, suspended or revoked or terminated in whole or in part during its term for cause as provided, but not limited to those set forth in KAR 28-16-62 and KAR 28-16-28b through f. The permittee shall furnish to the Director, within a reasonable amount of time, any information which the Director may request to determine whether cause exists for modifying, revoking and reissuing, or terminating this permit or to determine compliance with this permit. The permittee shall also furnish upon request, copies of all records required to be kept by this permit.
16. **Toxic Pollutants:** Notwithstanding paragraph 15 above, if a toxic effluent standard or prohibition (including any schedule of compliance specified at such effluent standards) is established under 33 USC Section 1317(a) for a toxic pollutant which is present in the discharge and such standard or prohibition is more stringent than any limitation for such pollutant in this permit, this permit shall be revised or modified in accordance with the toxic effluent standard or prohibition. Nothing in this permit relieves the permittee from complying with federal toxic effluent standards as promulgated pursuant to 33 USC Section 1317.
17. **Civil and Criminal Liability:** Except as authorized in paragraph 9 above, nothing in this permit shall be construed to relieve the permittee from civil or criminal penalties for noncompliance as provided for in KSA 65-170d, KSA 65-167, and 33 USC Section 1319.
18. **Oil and Hazardous Substance Liability:** Nothing in this permit shall be construed to preclude the institution of any legal action or relieve the permittee from any responsibilities, liabilities or penalties to which the permittee is or may be subject to under 33 USC Section 1321 or KSA 65-164 et seq. The municipal permittee shall promptly notify the Division by telephone upon discovering crude oil or any petroleum derivative in its sewer system or wastewater treatment facilities.
19. **Industrial Users:** The municipal permittee shall require any industrial user of the treatment works to comply with 33 USC Section 1317, 1318 and any industrial user of storm sewers to comply with 33 USC Section 1308.
20. **Property Rights:** The issuance of this permit does not convey any property rights in either real or personal property, or any exclusive privileges, nor does it authorize any injury to private property or any invasion of personal rights nor any infringements of or violation of federal, state or local laws or regulations.
21. **Operator Certification:** The permittee shall ensure the wastewater facilities are under the supervision of an operator certified by the Department. If the permittee does not have a certified operator or loses its certified operator, appropriate steps shall be taken to obtain a certified operator as required by KAR 28-16-30 et seq.
22. **Severability:** The provisions of this permit are severable. If any provision of this permit or any circumstance is held invalid, the application of such provision to other circumstances and the remainder of the permit shall not be affected thereby.
23. **Removal from Service:** The permittee shall inform the Division at least three months before a pumping station, treatment unit, or any other part of the treatment facility permitted by this permit is to be removed from service and shall make arrangements acceptable to the Division to decommission the facility or part of the facility being removed from service such that the public health and waters of the state are protected.
24. **Duty to Reapply:** A permit holder wishing to continue any activity regulated by this permit after the expiration date, must apply for a new permit at least 180 days prior to expiration of the permit.