

**AUTHORIZATION TO DISCHARGE UNDER
THE OKLAHOMA POLLUTANT DISCHARGE ELIMINATION SYSTEM**

**PERMIT NUMBER: OK0002429
ID NUMBER: I-72000540**

In compliance with the Oklahoma Pollutant Discharge Elimination System (OPDES) Act, Title 27A Oklahoma Statutes (O.S.) § 2-6-201, *et seq.*, as amended, Oklahoma Uniform Environmental Permitting Act, 27A O.S. § 2-14-101 *et seq.*, as amended, and the rules of the Oklahoma Department of Environmental Quality (DEQ) adopted thereunder (see the Oklahoma Administrative Code (OAC) 252:606 and OAC 252:616); the Federal Clean Water Act (CWA), Public Law 95-217 (33 U.S.C. 1251, *et seq.*), Section 402; and the National Pollutant Discharge Elimination System (NPDES) regulations at Title 40 of the Code of Federal Regulations (C.F.R.) Parts 122 and 124), and in reliance on the certified statements and representations heretofore made in its application,

Public Service Company of Oklahoma
Riverside Power Station
700 East 116th St.
Jenks, OK 74037

is authorized to discharge from their facility, located at:

NE¼ of Section 31, the W½ of Section 32, and the W½, E½ of Section 32,
Township 18 North, Range 13 East, Indian Meridian, Tulsa County, Oklahoma
or at 700 E. 116th Street, Jenks, OK 74037

to receiving waters identified as: The Arkansas River in stream segment 120420 (WBID No. OK120420010010_00) of the Middle Arkansas River Basin, from:

Outfall 001:

Latitude 35.992434° N, Longitude 95.945093° W (GPS: NAD83)
SE¼, NW¼, SE¼, Section 32, Township 18 North, Range 13 East,
Indian Meridian, Tulsa County, Oklahoma

in accordance with effluent limitations, monitoring requirements and other conditions set forth in Parts I, II, and III, hereof.

The above-referenced facility is authorized to retain wastewater in one (1) total retention surface impoundment (T01) and one (1) flow-through surface impoundment (F02) as described in the Appendix. Direct discharge of wastewater from surface impoundment T01 to waters of the State is specifically prohibited. Surface impoundments shall be maintained in accordance with Parts I, II, and IV, hereof.

Issuance of this permit in no way or in any respect affects the permittee's civil or criminal responsibility regarding disposal of wastewater, except with respect to the permittee's legal responsibility under the OPDES Act and DEQ Rules.

This permit replaces and supersedes the previous permit issued on October 8, 2021.

The issuance date of this permit is Month Date Year.

This permit shall become effective Month Date Year.

This permit and authorization to discharge shall expire at midnight Month Date Year.

For the Oklahoma Department of Environmental Quality:

Jason Ma, P.E., Manager
Industrial Permits Section
Water Quality Division

George Russell IV, Director
Water Quality Division

PART I EFFLUENT LIMITATIONS AND MONITORING REQUIREMENTS

SECTION A. EFFLUENT LIMITATIONS AND MONITORING REQUIREMENTS

1. Effluent Limitations and Monitoring Requirements for Outfall 001

a. Interim Limitations and Monitoring Requirements

Not applicable.

b. Final Limitations and Monitoring Requirements

During the period beginning on the effective date and lasting through the expiration date, the permittee is authorized to discharge from Outfall 001. The discharge from Outfall 001 consists of cooling tower blowdown and treated low volume wastewater from various sources as described in Section II.B of the fact sheet. Such discharge shall be limited and monitored by the permittee as specified below.

Final Effluent Limitations

Parameters ⁽¹⁾	Mass Loading Limits (lbs/day unless otherwise specified)		Concentration Limits (mg/L unless otherwise specified)	
	Monthly Average	Daily Maximum	Monthly Average	Daily Maximum
Flow STORET: 50050	Report (MGD)	Report (MGD)	---	---
Total Residual Chlorine (TRC) STORET: 50060	---	---	---	ND ⁽²⁾
pH STORET: 00400	Between 6.5 s.u. – 9.0 s.u.			

⁽¹⁾ There shall be no discharge of polychlorinated biphenyl compounds such as those commonly used for transformer fluid.

⁽²⁾ ND is "Non-detect" and is defined as <0.1 mg/L instantaneous maximum.

Final Monitoring Requirements

Parameters	Measurement Frequency ⁽¹⁾	Sample Type
Flow	Continuous	Record
TRC	1/week	Grab
pH	2/month	Grab

⁽¹⁾ When discharging.

NOTE: See Parts II and III for Additional Requirements.

There shall be no discharge of a visible sheen of oil or globules of oil or grease on or in the water. Oil and grease shall not be present in quantities that adhere to stream banks and coat bottoms of water courses.

There shall be no discharge of floating solids or visible foam in other than trace amounts.

The discharge shall not contain chemical, physical, or biological substances in concentrations that are irritating to skin or sense organs or are toxic or cause illness upon ingestion by human beings.

Samples taken in compliance with the monitoring requirements specified above shall be taken at the following location:

Outfall 001: At the outfall structure prior to being discharged over the weir to the Arkansas River in the SE¼, NW¼, SE¼, Section 32, Township 18 North, Range 13 East, Indian Meridian, Tulsa County, Oklahoma, at Latitude 35.992434° N, Longitude 95.945093° W (GPS: NAD83).

2. Effluent Limitations and Monitoring Requirements for Internal Monitoring Point 101 (IMP 101)

a. Interim Limitations and Monitoring Requirements

Not applicable.

b. Final Limitations and Monitoring Requirements

During the period beginning on the effective date and lasting through the expiration date, the permittee is authorized to discharge from IMP 101. The discharge from IMP 101 consists of treated cooling tower blowdown as described in Section II.B of the fact sheet. Such discharge shall be limited and monitored by the permittee as specified below.

Final Effluent Limitations

Parameters	Mass Loading Limits (lbs/day unless otherwise specified)		Concentration Limits (mg/L unless otherwise specified)	
	Monthly Average	Daily Maximum	Monthly Average	Daily Maximum
Flow STORET: 50050	Report (MGD)	Report (MGD)	---	---
Free Available Chlorine (FAC) ⁽¹⁾ STORET: 50064	7.44	18.61	0.2	0.5

⁽¹⁾ Per 40 C.F.R. § 423.12(b)(8), Neither FAC nor TRC may be discharged from any unit for more than two (2) hours in any one (1) day and not more than one (1) unit in any plant may discharge FAC or TRC at any one (1) time unless the utility can demonstrate to the Regional Administrator or DEQ that the units in a particular location cannot operate at or below this level of chlorination. Mass loading limitations for FAC were established in the previous permit to comply with the technology-based narrative requirement in 40 C.F.R. § 423.12(b)(8). The limitation is based on twenty-four (24) hours of chlorination in the cooling towers, and using the formula listed in Section VII.A of the fact sheet.

Final Monitoring Requirements

Parameters	Measurement Frequency ⁽¹⁾	Sample Type
Flow	Continuous	Estimate
FAC	1/year	Grab

⁽¹⁾ When discharging.

NOTE: See Parts II and III for Additional Requirements.

There shall be no discharge of a visible sheen of oil or globules of oil or grease on or in the water. Oil and grease shall not be present in quantities that adhere to stream banks and coat bottoms of water courses.

Samples taken in compliance with the monitoring requirements specified above shall be taken at the following location:

IMP 101: At the sample point after the cooling towers, in the NE¼, SW¼, NW¼, Section 32, Township 18 North, Range 13 East, Indian Meridian, Tulsa County, Oklahoma, at Latitude 35.998963° N, Longitude 95.955289° W (GPS: NAD83).

3. Effluent Limitations and Monitoring Requirements for Internal Monitoring Point 102 (IMP 102)

a. Interim Limitations and Monitoring Requirements

Not applicable.

b. Final Limitations and Monitoring Requirements

During the period beginning on the effective date and lasting through the expiration date, the permittee is authorized to discharge from IMP 102. The discharge from IMP 102 consists of low volume wastewater from various sources as described in Section II.B of the fact sheet. Such discharge shall be limited and monitored by the permittee as specified below.

Final Effluent Limitations

Parameters	Mass Loading Limits (lbs/day unless otherwise specified)		Concentration Limits (mg/L unless otherwise specified)	
	Monthly Average	Daily Maximum	Monthly Average	Daily Maximum
Flow STORET: 50050	Report (MGD)	Report (MGD)	---	---
Total Suspended Solids (TSS) STORET: 00530	---	---	30	100
Oil and Grease STORET: 00552	---	---	15	20

Final Monitoring Requirements

Parameters	Measurement Frequency ⁽¹⁾	Sample Type
Flow	Continuous	Estimate
TSS	2/month	Grab
Oil and Grease	1/quarter	Grab

⁽¹⁾ When discharging.

NOTE: See Parts II and III for Additional Requirements.

There shall be no discharge of a visible sheen of oil or globules of oil or grease on or in the water. Oil and grease shall not be present in quantities that adhere to stream banks and coat bottoms of water courses.

Samples taken in compliance with the monitoring requirements specified above shall be taken at the following location:

IMP 102: At the sample point after discharging from F02, in the SE¼, SW¼, NW¼, Section 32, Township 18 North, Range 13 East, Indian Meridian, Tulsa County, Oklahoma, at Latitude 35.996651° N, Longitude 95.954072° W (GPS: NAD83).

4. Effluent Limitations and Monitoring Requirements for Internal Monitoring Point 103 (IMP 103)

a. Interim Limitations and Monitoring Requirements

Not applicable.

b. Final Limitations and Monitoring Requirements

During the period beginning on the effective date and lasting through the expiration date, the permittee is authorized to discharge from IMP 103. The discharges from IMP 103 consist of wastewater contained in surface impoundment T01. During extreme precipitation events, the facility can discharge the wastewater contained in surface impoundment T01 to alleviate wastewater levels that may lead to violations of freeboard limitations and/or impoundment bypass. A description of the wastewater and the justification for allowing discharges from surface impoundment T01 can be found in Section II.B and Section IV.B.5 of the fact sheet. Such discharge shall be limited and monitored by the permittee as specified below.

Final Effluent Limitations

Parameters	Mass Loading Limits (lbs/day unless otherwise specified)		Concentration Limits (mg/L unless otherwise specified)	
	Monthly Average	Daily Maximum	Monthly Average	Daily Maximum
Flow STORET: 50050	Report (MGD)	Report (MGD)	---	---
TSS STORET: 00530	---	---	30	100
Oil and Grease STORET: 00552	---	---	15	20
Copper, total STORET: 01042	---	---	1.0	1.0
Iron, total STORET: 01045	---	---	1.0	1.0

Final Monitoring Requirements

Parameters	Measurement Frequency ⁽¹⁾	Sample Type
Flow	Continuous	Estimate
TSS	1/month	Grab
Oil and Grease	1/month	Grab
Copper, total	1/month	Grab
Iron, total	1/month	Grab

⁽¹⁾ When discharging.

NOTE: See Parts II and III for Additional Requirements.

There shall be no discharge of a visible sheen of oil or globules of oil or grease on or in the water. Oil and grease shall not be present in quantities that adhere to stream banks and coat bottoms of water courses.

Samples taken in compliance with the monitoring requirements specified above shall be taken at the following location:

IMP 103: At the sample point after discharging from T01, in the NW¼, SE¼, NW¼, Section 32, Township 18 North, Range 13 East, Indian Meridian, Tulsa County, Oklahoma, at Latitude 35.997685° N, Longitude 95.953257° W (GPS: NAD83).

5. Biomonitoring Requirements for Outfall TX1

During the period beginning on the effective date of the permit and lasting through the expiration date, the permittee is authorized to discharge from Outfall TX1 (functionally identical to Outfall 001). The discharge from Outfall 001 consists of cooling tower blowdown and treated low volume wastewater from various sources as described in Section II.B of the fact sheet. Such discharge shall be limited and monitored by the permittee as specified below.

The permittee is encouraged to perform required biomonitoring activities as early in the reporting period as practical so as to ensure sufficient time remains in the reporting period should retests/repeat tests be necessary.

All laboratory analyses for the biomonitoring parameters specified in this permit must be performed by a laboratory accredited by DEQ for those parameters.

Acute Whole Effluent Toxicity (WET) Reporting and Monitoring Requirements

Effluent Characteristic			Reporting and Monitoring Requirements ⁽¹⁾		
Test	Critical Dilution ⁽²⁾	Parameter	48-hour Min	Testing Frequency ⁽³⁾	Sample Type
Routine Testing	100%	Pass/Fail Survival [TIM3D]	Report	1/quarter ⁽⁴⁾	24-hr comp
		LC ₅₀ Effluent Conc [TAM3D]	Report		
		% Mortality at 100% Effluent [TJM3D]	Report		
	100%	Pass/Fail Survival [TIM6C]	Report	1/quarter ⁽⁴⁾	24-hr comp
		LC ₅₀ Effluent Conc [TAM6C]	Report		
		% Mortality at 100% Effluent [TJM6C]	Report		
Retesting	Retest #1 [22415] ⁽⁵⁾		Report	As required ⁽⁶⁾	24-hr comp
	Retest #2 [22416] ⁽⁵⁾		Report		

⁽¹⁾ See Part II, Section I, WET Testing, for additional monitoring and reporting conditions.

⁽²⁾ All acute WET testing shall use the dilution series specified in Part II, Section I, Item 1.

⁽³⁾ See provision for monitoring frequency reduction after the first year (Part II, Section I, Item 5).

⁽⁴⁾ Results of retests conducted pursuant to prior test failure shall not be submitted on Discharge Monitoring Reports (DMRs) in lieu of routine test results (see Part II, Section I, Item 2.a).

⁽⁵⁾ Applies to either or both test species according to results of test failure triggering monthly retests.

⁽⁶⁾ Monthly retesting is required only if routine test for reporting period (for either species) fails. Fill out ONLY these two (2) retest parameters on the retest DMRs, do not change the original results, and enter the correct submission date.

D. pulex WET reporting and monitoring requirements apply beginning _____, and the first reporting period is to _____.

P. promelas (Fathead minnow) WET reporting and monitoring requirements apply beginning _____, and the first reporting period is _____ to _____.

a. Whole Effluent Toxicity Testing Summary Reports:

Reports of all WET testing initiated, regardless of whether such tests are carried to completion, shall follow the requirements of Part II, Section I, Item 4.

b. Concurrent Testing

Concurrent testing is a provision for acute WET testing. Concurrent analyses of Total Dissolved Solids (TDS) and constituent ion species are required for each individual effluent sample collected for *Daphnia pulex* WET testing or retesting. TDS constituent ion species are: K⁺ (potassium), Na⁺ (sodium), Ca²⁺ (calcium), Mg²⁺ (magnesium), Cl⁻ (chloride), HCO₃⁻ (bicarbonate), and SO₄²⁻ (sulfate). Reporting of concurrent testing results shall be in accordance with the following requirements in the table below.

**Concurrent Effluent Testing for Acute WET Tests
Reporting Requirements (Outfall TX1)**

Effluent Characteristic	Concentration			Monitoring Requirements	
	Daily Min.	Monthly Avg.	Daily Max	Monitoring Frequency ⁽²⁾	Sample Type
TDS (mg/L) ⁽¹⁾ [STORET 70300]	Report	Report	Report	1/quarter	24 hr. comp

⁽¹⁾ One sample for concurrent analysis required for TDS: Report only those effluent samples collected for WET testing of the *Daphnia pulex*.

The concurrent TDS sample is taken at the beginning of the biomonitoring test. Only one (1) sample is necessary, and it must be sent directly to a state-certified analytical laboratory for the TDS analyses. The analyses must include the constituent ion species listed for TDS above the concurrent table.

The sample must be a composite that is properly preserved and refrigerated to maintain a temperature at or below 6°C but not frozen prior to arrival and processing. This result may be included in the results for Outfall 001, if required.

⁽²⁾ See provision for WET testing monitoring frequency reduction after the first year (Part II, Section I, Item 5)

c. Sampling Location

Samples taken in compliance with the monitoring requirements specified above for Outfall TX1 shall be taken at the following location: at the same location as for Outfall 001 (see Section A.1.b or the Appendix for latitude/longitude and legal location).

SECTION B. BACKGROUND MONITORING REQUIREMENTS – MONITORING DESIGNATION 999 (UPSTREAM)

Not applicable.

SECTION C. SCHEDULE OF COMPLIANCE

The permittee shall achieve compliance with the effluent limitations specified for discharges in accordance with the following schedule: None

SECTION D. REPORTING OF MONITORING RESULTS

Monitoring results shall be reported in accordance with the provisions of Part III, Section E(4) of the permit. Monitoring results obtained during the previous month shall be summarized and electronically reported on an electronic DMR form due to DEQ, Water Quality Division, Wastewater Compliance Tracking Section no later than the 15th day of the month following the completed monthly test. If no discharge occurs during the reporting period, an DMR form stating “No Discharge” shall be electronically submitted according to the above schedule.

Instructions on how to register as a "Preparer" or "Signatory" for DMRs, as well as how to prepare and submit DMRs, can be found on DEQ's website at:

<https://oklahoma.gov/deq/divisions/water-quality/wastewater-stormwater/electronic-reporting.html>.

Assistance is also available by contacting DEQ at (405) 702-8100 or deqreporting@deq.ok.gov.

The first report is due on _____.

PART II OTHER PERMIT REQUIREMENTS

A. REGULATORY NOTICE

The permittee is hereby given notice that this permit is in all respects subject to compliance with and actions under any and all applicable and relevant terms, conditions, provisions and requirements and any and all amendments of the laws of the State of Oklahoma and the rules of DEQ. The absence of any express reference within this permit of any particular statutory requirement, rule(s), regulation(s), or standard(s) shall in no respect be deemed or construed to exempt or preclude the application of such requirement, rule(s), regulation(s), or standard(s) to this permit or to the permittee. By DEQ approval, grant and issuance of this permit, permittee acknowledges responsibility to obtain correct and current copies of applicable DEQ Rules (as amended), provided, however, that permittee further acknowledges that any and all amendments thereto shall become a part of this permit.

B. REOPENER CLAUSE

This permit may be reopened for modification or revocation and reissuance to require additional monitoring and/or effluent limitations where actual or potential exceedances of State water quality criteria are determined to be the result of the permittee's discharge to the receiving water(s), or a Total Maximum Daily Load is established for the receiving stream(s), or when required as technology advances. The permit may also be reopened to require modifications of the facility's cooling water intake structure as needed to meet the requirements of the 316(b) rules of the Clean Water Act. Modification or revocation and reissuance of the permit shall follow regulations listed at 40 C.F.R. § 124.5.

C. LABORATORY ACCREDITATION

All laboratory analyses for the parameters specified in this permit must be performed by a laboratory accredited by DEQ for those parameters.

D. ANALYTICAL REQUIREMENTS

Unless otherwise specified in this permit, effluent and/or upstream monitoring shall be conducted according to analytical, apparatus and materials, sample collection, preservation, handling, etc., procedures listed in 40 C.F.R. Part 136 in effect on the effective date of this permit. Appendices A, B, and C to 40 C.F.R. Part 136 are specifically referenced as part of this requirement. Amendments to 40 C.F.R. Part 136 promulgated and incorporated by reference in OAC 252:606 after the effective date of this permit shall supersede these requirements as applicable.

E. MINIMUM QUANTIFICATION LEVEL

If any individual analytical test result taken for compliance with this permit is a non-detect, then the detection limit shall be used for DMR calculations. Any time a non-detect value is used for DMR calculations and/or reporting requirements, then the value reported on the DMR shall use the less than sign (<).

The following table lists minimum quantification levels to be used for the corresponding listed pollutants. If any individual analytical test result taken for compliance with this permit is less than the corresponding minimum quantification level listed in the following table, then the detection limit shall be used for DMR calculations. For reporting requirements, the value reported on the DMR shall use the less than sign (<).

POLLUTANT	MINIMUM QUANTIFICATION LEVEL
Oil and Grease (STORET: 00552)	5 mg/L

F. POLYCHLORINATED BIPHENYL COMPOUNDS

There shall be no discharge of polychlorinated biphenyl compounds such as those commonly used for transformer fluid at any of the outfalls.

G. LIMITS ON DISCHARGE OF CHLORINATED WASTEWATER

Neither FAC nor TRC may be discharged from any unit for more than two (2) hours in any one (1) day and not more than one (1) unit in any plant may discharge FAC or TRC at any one (1) time unless the permittee can demonstrate to the permitting agency that the units in a particular location cannot operate at or below this level of chlorination.

H. PRIORITY POLLUTANTS IN COOLING TOWER BLOWDOWN

The permittee shall provide written notification to DEQ at least thirty (30) days prior to commencing the use of new cooling water treatment chemical(s). Safety Data Sheets (SDSs) for all such newly proposed cooling tower maintenance/treatment chemicals shall be furnished with the notification. If proposed new cooling water treatment chemicals contain any of the priority pollutants listed in 40 C.F.R. Part 423, Appendix A, the permittee shall also provide engineering calculations for the expected level of the pollutant in the cooling tower blowdown from each affected outfall or internal monitoring point, as appropriate.

I. WHOLE EFFLUENT TOXICITY TESTING (48-HOUR ACUTE LC₅₀, STATIC RENEWAL, FRESHWATER)

1. Scope and Methodology

- a. The permittee shall test the effluent for toxicity in accordance with the provisions in this section, which apply individually and separately to the outfalls listed below. No samples or portions of samples from one (1) outfall may be composited with samples or portions of samples from another outfall. The permittee shall biomonitor for *Daphnia pulex* and *Pimephales promelas* in accordance with the WET testing frequencies prescribed in Part I.

The permittee is encouraged to perform required biomonitoring activities as early in the reporting period as is practical to ensure sufficient time remains in the reporting period should retests/repeat tests be necessary.

All laboratory analyses for the biomonitoring parameters specified in this permit must be performed by a laboratory accredited by DEQ for those parameters.

Provisions for performance-based monitoring frequency reductions are contained in Item 5 of this section.

Intervals between test initiation dates shall be a function of the required testing frequency, as follows:

- Monthly: No less than twenty (20) days and no more than forty (40) days.
- Quarterly: No less than two (2) months and no more than four (4) months.
- Semi-annually: No less than four (4) months and no more than eight (8) months.

APPLICABLE TO OUTFALL(S): 001

REPORTED ON DMR AS OUTFALL(S): TX1

CRITICAL DILUTION: 100%

EFFLUENT DILUTION SERIES (ALL TESTS): 32%, 42%, 56%, 75%, 100%

SAMPLE TYPE: Defined at Part I

TEST SPECIES/METHODS:

40 C.F.R. Part 136, except for changes required by EPA, Region 6.

Daphnia pulex acute static renewal 48-hour definitive toxicity test, Method 2021.0, EPA-821-R-02-012 (October 2002), or latest update thereof. A minimum of five (5) replicates with eight (8) organisms per replicate must be used in the control and in each effluent dilution of this test.

Pimephales promelas (Fathead minnow) acute static renewal 48-hour definitive toxicity test, Method 2000.0, EPA-821-R-02-012 (October 2002), or latest update thereof. A minimum of five (5) replicates with eight (8) organisms per replicate must be used in the control and in each effluent dilution of this test.

- b. Acute test failure – Acute test failure (LC_{50} test) is defined as 50% or more lethality (toxicity) at forty-eight (48) hours to test organisms at any effluent concentration. The 48-hour LC_{50} effluent value must be >100% to indicate a passing test. Any 48-hour LC_{50} effluent value of 100% or less (or equivalently, a survival value of less than 50.1% in any test dilution) will constitute a test failure.
- c. Reopener clause – This permit may be reopened to require whole effluent toxicity limits, chemical specific effluent limits, additional testing, and/or other appropriate actions to address toxicity.

2. Testing Requirements due to Test Failure

Upon becoming aware of the failure of any test, the permittee shall immediately notify the DEQ Water Quality Division biomonitoring coordinator, and shall provide written notification within five (5) working days of the test failure with a summary of the results of, and any other pertinent circumstances associated with, the failed test.

- a. Whenever there is a test failure for *Daphnia pulex* and/or *Pimephales promelas* during routine testing, the frequency of testing for *Daphnia pulex* and/or *Pimephales promelas* shall automatically increase to, or continue at, as appropriate, the WET testing frequency prescribed in Part I for the remaining life of the permit. In addition, two (2) additional monthly tests (retests) of *Daphnia pulex* and/or *Pimephales promelas* are required. The two (2) additional tests shall be conducted monthly during the next two (2) consecutive months. The permittee shall not substitute either of the two (2) additional tests for routine toxicity testing. A full laboratory report for the failed routine test and both additional tests, if required, shall be prepared and submitted to DEQ in accordance with procedures outlined in Item 4 of this section.
- b. Persistent toxicity – If either of the two (2) additional tests results in an LC_{50} value less than or equal to 100%, persistent toxicity is exhibited. Then the permittee shall initiate a Toxicity Reduction Evaluation (TRE) as specified in Item 6 of this section. The TRE initiation date will be the test completion date of the first failed retest. The permittee may request a temporary exemption to this TRE-triggering criterion only if the permittee is under a compliance schedule defined in an OPDES permit or an enforcement order to affect aquatic toxicity reduction measures.
- c. Intermittent toxicity – If both additional tests result in an LC_{50} value of greater than 100%, persistent toxicity is not exhibited. However, if any routine test failure occurs within 18 months of a prior test failure, intermittent toxicity is exhibited, and the permittee may be required by DEQ to initiate a TRE, as described in Item 6 of this section, based on the severity and pattern of such toxic effect over time.
- d. Suspension of Retesting Requirement During TRE - Retesting requirements in Item 2.a are temporarily suspended upon submittal of a TRE Action Plan. Such suspension of retesting requirements applies only to the species under evaluation by a TRE and only to the period during which a TRE is being performed.

3. Required Toxicity Testing Conditions

- a. Test acceptance – The permittee shall repeat a test, including the control and all effluent dilutions, if the procedures and quality assurance requirements defined in the test methods or in this permit are not satisfied, including the following additional criteria:

- (1) The toxicity test control (0% effluent) must have survival equal to or greater than 90%.
- (2) The percent coefficient of variation between replicates shall be 40% or less in the control (0% effluent) for the *Daphnia pulex* and Fathead minnow survival tests.
- (3) The percent coefficient of variation between replicates shall be 40% or less in the critical dilution, unless significant toxicity is exhibited in the *Daphnia pulex* and Fathead minnow survival tests.
- (4) As documented at test termination, no more than forty (40) percent of the daphnid test organisms in any replicate of any effluent dilution or in any replicate of the control (0% effluent) shall be male.

If the above criteria or criteria listed in Item 1.a are not met the test will be considered invalid. Test failure may not be construed or reported as invalid due to a coefficient of variation value for toxicity of greater than 40% for replicates tested at the critical dilution. A repeat test shall be conducted and the DEQ, Water Quality Division, biomonitoring coordinator notified, within the reporting period of any test determined to be invalid.

- b. The permittee shall follow the requirements listed below in determining success or failure of a WET test:

The statistical analyses in the *Daphnia pulex* and the Fathead minnow survival tests, used to determine the LC₅₀ shall be in accordance with the methods described in EPA-821-R-02-012, or the most recent update thereof.

- c. The permittee shall use dilution water that meets the following standards:

- (1) Dilution water used in the toxicity tests will be receiving water collected as close to the point of discharge as possible but unaffected by the discharge. In OAC 252:606-6-36, for discharges to a receiving stream classified as intermittent or to a receiving stream with no flow due to zero flow, the permittee shall substitute synthetic dilution water of similar pH, hardness and alkalinity to the closest downstream perennial water where the toxicity test is conducted. In the event that the receiving stream has sufficient flow for a sample to be collected, the facility will return to receiving stream water instead of synthetic.
- (2) If the receiving water is unsatisfactory as a result of instream toxicity (fails to meet the test acceptance criteria in Item 3.a), the permittee must submit the test results exhibiting receiving water toxicity with the full test report required in Item 4 below and may thereafter substitute synthetic dilution water for the receiving water in all subsequent tests, provided the unacceptable receiving water test met the following stipulations:
 - (a) A synthetic dilution water control which fulfills the test acceptance requirements of Item 3.a was run concurrently with the receiving water control;
 - (b) The test indicating receiving water toxicity was carried out to completion (i.e., forty-eight (48) hours);
 - (c) The synthetic dilution water had a pH, hardness and alkalinity similar to that of the receiving water or closest downstream perennial water not adversely affected by the discharge, provided the magnitude of these parameters will not cause toxicity in the synthetic dilution water; and
 - (d) The receiving water test must be conducted at the start of each permitting cycle.

- d. The permittee shall collect samples that are representative of their effluent by following the criteria listed below:
- (1) Unless grab sampling is specifically authorized in Part I of the permit, the permittee shall collect two (2) flow-weighted 24-hour composite samples representative of the flows during normal operation from the outfall(s) listed at Item 1.a above. If grab sampling is authorized, all the requirements listed below for composite sampling also pertain to grab sampling. In such cases, collection of the grab sample is considered equivalent to collection of the last portion of a composite sample. Unless otherwise specified in Part I of the permit, a 24-hour composite sample consists of a minimum of twelve (12) effluent portions collected at equal time intervals, representative of a 24-hour operating day and combined proportional to flow, or a sample continuously collected proportional to flow over a 24-hour operating day.
 - (2) The permittee must collect the composite samples so that the maximum holding time for any effluent sample shall not exceed thirty-six (36) hours. The permittee must initiate the toxicity test within thirty-six (36) hours after the collection of the last portion of the first composite sample. The first composite sample shall be used to initiate each test. The second composite sample shall be used for 24-hour static renewal of each dilution concentration for each test. Samples shall be chilled to maintain a temperature at or below 6° C but not frozen during collection, shipping, and/or storage.
 - (3) The permittee must collect the composite samples such that the effluent samples are representative of any periodic episode of chlorination, biocide usage or other potentially toxic substance discharged on an intermittent basis.
 - (4) If it is anticipated that flow from the outfall being tested may cease prior to collection of the second composite sample, the permittee must ensure that the first composite sample is of sufficient volume to complete the required testing with daily renewal of effluent. The abbreviated composite sample collection duration, the static renewal protocol associated with an abbreviated sample collection, and a summary of the circumstances justifying collection of an abbreviated sample must be adequately documented in the full test report required in Item 4 below. DEQ reserves the right to require a retest and/or consider the permittee in violation of this permit if the basis offered for justification of an abbreviated sample is insufficient, flawed, or in any way reflects an effort on the part of the permittee to avoid test failure by use of an abbreviated sample.

4. Reporting

- a. The permittee shall retain each full report pursuant to the records retention provisions of Part III of this permit. The permittee shall also submit to the DEQ, Water Quality Division, biomonitoring coordinator a copy of the full laboratory test reports at TX1 in accordance with the Report Preparation Section of EPA-821-R-02-012 for every valid or invalid toxicity test initiated, whether carried to completion or not, including any test which is considered invalid, is terminated early for any reason, or which indicates receiving water toxicity. The reports shall be received no later than the 15th day of the month following the end of the testing period.
- b. A valid test for *Daphnia pulex* and/or *Pimephales promelas* (excluding retests) at TX1 must be reported on the DMR for each reporting period specified in Part I of this permit, unless the permittee is performing a TRE, which may increase the frequency of testing and reporting. An electronic DMR and a copy of the lab report must be received by the 15th day of the month following the end of the testing period.

If a test is determined to be invalid, the repeat test must be conducted in the coinciding testing period; if the first sample of the repeat test is taken after the last day of the final month in a testing period, the facility will be out of compliance with the reporting period. If a lethal failure is experienced for *Daphnia pulex* and/or

Pimephales promelas, two (2) monthly WET retests are required during the two-month period following the month in which the test failure is experienced.

If more than one (1) valid test (excluding retests) is performed on a species during a reporting period, the permittee shall report the lowest lethality LC_{50} effluent concentrations for all such tests as the 7-day minimum on the DMR for the reporting period in question, specifying the dates of each test in the comments section of the DMR. Under no circumstance shall the monitoring/reporting period dates at the top of the DMR form be altered.

- c. If any test results in anomalous LC_{50} findings (i.e., it indicates an interrupted dose response across the dilution series), DEQ recommends that the permittee contact the DEQ, Water Quality Division, biomonitoring coordinator for a technical review of the test results prior to submitting the full laboratory test report and DMR. A summary of all tests initiated during the reporting period, including invalid tests, repeat tests, and retests, shall be attached to the reporting period DMR for DEQ review.

A test is a REPEAT test if it is performed as the result of a previously invalid test. A test is a RETEST if it is performed as the result of a previously failed test, the exception being where the test is the first (valid) test of a reporting period, in which case it is reported as such on the DMR for that period.

- (1) The reporting period test summary attached to the DMR shall be organized as follows:

- (a) Invalid tests (basis for test invalidity must be described)
- (b) Valid tests (other than retests) initiated during current reporting period
- (c) Valid retests for tests failed during previous reporting period (if not submitted in the previous reporting period test summary)
- (d) Valid retests for tests failed during current reporting period.

- (2) The following information shall be listed in the reporting period test summary for each valid test in categories (b) through (d) in Item 4.b(1) above:

- (a) Test species
- (b) Date of test initiation at laboratory
- (c) Results of all concurrent effluent analyses specified in Part I of this permit
- (d) All test result parameters for the test species specified in Item 4.c below.

- d. The permittee shall report the following results for all VALID routine toxicity tests (excluding retests) on the DMR(s) for that reporting period in accordance with Item 4.b above and Part III of this permit.

Daphnia pulex

- (1) Parameter TIM3D: If the *Daphnia pulex* 48-hour LC_{50} for survival is equal to or less than 100%, report a "1"; otherwise, report a "0".
- (2) Parameter TAM3D: Report the *Daphnia pulex* 48-hour LC_{50} value for survival.
- (3) Parameter TJM3D: Report the *Daphnia pulex* 48-hour percent mortality in the 100% effluent concentration.

Pimephales promelas (Fathead Minnow)

- (1) Parameter TIM6C: If the Fathead minnow 48-hour LC_{50} for survival is equal to or less than 100%, report a "1"; otherwise, report a "0".
 - (2) Parameter TAM6C: Report the Fathead minnow 48-hour LC_{50} value for survival.
 - (3) Parameter TJM6C: Report the Fathead minnow 48-hour percent mortality in the 100% effluent concentration.
- e. The permittee shall report the following results for all VALID toxicity retests on the DMR(s) for that reporting period.
- (1) Retest #1 (STORET 22415): If the first monthly retest following failure of a routine test for *Daphnia pulex* and/or Fathead minnow results in a 48-hour LC_{50} for survival equal to or less than 100%, report a "1"; otherwise, report a "0".
 - (2) Retest #2 (STORET 22416): If the second monthly retest following failure of a routine test for *Daphnia pulex* and/or Fathead minnow results in a 48-hour LC_{50} for survival equal to or less than 100%, report a "1"; otherwise, report a "0".

Results of all retests shall be reported on a copy of the DMR for the reporting period (see Item 4.b above) in which the triggering routine test failure is experienced. Such retest results (using STORET codes 22415 and 22416 only) shall be received no later than the 15th day of the month at the end of the testing period for the retest. The full report for the retest (see Item 4.a above) shall be submitted along with the retest DMR. Even if a retest cannot be conducted before the end of the reporting period for which it is required (due to test initiation interval requirements), the retest results shall still be reported for the reporting period in which the triggering test failure is experienced. Under no circumstance shall the monitoring/reporting period dates for a supplemental retest DMR ever be modified. The permittee shall indicate the retest date in the comments section of the supplemental DMR and insert the date the DMR is submitted in the lower right-hand corner. In this manner, both retests are reported for the same reporting period as the failed routine test triggering the retests. If retesting is not required during a given reporting period, the permittee shall leave the DMR retest fields blank.

5. Monitoring Frequency Reduction

- a. The permittee may apply for a testing frequency reduction upon the successful completion of the first year of testing for *Daphnia pulex* and/or Fathead minnow with no lethal effects demonstrated at or below the critical dilution. Certification in accordance with Item 5.b of this section shall be submitted with the application for monitoring frequency reduction. If granted, the monitoring frequency may be reduced to a minimum of once per six (6) months (actual testing must occur during the periods June 1st through September 30th and December 1st through March 31st) for the approved test specie(s).
- b. Certification – The permittee must certify in writing that no lethal test failures have occurred for the species for which the monitoring frequency reduction is being requested and that all tests meet all test acceptability criteria in Item 3.a above. In addition, the permittee must provide a summary of all tests initiated during the period of certification including test initiation dates, species, test acceptability parameters, LC_{50} concentrations, percent mortality at the 100% effluent dilution, and coefficients of variation for the control and 100% effluent dilution. If the certification is approvable, DEQ will issue a letter of confirmation of the monitoring frequency reduction. A copy of the confirmation letter will be forwarded to DEQ's Permit Compliance Tracking Section to update the permit reporting requirements and TX1S will be activated while TX1Q will be deactivated. DEQ may refuse to approve the certification if it determines that, during the period for which the certification is submitted, there were errors in meeting test acceptability requirements, errors in statistical interpretation affecting test results reported on DMRs, late submissions of test reports or

submissions of substantively incomplete test reports. If the certification is not approved, the permittee shall continue biomonitoring of the affected test species at a frequency of once per quarter until the permit is reissued.

- c. Lethal failures after a monitoring frequency reduction – If any lethal endpoint test is failed at any time after the granting of a monitoring frequency reduction, two (2) monthly retests are required for that species in accordance with Item 2 above and the monitoring frequency for the affected test species shall be increased to the WET testing frequency prescribed in Part I before the frequency reduction was granted and shall remain for the life of the permit. TX1Q will be reactivated and TX1S will be discontinued for the life of the permit. If the permittee is performing a TRE this section does not apply.

6. Toxicity Reduction Evaluation

- a. Within ninety (90) days of confirming toxicity in the retests for a test species, the permittee shall submit to DEQ a TRE Action Plan and Schedule for conducting a TRE. The TRE Action Plan shall specify the approach and methodology to be used in performing the TRE. A Toxicity Reduction Evaluation is an investigation intended to determine those actions necessary to achieve compliance with water quality-based effluent limits by reducing an effluent's toxicity to an acceptable level. A TRE is defined as a step-wise process which combines toxicity testing and analyses of the physical and chemical characteristics of a toxic effluent to identify the constituents causing effluent toxicity and/or treatment methods which will reduce the effluent toxicity. The TRE Action Plan shall lead to the successful elimination of effluent toxicity and include the following:

- (1) Specific Activities. DEQ requires that a thorough audit of the design, operation and maintenance of the entire plant be done at the outset of the Toxicity Identification Evaluation and/or TRE, rather than later in the process.

The plan shall detail the specific approach the permittee intends to utilize in conducting the TRE. The approach may include toxicity characterizations, identifications and confirmation activities, source evaluation, treatability studies, or alternative approaches. When the permittee conducts Toxicity Characterization Procedures, the permittee shall perform multiple characterizations and follow the procedures specified in the documents "Methods for Aquatic Toxicity Identification Evaluations: Phase I Toxicity Characterization Procedures" (EPA-600/6-91/003) and "Toxicity Identification Evaluation: Characterization of Chronically Toxic Effluents, Phase I" (EPA-600/6-91/005F), or alternate procedures. When the permittee conducts Toxicity Identification Evaluations and Confirmations, the permittee shall perform multiple identifications and follow the methods specified in the documents "Methods for Aquatic Toxicity Identification Evaluations, Phase II Toxicity Identification Procedures for Samples Exhibiting Acute and Chronic Toxicity" (EPA/600/R-92/080) and "Methods for Aquatic Toxicity Identification Evaluations, Phase III Toxicity Confirmation Procedures for Samples Exhibiting Acute and Chronic Toxicity" (EPA/600/R-92/081), as appropriate.

The documents referenced above may be available through the

National Technical Information Service (NTIS)

U.S. Department of Commerce
National Technical Information Service
5301 Shawnee Rd., Alexandria, VA 22312
E-mail: orders@ntis.gov
(800) 553-NTIS (6847), or at the

National Service Center for Environmental Publications (NSCEP)
U.S. EPA/NSCEP

P.O. Box 42419
Cincinnati, Ohio 45242-0419
E-mail: nscep@bps-lmit.com
1-(800) 490-9198

- (2) Sampling Plan (e.g., locations, methods, holding times, chain of custody, preservation, etc.). The effluent sample volume collected for all tests shall be adequate to perform the toxicity test, toxicity characterization, identification and confirmation procedures, and to conduct chemical specific analyses when a probable toxicant has been identified. Where the permittee has identified or suspects specific pollutant(s) and/or source(s) of effluent toxicity, the permittee shall conduct, concurrent with toxicity testing, chemical specific analyses for the identified and/or suspected pollutant(s) and/or source(s) of effluent toxicity. Where toxicity was demonstrated within forty-eight (48) hours of test initiation, each composite sample shall be analyzed independently. Otherwise, the permittee may substitute a composite sample, comprised of equal portions of the individual composite samples, for the chemical specific analysis.
- (3) Quality Assurance Plan (e.g., QA/QC implementation, corrective actions, etc.).
- (4) Project Organization (e.g., project staff, project manager, consulting services, etc.).
- b. The permittee shall initiate the TRE Action Plan within thirty (30) days of submitting the plan and schedule. The permittee shall assume all risks for failure to achieve the required toxicity reduction.
- c. The permittee shall submit to DEQ a quarterly TRE Activities Report with the DMR in months to be specified in their TRE plan, containing the following information:
 - (1) all data and/or substantiating documentation which identifies the pollutant(s) and/or source(s) of effluent toxicity;
 - (2) all studies/evaluations and results on the treatability of the facility's effluent toxicity; and
 - (3) all data which identifies effluent toxicity control mechanisms that will reduce effluent toxicity to the level necessary to meet no significant toxicity at any dilution.
- d. The permittee shall submit to DEQ a Final Report on Toxicity Reduction Evaluation Activities no later than 28 months after confirming toxicity in the retests. The final report shall provide information pertaining to the specific control mechanism(s) selected that will, when implemented, result in reduction of effluent toxicity to a 48-hour LC₅₀ effluent value of greater than 100%. The final report shall also provide a schedule for implementing the selected control mechanism(s).
- e. Quarterly testing during the TRE is the minimum monitoring requirement. DEQ recommends that permittees performing a TRE not rely on quarterly testing alone. Failure to identify the specific chemical compound(s) causing toxicity test failure will normally result in a permit limit for whole effluent toxicity per federal regulations at 40 C.F.R. § 122.44(d)(1)(v).

J. COOLING WATER INTAKE STRUCTURE (CWIS) AND COOLING SYSTEM REQUIREMENTS

1. The facility shall maintain and follow the Cooling System Maintenance and Operation Plan (CSMOP) for the cooling water intake structure and cooling system.

The plan must describe how the intake structure and associated cooling system will be maintained to ensure the facility continues to meet the final Best Technology Available (BTA) determinations, must be reviewed annually and revised if necessary, and must be made available to DEQ on request. The plan must also include provisions relating to the following:

- a. Weekly visual monitoring in accordance with 40 C.F.R. § 125.96(e) (if weekly visual monitoring is not feasible given the location or nature of the intake, the plan should provide justification for why this monitoring is not feasible and include an appropriate alternative);
 - b. Recordkeeping in accordance with 40 C.F.R. § 125.97(d);
 - c. BTA monitoring as required by the selected compliance option.
2. DEQ has determined that the operation of a closed-cycle recirculating system is the BTA for minimizing impingement mortality and entrainment at this facility. Therefore, the facility shall operate and maintain the system in accordance with the CSMOP.
3. Annual Report for BTA Compliance Monitoring and Required Certification Statement.
 - a. The permittee shall monitor daily actual intake flow, cooling water withdrawals, makeup water, and blowdown volume, or cycles of concentration, at a minimum frequency of daily, and shall report the monitoring results once per year. The monitoring results shall be included with the annual certification statement described below in Part II.J.3.b. Any analytical testing that is performed for compliance with these monitoring requirements must be performed by a state-certified laboratory.
 - b. 40 C.F.R. § 125.97(c) requires permittees to submit an annual certification statement and report signed by a responsible corporate official, indicating whether or not the facility has substantially modified operation of any units at the facility that impacts cooling water withdrawal and/or CWIS operation. If no such changes have been made, the permittee may simply state as such in a letter to the DEQ. If such modifications have been made, the permittee must provide a summary of those changes in the report. Additionally, if such modifications have been made, the next permit application submitted by the permittee must include revisions to any applicable parts of the information required by 40 C.F.R. § 122.21(r).
 - c. The facility has opted to use cycles of concentration for their BTA compliance monitoring. The annual report regarding this compliance monitoring and the required certification statement shall cover the calendar year, January 1st through December 31st. The first annual report is due on January 31, 2027.
4. In accordance with 40 C.F.R. § 125.95(c), the permittee may submit a request to reduce the amount of CWIS-related information required by 40 C.F.R. § 122.21(r) that will be submitted with the next permit application. Such a request must identify each element of the 40 C.F.R. § 122.21(r) information that has not substantially changed since the previous data submittal. The request must be submitted at least two (2) years and six (6) months prior to the expiration date of the permit. If a timely request is not received, the permittee shall submit all 40 C.F.R. § 122.21(r) information with the next permit renewal application.
5. Nothing in this permit authorizes take for the purposes of a facility's compliance with the Endangered Species Act.

K. SURFACE IMPOUNDMENT REQUIREMENTS

1. A minimum freeboard of two (2) feet shall be maintained for surface impoundments F02 and T01. Freeboard requirements shall be temporarily waived during and after excessive rainfall and/or plant upsets.
2. The permit may be reopened to implement and/or require surface impoundment modifications, additions, extensions, and/or operational changes; monitoring and reporting; reclassification of wastes; sludge management plans; best management practices; closure plans; and/or other appropriate actions.
3. At such time as any of the surface impoundments (F02 and/or T01) are to be permanently taken out of service or at such time as the contents of any of the surface impoundments (F02 and/or T01) pose a risk to the environment

or waters of the state, the owner or operator of the facility shall be required to follow all closure requirements contained in OAC 252:616-13.

4. The facility shall maintain a written surface impoundment Maintenance and Operation Plan (MOP) that discusses maintenance, operational, and monitoring procedures as specified in OAC 252:616-5-2 for surface impoundment T01 that contains Class II wastewater. The MOP shall be kept on site and made available to DEQ upon request. The MOP must be followed and updated annually, if necessary. The following shall be addressed in the MOP.
 - a. Maintenance procedures including methods to protect surface impoundments and liner integrity
 - b. Operation procedures used to protect surface impoundments and liner integrity
 - c. The name and telephone number of personnel responsible for maintenance, operation and monitoring
5. In all other respects, surface impoundments F02 and T01 shall be subject to standard conditions for surface impoundments contained in OAC 252:616, Subchapters 5, 7, and 13, including but not limited to requirements for construction, operation, maintenance, monitoring and closure.

L. TANK SYSTEM REQUIREMENTS

Not applicable

M. OTHER DISPOSAL METHODS

Solids, sludges, filter backwash, or other pollutants removed in the course of treatment or control of wastewater shall be disposed of at a state-approved industrial waste disposal site or to a company for recycling. This requirement excludes cooling tower bottoms sludge, which may be used as fill material on facility property as outlined in the authorization letter dated March 25, 2024. Disposal of any waste or wastewater shall be in a manner such as to prevent any pollutant from such materials from entering waters of the State or waters of the United States.

If any such industrial wastes are removed from the facility, the permittee shall keep accurate records which include the following information:

1. Name and address of company hauling waste.
2. The type and amount of waste hauled.
3. The final disposal site of waste hauled.

The permittee shall retain the above records for a period of at least five (5) years. Upon request, the above records shall be made available to the staff of DEQ for inspection, review, and copying.

N. DEFINITIONS

1. "The term "total residual chlorine" (or "total residual oxidants" for intake water with bromides) means the value obtained using any of the "chlorine—total residual" methods in Table IB in 40 C.F.R. § 136.3(a), or other methods approved by the permitting authority."
2. "The term "free available chlorine" means the value obtained using any of the "chlorine—free available" methods in Table IB in 40 C.F.R. § 136.3(a) where the method has the capability of measuring free available chlorine, or other methods approved by the permitting authority."
3. "The term 'low volume waste sources' means, taken collectively as if from one (1) source, wastewater from all sources except those for which specific limitations or standards are otherwise established in this part. Low volume waste sources include, but are not limited to, the following: wastewaters from ion exchange water treatment

systems, water treatment evaporator blowdown, laboratory and sampling streams, boiler blowdown, floor drains, cooling tower basin cleaning wastes, recirculating house service water systems, and wet scrubber air pollution control systems whose primary purpose is particulate removal. Sanitary wastes, air conditioning wastes, and wastewater from carbon capture or sequestration systems are not included in this definition.”

4. “The term ‘chemical metal cleaning waste’ means any wastewater resulting from the cleaning of any metal process equipment with chemical compounds, including, but not limited to, boiler tube cleaning.”
5. “The term ‘metal cleaning waste’ means any wastewater resulting from the cleaning [with or without chemical cleaning compounds] any metal process equipment including, but not limited to, boiler tube cleaning, boiler fireside cleaning, and air preheater cleaning.”
6. “The term ‘recirculated cooling water’ means water which is passed through a cooling device for the purpose of removing such heat from the water and then passed again, except for blowdown, through the main condenser.”
7. “The term ‘blowdown’ means the minimum discharge of recirculating water for the purpose of discharging materials contained in the water, the further buildup of which would cause concentration in amounts exceeding limits established by best engineering practices.”

APPENDIX

DESCRIPTION OF WASTEWATER TREATMENT/DISPOSAL SURFACE IMPOUNDMENTS (S.I.s)

S.I. ⁽¹⁾	Impoundment Description and Wastewater Classification OAC 252:616-1-2	Liner Description	Holding Capacity OAC 252:616-7-1(6)	Wastewater Destination
F02	Low Volume Waste Settling basin: all low volume waste sources generated at the facility – Class III	Compacted Clay	Approximately 2.5 million gal (66,834 sf × 7' deep)	Outfall 001
T01	Emergency Low Volume Waste Pond: chemical metal cleaning wastes from boilers and accumulated stormwater. – Class II	30 mil PVC membrane liner	Approximately 2.4 million gallons (365' × 365' × 5')	Total retention, evaporation, and occasional discharge to F02.

⁽¹⁾ Designation F refers to flow through surface impoundment, and designation T refers to total retention surface impoundment.

LOCATION OF SURFACE IMPOUNDMENTS

S.I.	Legal Description	General Location and Description
F02	SE¼, SW¼, NW¼, Section 32, Township 18 North, Range 13 East, Indian Meridian, Tulsa County, Oklahoma	Immediately southeast of the generating station, west of T01
T01	NW¼, SE¼, NW¼, Section 32, Township 18 North, Range 13 East, Indian Meridian, Tulsa County, Oklahoma	Immediately southeast of the cooling tower complex, east of F02



