

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

PERMIT TO DISCHARGE TREATED WASTEWATER: OK0038385
PERMIT TO SUPPLY RECLAIMED WATER: RW20-023
ID NUMBER: S-23528

PART I

In compliance with the Oklahoma Pollutant Discharge Elimination System Act (OPDES Act), Title 27A O.S. § 2-6-201 *et seq.*, and the rules of the State of Oklahoma Department of Environmental Quality (DEQ) adopted thereunder {See OAC 252:606}; the Federal Clean Water Act, Public Law 95-217 (33 U.S.C. 1251 *et seq.*), Section 402; and NPDES Regulations (40 CFR Parts 122, 124, and 403),

Oklahoma City Water Utilities Trust
(South Canadian Wastewater Treatment Facility)
420 W. Main, Suite 500
Oklahoma City, OK 73102

is hereby authorized to discharge treated wastewater from a facility located at approximately

NE¹/₄, SE¹/₄, SW¹/₄,
Section 30, Township 10 North, Range 3 West, Indian Meridian,
Cleveland County, Oklahoma

to receiving waters:

Existing Outfall : Unnamed tributary to Canadian River at the point located at approximately
(Outfall 001) Latitude: 35° 18' 27.555" N [GPS: NAD 1983 CONUS]
 Longitude: 97° 33' 33.573" W [GPS: NAD 1983 CONUS]

Proposed New Outfall: Canadian River at the point located at approximately
(Outfall 002) Latitude: 35° 17' 59" N
 Longitude: 97° 34' 31" W
 Water Body ID No.: 520610010010_20

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

This permit replaces and supersedes the previous permit issued on April 30, 2009.

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:

Michael B. Moe, P.E., Manager
Municipal Discharge and Stormwater Permit Section
Water Quality Division

Shellie R. Chard, Director
Water Quality Division

A. Effluent Limitations and Monitoring Requirements

1. Interim Limitations and Monitoring Requirements (Outfall 001)

During the period beginning the effective date and lasting through January 31, 2026, the permittee is authorized to discharge treated wastewater in accordance with the following interim limits and reporting requirements:

Pollutants		Discharge Limitations				Monitoring Requirements ^a	
		Mass Loading (lb/d)	Concentrations (mg/l unless otherwise specified)			Frequency	Sample Type
			Monthly Avg.	Weekly Avg.	Daily Max.		
Flow (mgd) [50050]	Year round	Report Monthly Average and Daily Maximum				Daily	Totalized
Biochemical Oxygen Demand - 5 Day (BOD₅) [00310]	Jun – Sep	750.6	15	22.5	---	5/Week	3-Cycle SBR Comp
	Oct – May	1000.8	20	30	---		
Total Suspended Solids (TSS) [00530]	Year round	1501.2	30	45	---	5/Week	
Ammonia as N (NH₃-N) [00610]	Year round	205.2	4.1	---	9.9	3/Week ^b	
Cadmium, total (µg/l) [01027]	Year round	0.17	3.4	---	160.9	1/Quarter	
<i>E. coli</i> (MPN/100 ml) [51040]	May – Sep	---	126 Geo. mean	---	406	2/Week	Grab
Total Residual Chlorine (TRC) ^c [50060]	Year round	---	Instantaneous Maximum: No Measurable ^d			Daily	
Dissolved Oxygen (DO) [00300]	Jun – Sep	---	Minimum: 5.0			Daily	
pH (standard unit) [00400]	Year round	---	6.5 – 9.0			Daily	

^a When discharging. If all of the effluent is supplied as reclaimed water and discharge does not occur, the permittee must state “No Discharge” in the comment column of the eDMRs. However, sampling and monitoring must still be conducted to ensure proper facility operation, maintenance, and performance.

^b In accordance with OAC 252:690-3-26, the facility may request a performance-based monitoring frequency reduction from three (3) times per week to one (1) time per week by certifying that the highest daily maximum reported during the 12 consecutive reporting periods subject to toxicity-based limits is no greater than 1.5 times the toxicity-based MAL concentration (or 6.15 mg/l) and no exceedances of ammonia limits occur.

^c If no chlorine is used for an entire reporting period, the permittee shall report a value of “zero” for the daily maximum and enter “No chlorine used this reporting period” in the comments section on the DMR for that reporting period in lieu of the indicated testing. For any week in which chlorine is used, the indicated testing shall be done until chlorine is no longer in use and at least one subsequent test verifies that the effluent meets the total residual chlorine limit.

^d No measurable is defined as less than 0.1 mg/l.

Other Year Round Requirements (Outfall 001)

- There shall be no discharge of floating solids or visible foam in other than trace amounts.
- 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 or which cause deleterious effects to the biota.
- All monitoring and reporting requirements shall also be in compliance with Part III of this permit.

Interim Sampling Location (Outfall 001)

Samples taken for compliance with permit limits and monitoring requirements specified above shall be taken at the conjunction box downstream of the chlorine contact basin located in the NE¼, SE¼, SW¼, Section 30, Township 10N, Range 3W, I.M., Cleveland County, Oklahoma.

2. Final Limitations and Monitoring Requirements (Outfall 002)

Beginning February 1, 2026, and lasting through the expiration date of the permit, the permittee is authorized to discharge treated wastewater in accordance with the following limitations (see Compliance Schedule for details):

Pollutants		Discharge Limitations				Monitoring Requirements ^a	
		Mass Loading (lb/d)	Concentrations (mg/l unless otherwise specified)			Frequency	Sample Type
			Monthly Avg.	Monthly Avg.	Weekly Avg.		
Flow (mgd) [50050]	Year round	Report Monthly Average and Daily Maximum				Daily	Totalized
Carbonaceous Biochemical Oxygen Demand - 5 Day (CBOD₅) [80082]	Apr – May	722.2	10	15	---	5/Week	24-hr Comp
	Jun – Oct	577.8	8.0	12	---		
	Nov – Mar	1805.6	25	37.5	---		
Total Suspended Solids (TSS) [00530]	Apr – May	722.2	10	15	---	5/Week	
	Jun – Oct	722.2	10	15	---		
	Nov – Mar	2166.7	30	45	---		
Ammonia as N (NH₃-N) [00610]	Apr – May	72.2	1.0	1.5	---	5/Week	
	Jun – Oct	36.1	0.5	0.75	---		
	Nov – Mar	296.1	4.1	---	9.9	3/Week ^b	
Cadmium, total (µg/l) [01027]^c	Year round	0.25	3.4	---	160.9	1/Quarter	
<i>E. coli</i> (MPN/100 ml) [51040]	May – Sep	---	126 Geo. Mean	---	406	2/Week	
Total Residual Chlorine (TRC)^d [50060]	Year round	---	Instantaneous Maximum: No Measurable ^e			Daily	Grab
Dissolved Oxygen (DO) [00300]	Apr – May	---	Minimum: 7.0			Daily	
	Jun – Oct	---	Minimum: 7.5				
	Nov – Mar	---	Minimum: 5.0				
pH (standard unit) [00400]	Year round	---	6.5 – 9.0			Daily	

^a When discharging. If all of the effluent is supplied as reclaimed water and discharge does not occur, the permittee must state “No Discharge” in the comment column of the eDMRs. However, sampling and monitoring must still be conducted to ensure proper facility operation, maintenance, and performance.

^b In accordance with OAC 252:690-3-26, the facility may request a performance-based monitoring frequency reduction from three (3) times per week to one (1) time per week by certifying that the highest daily maximum reported during the 12 consecutive reporting periods subject to toxicity-based limits is no greater than 1.5 times the toxicity-based MAL concentration (or 6.15 mg/l) and no exceedances of ammonia limits occur.

^c Reasonable potential to exceed water quality standards will be reevaluated when the permit is renewed next time.

^d If no chlorine is used for an entire reporting period, the permittee shall report a value of “zero” for the daily maximum and enter “No chlorine used this reporting period” in the comments section on the DMR for that reporting period in lieu of the indicated testing. For any week in which chlorine is used, the indicated testing shall be done until chlorine is no longer in use and at least one subsequent test verifies that the effluent meets the total residual chlorine limit.

^e No measurable is defined as less than 0.1 mg/l.

Other Year Round Requirements (Outfall 002)

- There shall be no discharge of floating solids or visible foam in other than trace amounts.
- 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 or which cause deleterious effects to the biota.
- All monitoring and reporting requirements shall also be in compliance with Part III of this permit.

Final Sampling Location (Outfall 002)

Samples taken for compliance with permit limits and monitoring requirements (except for dissolved oxygen) shall be taken at the end of the final treatment unit.

Samples taken for compliance with permit limits and monitoring requirements for dissolved oxygen shall be taken at the end-of-pipe discharge to the Canadian River.

3. Whole Effluent Toxicity Reporting and Monitoring Requirements

During the period beginning the effective date of the permit and lasting through the expiration date, the permittee is authorized to discharge from Outfall TX1 during the first three years of the permit, or Outfall TX2 beginning the fourth year of the permit (functionally identical to Outfall 001 or Outfall 002). 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 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 certified by the Oklahoma Department of Environmental Quality for those parameters.

Chronic Whole Effluent Toxicity Reporting and Monitoring Requirements
(Outfall TX1 until January 31, 2026, or Outfall TX2 beginning February 1, 2026)

Effluent Characteristic			Reporting/Monitoring Requirements ^a			
Test	Critical Dilution ^b	Parameter	7-day Min.	Testing Frequency ^c	Sample Type	
Routine Testing	<i>Ceriodaphnia dubia</i> , 7-day chronic NOEC static renewal, freshwater	Pass/Fail Survival [TLP3B]	Report	1/Quarter	24-hr Comp	
		NOECL Survival [TOP3B]	Report			
		% Mortality at Critical Dilution [TJP3B]	Report			
		Pass/Fail Reproduction [TGP3B]	Report			
		NOECS Reproduction [TPP3B]	Report			
		% Coeff of Variation [TQP3B]	Report			
	<i>Pimephales promelas</i> (Fathead minnow), 7-day chronic NOEC static renewal, freshwater	100%	Pass/Fail Survival [TLP6C]	Report	1/Quarter	24-hr Comp
			NOECL Survival [TOP6C]	Report		
			% Mortality at Critical Dilution [TJP6C]	Report		
			Pass/Fail Reproduction [TGP6C]	Report		
			NOECS Reproduction [TPP6C]	Report		
% Coeff of Variation [TQP6C]	Report					

^a See Part II, Section E, Whole Effluent Toxicity Limit, for additional monitoring and reporting conditions.

^b All chronic WET testing shall use the dilution series specified in Part II, Section E, Item 1.

^c Quarterly reporting periods commence with the effective date of the permit. A valid WET test shall be reported for each species for each reporting period. Results of monthly tests conducted pursuant to prior test failure may be substituted for a routine test result if the monthly test coincides within the testing period of the routine testing (See Part II, Section E, Item 2.a).

C. dubia whole effluent toxicity reporting and monitoring requirements apply beginning the effective date of the permit, and the first reporting period is _____ to _____. The first report is due on _____.

P. promelas (Fathead minnow) whole effluent toxicity reporting and monitoring requirements apply beginning the effective date of the permit, and the first reporting period is _____ to _____. The first report is due on _____.

Chronic Whole Effluent Toxicity Limit and Monitoring Requirements^a
(Outfall TX1 the first 30 months of the permit, or Outfall TX2 after construction of the new treatment system and new outfall is completed)

Effluent Characteristic	Reporting/Monitoring Requirements ^b		
	7-day Min.	Testing Frequency ^c	Sample Type
Whole Effluent Toxicity Limit <i>Ceriodaphnia dubia</i> (lowest lethal NOEC _L and/or sublethal NOEC _S) [STORET 51710]	100%	1/Quarter	24-hr Comp
Whole Effluent Toxicity Limit <i>Pimephales promelas</i> (lowest lethal NOEC _L and/or sublethal NOEC _S) [STORET 51714]	100%	1/Quarter	24-hr Comp

^a WET limits will be discontinued and replaced with regular biomonitoring requirement (WET testing) once the new treatment system is operational.

^b See Part II, Section E, Whole Effluent Toxicity Limit, for additional monitoring and reporting conditions.

^c Results of monthly tests conducted pursuant to prior test failure may be substituted for a routine test result if the monthly test coincides within the testing period of the routine testing (See Part II, Section E, Item 2.a).

Compliance with the Whole Effluent Toxicity Limit is required beginning the effective date of the permit.

WET 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 E, Item 4.

Report all WET testing initiated under Outfall TX1 during the first 30 months of the permit.

Report all WET testing initiated under Outfall TX2 beginning the 31st month of the permit (construction of the new treatment system and new outfall is completed and the new system is operational).

Dilution Water and WET Test Acceptability

For the existing outfall (Outfall TX1) where the receiving stream (unnamed tributary)'s flow is intermittent, OAC 252:690-3-36 states that "...where there is no receiving water available when the sample is collected, permittees must use synthetic dilution water having a pH, hardness, and alkalinity similar to that of the closet downstream perennial water."

For the proposed new outfall (Outfall TX2) where the receiving stream (the Canadian River)'s flow is perennial, OAC 252:690-3-37 states that "...permittees must use receiving water collected as close to the point of discharge as possible but unaffected by the discharge. Receiving water must be collected outside the regulatory mixing zone for discharges to lakes. If the receiving water control fails to fulfill the test acceptability criteria in OAC 252:690-3-38, the permittee must substitute synthetic dilution water for the receiving water in all subsequent tests, provided:

- (1) a synthetic dilution water control which fulfills the test acceptability requirements in OAC 252:690-3-38 was run concurrently with the receiving water control.
- (2) the test indicating receiving water toxicity was carried out to completion.
- (3) the synthetic dilution water had a pH, hardness and alkalinity similar to that of the receiving water, provided the magnitude of these three parameters did not cause toxicity in the synthetic dilution water.
- (4) the receiving water test must be conducted at the start of each permitting cycle."

Concurrent Testing

Concurrent analyses of ammonia and pH are required for each individual effluent sample collected for chronic WET testing or retesting of the Fathead minnow species. Reporting of concurrent testing results shall be in accordance with the following requirements in the table below.

Concurrent analyses of TDS and constituent ion species are required for each individual effluent sample collected for *Ceriodaphnia dubia* 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 and Reporting Requirements for Chronic WET Tests (Outfall TX1 until January 31, 2026, or Outfall TX2 beginning February 1, 2026)

Effluent Characteristic	Concentration			Monitoring Requirements	
	Daily Min.	Monthly Avg.	Daily Max.	Monitoring Frequency	Sample Type
Ammonia, (NH ₃ -N) (mg/l) ^a [STORET 00610]	Report	Report	Report	1/Quarter	24-hr Comp
pH (standard units) ^a [STORET 00400]	Report	N/A	Report	1/Quarter	Measured in each composite effluent sample, including static renewals, just prior to first use
Total Dissolved Solids (mg/l) ^b [STORET 70300]	Report	Report	Report	1/Quarter	24-hr Comp

^a Two sets of samples for concurrent analyses are required for ammonia and pH: Report only those effluent samples collected for WET testing of the *Pimephales promelas*.

Samples collected for WET testing purposes, including static renewals, shall be of sufficient volume to allow for the required concurrent analyses in addition to the WET testing itself.

Samples sent directly to a WET testing laboratory shall NOT undergo any preservation other than refrigeration to maintain a temperature at or below 6°C but not frozen prior to arrival and processing at the WET testing laboratory. These results should be used in the table above. Samples sent directly to a state certified analytical laboratory must be composite samples that are properly preserved. These results may be included in the results for Outfall 001 for the first 30 months of the permit, or Outfall 002 beginning the 31st month of the permit.

A second concurrent analysis is required for the sample that is sent to the WET testing laboratory and for the table above. Just prior to first use of each composite sample for WET testing purposes, the biomonitoring laboratory shall take an adequately-sized portion of each composite sample, acidify it in accordance with preservation requirements in 40 CFR 136, and have it analyzed for ammonia (NH₃-N) at a state certified laboratory. The pH measurement required for the above table must be taken just prior to the acidification step. These pH and ammonia readings should NOT be included in the results for Outfall 001 for the first 30 months of the permit, or Outfall 002 beginning the 31st month of the permit.

^b One sample for concurrent analysis required for TDS: Report only those effluent samples collected for WET testing of the *Ceriodaphnia dubia*.

The concurrent TDS sample is taken at the beginning of the biomonitoring test. Only one 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 for the first three years of the permit, or Outfall 002 beginning the fourth year of the permit, if required.

Sampling Location

Samples taken in compliance with the monitoring requirements specified above for Outfall TX1, as the interim, until January 31, 2026, shall be taken at the following location: at the same sampling location as for the existing outfall - Outfall 001.

Beginning February 1, 2026, samples taken in compliance with the monitoring requirements specified above for Outfall TX2 shall be taken at the following location: at the same sampling location as for the proposed new outfall - Outfall 002.

B. Background Monitoring Requirement (Outfall 999)

For the purpose of re-evaluation of reasonable potential for cadmium to exceed water quality standards, background levels of the following pollutants/parameters in the Canadian River shall be monitored and reported as follows:

Background Monitoring Requirements

Parameters	Concentration (µg/l unless otherwise specified)	Background Monitoring Requirements	
		Frequency	Sample Type
Cadmium, total	Report	1/Month	Grab
Hardness (mg/l)	Report	1/Month	Grab

Background monitoring samples are to be taken from within the channel of the Canadian River at a location immediately upstream from, but not affected by, the discharge from the proposed new outfall (Outfall 002). Background monitoring and reporting requirement shall begin once the new treatment system commences discharge or as early as possible so that at least 10 data points, at a frequency of 1/month, are available at least 180 days prior to the expiration of the permit.

C. Compliance Schedule

In order to comply with the revised wasteload allocation, as a result of the relocation of the discharge point, which was approved by EPA on December 26, 2018, the Oklahoma City Water Utilities Trust (OCWUT) is required to upgrade the South Canadian WWTF by completing the remaining proposed tasks:

Task	Task Description ^{a, b}	Completion Date
1	Submit a revised engineering report (ER), prepared by a Professional Engineer licensed to practice in the State of Oklahoma, outlining plans to comply with permit limits	Completed
2	Submit revised plans and specifications ("P&S"), prepared by a Professional Engineer licensed to practice in the State of Oklahoma, for additional treatments and/or needed facility upgrades, and submit an application for a construction permit, and the associated fees for the proposed construction	Completed
3	Begin construction in accordance with approved P&S	September 16, 2022
4	Complete construction in accordance with approved P&S, and begin to discharge from the new outfall	August 1, 2025
5	Attain three consecutive months of compliance with final limits	February 1, 2026

^a The permittee shall submit a progress report to the DEQ outlining the status of all facility improvements during the months of January and July of each year until the construction is complete. The first report shall be due during the first designated month after the permit becomes effective.

^b Where percent project completion reported is less than would be required to assure completion of construction by the required date, the progress report shall also include an explanation for this delay and proposed remedial actions.

D. Reporting of Monitoring Results

Monitoring results shall be reported in accordance with the provisions of Part III.B.5 of the permit. Monitoring results obtained during the previous month shall be summarized and electronically reported on an electronic Discharge Monitoring Report (eDMR) form due to the Oklahoma Department of Environmental Quality, 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 eDMR form stating "No Discharge" shall be electronically submitted according to the above schedule. Instructions on how to register as a Preparer or Signatory for eDMRs, as well as how to prepare and submit eDMRs, can be found on DEQ's website at <https://www.deq.ok.gov/water-quality-division/electronic-reporting/>. Assistance is also available by contacting DEQ at (405) 702-8100 or email deqreporting@deq.ok.gov.

The first report is due on the 15th of MONTH, 2022.

E. Sanitary Sewer Overflows

Any bypass in the collection system [sanitary sewer overflow (SSO)] shall be reported in accordance with Permit Part III.B.6.

F. Permit to Supply Reclaimed Water No. RW20-023

The Oklahoma City Water Utilities Trust – South Canadian Wastewater Treatment Plant (Permit to Supply Reclaimed Water ID No. RW20-023) is hereby authorized to supply reclaimed water to the OG&E McClain – Duke Energy Power Plant (User ID No. RWID20-004) by diverting a portion or all of the filtered, un-disinfected effluent into a one-million gallon basin, where it commingles with reclaimed water from the City of Moore Wastewater Treatment Facility, for reuse as “make up water” for the cooling towers at OG&E McClain – Duke Energy Power Plant. The commingled reclaimed water from the storage basin is transferred by OG&E McClain – Duke Energy through a pipeline to a 4.5 million gallon impoundment located on-site at OG&E McClain – Duke Energy Power Plant across the South Canadian River. The permitted uses of the categories of reclaimed water are described in OAC 252:627-1-6. The permit to supply is based on Category 3 end-use of reclaimed water in the OG&E McClain – Duke Energy cooling towers in accordance with OAC 252:627 and OAC 252:656. OG&E McClain – Duke Energy chlorinates the reclaimed water at the cooling towers and monitors the residual chlorine prior to recirculation to comply with the disinfection and residual chlorine requirements of Category 3 reclaimed water stated in Appendix A of OAC 252:627.

By mutual agreement between OG&E McClain – Duke Energy, the City of Moore, and OCWUT, OG&E McClain – Duke Energy (User ID No. RW20-004) will maintain the Monthly Operating Reports (MORs) for Category 3 reclaimed water at the OG&E McClain – Duke Energy Power Plant. OCWUT is not required to perform compliance monitoring of Category 3 reclaimed water being supplied to OG&E McClain – Duke Energy Power Plant. Compliance with limits and monitoring requirements for Category 3 reclaimed water has been incorporated into OPDES Permit No. OK0045250 for OG&E McClain – Duke Energy.

PERMIT PART II - OTHER PERMIT REQUIREMENTS

A. CONTRIBUTING INDUSTRIES AND PRETREATMENT REQUIREMENTS

1. The permittee shall operate an industrial pretreatment program in accordance with Section 402(b)(8) of the Clean Water Act, the General Pretreatment Regulations (40 CFR Part 403) and the provisions of the subsequently approved industrial pretreatment program submitted by the permittee. A Publicly Owned Treatment Works (POTW) facility is defined in 40 CFR 403.3(o) as any devices and systems used in storage, treatment, recycling and reclamation of municipal sewage and industrial wastes of a liquid nature. It includes sewers, pipes and other conveyances if they convey wastewater to a POTW. The term also means a municipality as defined in the Act, which has jurisdiction over the Indirect Discharges to and from such treatment works. This POTW pretreatment program was approved on March 12, 1985 and modified on May 7, 1993; January 30, 1998, February 21, 2003, February 23, 2012, and May 10, 2018, to incorporate program revisions to comply with the latest 40 CFR Part 403 regulations adopted by DEQ effective June 15, 2007. Any non-substantial modifications [as defined under 40 CFR 403.18(b)] to the POTW pretreatment program received and implemented in accordance with 40 CFR 403.18(d) shall be considered incorporated as of the date of approval by DEQ. The current POTW pretreatment program is hereby incorporated by reference and shall be implemented in a manner consistent with the following requirements:
 - a. Industrial user information shall be updated at a frequency adequate to ensure that all IUs are properly characterized at all times;
 - b. The frequency and nature of industrial user compliance monitoring activities by the permittee shall be commensurate with the character, consistency and volume of waste. The permittee must inspect and sample the effluent from each Significant Industrial User in accordance with 40 CFR 403.8(f)(2)(v). This is in addition to any industrial self-monitoring activities;
 - c. The permittee shall enforce and obtain remedies for noncompliance by any industrial users with applicable pretreatment standards and requirements;
 - d. The permittee shall control through permit, order, or similar means, the contribution to the POTW by each Industrial User to ensure compliance with applicable pretreatment standards and requirements. In the case of Industrial Users identified as significant under 40 CFR 403.3(v), this control shall be achieved through individual or general control mechanisms in accordance with 40 CFR 403.8(f)(1)(iii). Both individual and general control mechanisms must be enforceable and contain, at a minimum, the following conditions:
 - (1) Statement of duration (in no case more than five years);
 - (2) Statement of non-transferability without, at a minimum, prior notification to the POTW and provision of a copy of the existing control mechanism to the new owner or operator;
 - (3) Effluent limits and/or Best Management Practices based on applicable general and categorical Pretreatment Standards, local limits, and State and local laws;
 - (4) Self-monitoring, sampling, reporting, notification and record keeping requirements, including an identification of the pollutants to be monitored (including the process for seeking pollutant waivers in accordance with 403.12(e)(2)), sampling location, sampling frequency, and sample type, based on the applicable general and categorical Pretreatment Standards, local limits, and State and local laws; and

- (5) Statement of applicable civil and criminal penalties for violation of Pretreatment Standards and requirements and any applicable compliance schedule. Such schedules may not extend the compliance date beyond federal deadlines; and
 - (6) Requirements to control slug discharges, if determined by the POTW to be necessary.
- e. The permittee shall evaluate whether each Significant Industrial User needs a plan or other action to control slug discharges in accordance with 40 CFR 403.8(f)(2)(vi);
 - f. The permittee shall provide adequate staff, equipment, and support capabilities to carry out all elements of the pretreatment program; and
 - g. The approved program shall not be modified by the permittee without the prior approval of the DEQ.
2. The permittee shall establish and continue to develop and enforce technically based local limits (TBLL) to implement the provisions of 40 CFR Part 403.5. POTWs may develop Best Management Practices (BMPs) to implement paragraphs 40 CFR 403.5 (c)(1) and (c)(2). Such BMPs shall be considered local limits and Pretreatment Standards. All specific prohibitions or limits developed under this requirement are deemed to be conditions of this permit. The general and specific prohibitions set out in 40 CFR Parts 403.5(a)(1) and (b) shall also be enforced by the permittee unless modified under this provision.

The permittee shall, within sixty days of the effective date of this permit, (1) submit a WRITTEN CERTIFICATION that a technical evaluation has been performed demonstrating that the existing technically based local limits (TBLL) are based on the current state water quality standards and are adequate to prevent pass through of pollutants, inhibition of or interference with the treatment facility, worker health and safety problems, and sludge contamination, OR (2) submit a WRITTEN NOTIFICATION that a technical evaluation revising the current TBLL and a draft sewer use ordinance which incorporates such revisions will be submitted within 12 months of the effective date of this permit.

3. The permittee shall analyze, at a minimum the treatment facility influent and effluent for the presence of the toxic pollutants listed in 40 CFR 122 Appendix D (NPDES Application Testing Requirements) Table II at least annually (once per year) and the toxic pollutants in Table III plus molybdenum at least quarterly (once per three months). If, based upon information available to the permittee there is reason to suspect the presence of any toxic or hazardous pollutant listed in Table V, or any other pollutant, known or suspected to adversely affect treatment plant operation, receiving water quality, or solids disposal procedures, analysis for those pollutants shall be performed at least quarterly (once per three months) on both the influent and the effluent.

The influent and effluent samples collected shall be flow-composite samples consisting of at least 12 aliquots collected at approximately equal intervals over a representative 24-hour period. Sampling and analytical procedures shall be in accordance with guidelines established in 40 CFR 136. The effluent samples shall be analyzed to a level as required in item 6 below. Where composite samples are inappropriate, due to sampling, holding time, or analytical constraints, grab samples shall be taken.

4. The permittee shall prepare annually a list of Industrial Users which during the preceding pretreatment year were significantly noncompliant with applicable pretreatment requirements. For the purposes of this Part, significant noncompliance shall be determined based upon the more stringent of either criteria established at 40 CFR Part 403.8(f)(2)(viii) or criteria established in the approved POTW pretreatment program. This list is to be published annually in a newspaper of general circulation that provides meaningful public notice within the jurisdiction(s) served by the POTW during the month of **March**.

In addition, during the month of **March** the permittee shall submit an updated status report to DEQ containing the following information:

- a. An updated list of all Non-significant Categorical Industrial Users defined under 40 CFR 403.3(v)(2) if applicable, Categorical Industrial Users subject to reduced reporting under 40 CFR 403.12(e)(3) if applicable and Significant Industrial Users. For each industrial user listed the following information shall be included:
 - (1) Standard Industrial Classification (SIC) or NAISC code and categorical determination;
 - (2) Control document status. Whether the user has an effective control document, and the date such document was last issued, reissued, or modified, (indicate which industrial users were added to the system (or newly identified) within the previous year);
 - (3) A summary of all monitoring activities performed within the previous year. The following information shall be reported:
 - total number of inspections performed;
 - total number of sampling visits made;
 - (4) Status of compliance with both effluent limitations and reporting requirements. Compliance status shall be defined as follows:
 - Compliant (C) - no violations during the previous pretreatment year;
 - Non-compliant (NC) - one or more violations during the previous pretreatment year but does not meet the criteria for significant non-compliance;
 - Significantly Noncompliant (SNC) - in accordance with requirements described above; and
 - (5) For significantly noncompliant industrial users, indicate the nature of the violations, the type and number of actions taken (notice of violation, administrative order, criminal or civil suit, fines or penalties collected, etc.) and current compliance status. If ANY industrial user was on a schedule to attain compliance with effluent limits, indicate the date the schedule was issued and the date compliance is to be attained.
 - b. A list of all significant industrial users whose authorization to discharge was terminated or revoked during the preceding pretreatment year and the reason for termination;
 - c. A report on any interference, pass through, upset or POTW permit violations known or suspected to be caused by industrial contributors and actions taken by the permittee in response;
 - d. A copy of the newspaper publication of the significantly non-compliant industrial users giving the name of the newspaper and the date published;
 - e. The results of all influent and effluent analyses performed pursuant to above requirements;
 - f. A comparison of the influent and effluent analyses performed pursuant to above with maximum allowable headwork loadings developed in the approved technically based local limits and water quality based effluent concentrations necessary to meet state water quality standards.
5. The permittee shall provide adequate notice of the following:

- a. Any new introduction of pollutants into the treatment works from an indirect discharger which would be subject to Sections 301 and 306 of the CWA and/or Sections 40 CFR 405-499 if it were directly discharging those pollutants; and
- b. Any substantial change in-the volume or character of pollutants being introduced into the treatment works by a source introducing pollutants into the treatment works at the time of issuance of the permit.

Adequate notice shall include information on (i) the quality and quantity of effluent to be introduced into the treatment works, and (ii) any anticipated impact of the change on the quality or quantity of effluent to be discharged from the POTW.

6. All effluent monitoring conducted pursuant to above requirements shall meet the Minimum Quantification Levels (MQLs) shown on Page 13 below.

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 revised Total Maximum Daily Load is established for the receiving water(s), or when required as technology advances. Modification or revocation and reissuance of the permit shall follow regulations listed at 40 CFR 124.5

C. BIOSOLIDS/SEWAGE SLUDGE REQUIREMENTS

Biosolids/sewage sludge disposal practices shall comply with the Federal regulations for land application of biosolids/sewage sludge, established at 40 CFR Part 503, and the DEQ rules governing Sludge Management (OAC 252:606) as applicable.

The biosolids generated at the facility is applied to land at various locations in Oklahoma County. Biosolids disposal practices shall comply with the federal regulations for landfills, sludge, and solid waste disposal established at 40 CFR Part 257, 503 and the DEQ rules governing Sludge Management (OAC 252:606 and OAC 252:515) as applicable, and with the requirements of Sludge Management Plan 3555024, which was approved by the DEQ on August 10, 2000.

The permittee is required to maintain all records relevant to sewage biosolids/sewage sludge disposal for the life of the permit. These records shall be made available to the ODEQ upon request.

The permittee shall give 120 days prior notice to DEQ of any change planned in the biosolids/sewage sludge disposal practice.

In addition, the permittee shall comply with other biosolids/sewage sludge requirements specified in Part IV of this permit.

D. POLLUTION PREVENTION REQUIREMENTS

1. The permittee shall institute a program within 12 months of the effective date of the permit (or continue an existing program) directed towards optimizing the efficiency and extending the useful life of the facility. The permittee shall consider the following items in the program:
 - a. The influent loadings, flow and design capacity;
 - b. The effluent quality and plant performance;

- c. The age and expected life of the wastewater treatment facility's equipment;
 - d. Bypasses and overflows of the tributary sewerage system and treatment works;
 - e. New developments at the facility;
 - f. Operator certification and training plans and status;
 - g. The financial status of the facility;
 - h. Preventative maintenance programs and equipment conditions; and
 - i. An overall evaluation of conditions at the facility.
2. The permittee shall prepare the following information on the biosolids/sewage sludge generated by the facility:
- a. An annual quantitative tabulation of the ultimate disposition of all biosolids/sewage sludge (including, but not limited to, the amount beneficially reused, landfilled, and incinerated).
 - b. An assessment of technological processes and an economic analysis evaluating the potential for beneficial reuse of all biosolids/sewage sludge not currently beneficially reused including a listing of any steps which would be required to achieve the biosolids/sewage sludge quality necessary to beneficially reuse the biosolids/sewage sludge.
 - c. A description of, including the expected results and the anticipated timing for, all projects in process, in planning and/or being considered which are directed towards additional beneficial reuse of biosolids/sewage sludge.
 - d. An analysis of one composite sample of the biosolids/sewage sludge collected prior to ultimate re-use or disposal shall be performed for the pollutants listed in Part IV, Element 1, Section III, Table 3.
 - e. A listing of the specific steps (controls/changes) which would be necessary to achieve and sustain the quality of the biosolids/sewage sludge so that the pollutant concentrations in the biosolids/sewage sludge fall below the pollutant concentration criteria listed in Part IV, Element 1, Section III, Table 3.
 - f. A listing of, and the anticipated timing for, all projects in process, in planning, and/or being considered which are directed towards meeting the biosolids/sewage sludge quality referenced in (e) above.

The permittee shall certify in writing, within three years of the effective date of the permit, that all pertinent information is available. This certification shall be submitted to:

Oklahoma Department of Environmental Quality
Water Quality Division
Municipal Permits Section
P. O. Box 1677
707 North Robinson Street
Oklahoma City, Oklahoma 73101-1677

E. WHOLE EFFLUENT TOXICITY TESTING

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 outfall may be composited with samples or portions of samples from another outfall. The permittee

shall biomonitor for *Ceriodaphnia dubia* 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 certified by the Oklahoma Department of Environmental Quality for those parameters.

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

- Monthly: No less than 20 days and no more than 40 days.
- Quarterly: No less than 2 months and no more than 4 months.
- Semi-annually: No less than 4 months and no more than 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 CFR 136, except for changes required by EPA, Region 6.

Ceriodaphnia dubia chronic static renewal 7-day survival and reproduction test, Method 1002.0, EPA-821-R02-013 (October 2002), or most recent update thereof. A minimum of ten (10) replicates consisting of a single (1) organism each must be used in the control and in each effluent dilution of this test. This test should be terminated when 60% of the surviving females in the control produce three broods or at the end of eight days, whichever comes first. If this criterion is not met at the end of 8 days, the test must be repeated.

Pimephales promelas (Fathead minnow) chronic static renewal 7-day larval survival and growth test, Method 1000.0, EPA-821-R-02-013 (October 2002), or most recent 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. Chronic lethal effect test failure – The NOEC_L (No Observed Lethal Effect Concentration) is defined as the greatest effluent dilution at and below which lethality (toxicity) that is statistically different from the control (0% effluent) at the 95% confidence level does not occur. Chronic lethal test failure (chronic NOEC_L test) is defined as a demonstration of a statistically significant lethal (toxic) effect at test completion to a test species at or below the critical dilution.
- c. Chronic sublethal effect test failure – The NOEC_S (No Observed Sublethal Effect Concentration) is defined as the greatest effluent dilution at and below which sublethality (toxicity: inhibited reproduction in the *Ceriodaphnia dubia* test or inhibited growth in the Fathead minnow test) that is statistically different from the control (0% effluent) at the 95% confidence level does not occur.

Chronic sublethal test failure (chronic NOEC_s test) is defined as a demonstration of a statistically significant sublethal effect at test completion to a test species at or below the critical dilution.

- d. The conditions of this item are effective beginning with the effective date of the WET limit as established in Part 1 of this permit. When the testing frequency stated above is less than monthly and the effluent fails the lethal and/or sublethal endpoint at or below the critical dilution, the permittee shall be considered in violation of this permit limit and the frequency for the affected species will increase to monthly until such time as compliance with the No Observed Effect Concentration (NOEC: lethal and sublethal) effluent limitation is demonstrated for a period of three consecutive months, at which time the permittee may return to the testing frequency stated in Part I of this permit. The increased frequency of WET testing after a violation is used to determine the duration of a toxic event. A test that meets all test acceptability criteria and demonstrates significant toxic effects does not need additional confirmation. Such testing cannot confirm or disprove a previous test result. Testing conducted pursuant to the provision shall be reported in accordance with Item 3 of this section.
- e. Reopener clause – This permit may be reopened to require chemical specific effluent limits, additional testing, and/or other appropriate actions to address toxicity. Accelerated or intensified testing may be required in accordance with Section 308 of the Clean Water Act.
- f. 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.

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 5 working days, of the test failure with a summary of the results of, and any other pertinent circumstances associated with, the failed test.

Beginning with the effective date of the WET limit, as established in Part I of this permit, the following testing requirements due to chronic test failure apply:

- a. When there is a lethal and/or sublethal effect test failure for *Ceriodaphnia dubia* and/or *Pimephales promelas* during routine testing, at least three additional monthly tests for *Ceriodaphnia dubia* and/or *Pimephales promelas* are required (Part II, Section E.1.d above). The additional tests shall be conducted monthly during subsequent consecutive months until there are three consecutive months of passing tests at which time the frequency of testing shall return to that stated in Part 1 of the permit. The permittee may substitute one of the monthly tests that coincides within the quarter of a routine toxicity testing.
- b. A full laboratory report for the failed routine test and all additional tests shall be provided and submitted to DEQ in accordance with the procedure outlined in Item 3.
- c. If the permittee cannot pass three tests in a row within the next six months, DEQ will review the test results and may require a Toxicity Identification Evaluation (TIE) be done to determine the cause of the toxicity. If the TIE cannot detect the problem, another Toxicity Reduction Evaluation (TRE) may be required.

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 80%.
 - (2) The mean number of *Ceriodaphnia dubia* neonates produced per surviving female in the control (0% effluent) must be 15 or more.
 - (3) Sixty (60) percent of the surviving *Ceriodaphnia dubia* females in the control must produce three broods.
 - (4) The mean dry weight of surviving Fathead minnow larvae at the end of the 7 days in the control (0% effluent) must be 0.25 mg per larva or greater.
 - (5) The percent coefficient of variation between replicates shall be 40% or less in the control (0% effluent) for the young of surviving females in the *Ceriodaphnia dubia* reproduction test and for the survival and growth endpoints of the Fathead minnow test.
 - (6) The percent coefficient of variation between replicates shall be 40% or less in the critical dilution, unless significant lethal or sublethal effects are exhibited for the young of surviving females in the *Ceriodaphnia dubia* reproduction test and for the growth and survival endpoints of the Fathead minnow test.
 - (7) As documented at test termination, no more than forty (40) percent of the *Ceriodaphnia dubia* test organisms in any replicate of any effluent dilution or in any replicate of the control (0% effluent) shall be male.
 - (8) The Percent Minimum Significant Difference (PMSD) shall be in the range of 13-47 for *Ceriodaphnia dubia* reproduction. If the test PMSD is less than 13, 13 may be substituted for the PMSD.
 - (9) The PMSD shall be in the range of 12-30 for Fathead minnow growth. If the test PMSD is less than 12, 12 may be substituted for the PMSD.

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 biomonitoring enforcement 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:
- (1) The statistical analyses in the *Ceriodaphnia dubia* survival test, used to determine if there is a significant difference between the control and the critical dilution shall be Fisher's Exact Test as described in EPA-821-R-02-013 or most recent update thereof.

- (2) The statistical analyses in the *Ceriodaphnia dubia* reproduction test and the Fathead minnow larval survival and growth test, used to determine if there is a significant difference between the control and the critical dilution shall be in accordance with the methods for determining the No Observed Effect Concentration (NOEC) as described in EPA-821-R-02-013 or most recent update thereof.
 - (3) If the conditions of test acceptability are met in Item 3.a above and the percent survival of the test organism is equal to or greater than 80% in the critical dilution concentration and all lower dilution concentrations, the test shall be considered to be a passing test, and the permittee shall report an $NOEC_L$ of not less than the critical dilution for the DMR reporting requirements found in Item 4 below.
- 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 252:690-3-36, 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., 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 three 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 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 first composite effluent sample shall be used to initiate each test. The permittee must collect the composite samples so that the maximum holding time for any effluent sample shall not exceed 36 hours. The permittee must have initiated the toxicity test within 36 hours after the collection of the last portion of the first composite sample. 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 effluent sample, the permittee must ensure that the first composite effluent sample is of sufficient volume to complete the required testing with daily renewal of effluent. The abbreviated effluent 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 of this section. 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 biomonitoring enforcement coordinator a copy of the full laboratory test reports at TX1 (the first three years of the permit) or TX2 (beginning the fourth year of the permit) in accordance with the Report Preparation Section of (Chronic EPA-821-R-02-013) 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 *Ceriodaphnia dubia* and/or *Pimephales promelas* (excluding retests) at TX1 (the first three years of the permit) or TX2 (beginning the fourth year of the permit) must be reported on the DMR for each reporting period specified in Part I of this permit. DMRs must be received by the 15th day of the month following the end of the testing period. The full report for the test (see Item 4.a above) shall be submitted along with the DMR. 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 monthly retesting is required as a result of a WET limit permit violation, the monthly DMR will be reported to TX1A (the first three years of the permit) or TX2A (beginning the fourth year of the permit). Quarterly testing at TX1Q (the first three years of the permit) or TX2Q (beginning the fourth year of the permit) shall continue; the facility may substitute a monthly test from TX1A (the first three years of the permit) or TX2A (beginning the fourth year of the permit) for the quarterly report if the test falls within the testing period. If more than one valid test (excluding retests) is performed on a species during a reporting period, the permittee shall report the lowest lethal and/or sublethal test result as the 7-day minimum and the *C. dubia* [51710] and/or *P. promelas* [51714] result.
- c. If any test results in anomalous NOEC_L or NOEC_S finding (i.e., it indicates an interrupted dose response across the dilution series), DEQ recommends that the permittee contact the DEQ 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 monthly tests, 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 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.

Ceriodaphnia dubia

- (1) Parameter TLP3B: If the *Ceriodaphnia dubia* NOEC_L for survival is less than the critical dilution, report a “1”; otherwise, report a “0”.
- (2) Parameter TOP3B: Report the *Ceriodaphnia dubia* NOEC_L value for survival.
- (3) Parameter TJP3B: Report the *Ceriodaphnia dubia* percent mortality in the critical dilution at test completion.
- (4) Parameter TGP3B: If the *Ceriodaphnia dubia* NOEC_S for reproduction is less than the critical dilution, report a “1”; otherwise, report a “0”.
- (5) Parameter TPP3B: Report the *Ceriodaphnia dubia* NOEC_S value for reproduction.
- (6) Parameter TQP3B: Report the highest coefficient of variation (critical dilution or control) for *Ceriodaphnia dubia* reproduction.
- (7) Parameter 51710: Report the NOEC value (lowest of lethal and sublethal) for *Ceriodaphnia dubia*.

Pimephales promelas (Fathead Minnow)

- (1) Parameter TLP6C: If the Fathead minnow NOEC_L for survival is less than the critical dilution, report a “1”; otherwise, report a “0”.
 - (2) Parameter TOP6C: Report the Fathead minnow NOEC_L value for survival.
 - (3) Parameter TJP6C: Report the Fathead minnow percent mortality in the critical dilution at test completion.
 - (4) Parameter TGP6C: If the Fathead minnow NOEC_S for growth is less than the critical dilution, report a “1”; otherwise, report a “0”.
 - (5) Parameter TPP6C: Report the Fathead minnow NOEC_S value for growth.
 - (6) Parameter TQP6C: Report the highest coefficient of variation (critical dilution or control) for Fathead minnow survival and growth.
 - (7) Parameter 51714: Report the NOEC value (lowest of lethal and sublethal) for Fathead minnows.
- e. The permittee shall report the results for all toxicity monthly testing on the DMR(s) for the reporting period in which monthly testing is required, which shall be received no later than the 15th day of the month following the end of the monthly period. Results of all required monthly tests shall be reported under TX1A (the first three years of the permit) or TX2A (beginning the fourth year of the permit) of the DMR for the reporting period (see Item 4.b above). If the permittee passes three consecutive tests in the six months after the initial failure, the permittee will return to quarterly testing. If the permittee takes the first sample of the monthly test after the last day of the final month in the monthly period, the facility will be out of compliance with the reporting period. The full laboratory report for the WET tests (see Item 4.a above) shall be submitted along with the retest DMR. Should test failures necessitate the continuation of monthly testing into subsequent reporting periods, the results of the first test in any reporting period will be reported using the parameter STORET codes listed in Items 4.c above. If monthly testing is not required during a given reporting period, the permittee shall leave these DMR fields blank and DMR TX1A (the first three years of the permit) or TX2A (beginning the fourth year of the permit) will not be activated.
- f. Whole effluent toxicity limit – The permittee shall report the lowest of either the NOEC_L or NOEC_S value across these species for the 7-day minimum under STORET No. *C. dubia* [51710], and/or *P. promelas* [51714] on the DMR for the reporting period in accordance with Part III of this permit.

MINIMUM QUANTIFICATION LEVELS (MQLs)

<u>METALS AND CYANIDE</u>	<u>(ug/L)</u>	<u>EPA METHOD</u>
Antimony (Total) ¹	60	200.7
Arsenic (Total) ¹	0.5	206.5
		200.7 revision 4.4 (1994)
		200.8 revision 5.4 (1994)
		200.9 revision 2.2 (1994)
Beryllium (Total) ¹	5	200.7
Cadmium (Total)	1	200.7 revision 4.4 (1994)
		200.8 revision 5.4 (1994)
		200.9 revision 2.2 (1994)
Chromium (Total) ¹	10	200.7
Chromium (3+) ¹	10	200.7
Chromium (6+) ¹	10	200.7
Copper (Total)	1	200.7 revision 4.4 (1994)
		200.8 revision 5.4 (1994)
		200.9 revision 2.2 (1994)
Lead (Total)	0.5	200.7 revision 4.4 (1994)
		200.8 revision 5.4 (1994)
		200.9 revision 2.2 (1994)
Mercury (Total) ¹	0.05	245.1 revision 3.0 (1994)
Molybdenum (Total)	30	200.7
Nickel (Total) ¹ [Freshwater]	10	200.7
Nickel (Total) [Marine]	5	200.8 revision 5.4 (1994)
		200.9 revision 2.2 (1994)
Selenium (Total) ¹	5	200.7 revision 4.4 (1994)
		200.8 revision 5.4 (1994)
		200.9 revision 2.2 (1994)
Silver (Total)	0.5	200.7 revision 4.4 (1994)
		200.8 revision 5.4 (1994)
		200.9 revision 2.2 (1994)
Thallium (Total) ¹	0.5	279.2 revision
Zinc (Total) ¹	20	200.7
Cyanide (Total) ¹	10	335.4
Phenols, (Total) ¹	10	604
 <u>DIOXIN</u>		
2,3,7,8-Tetrachlorodibenzo- P-Dioxin (TCDD) ^{2,4}	0.00001	1613
 <u>VOLATILE COMPOUNDS</u>		
Acrolein ³	50	624.1
Acrylonitrile ³	50	624.1
Benzene ³	10	624.1
Bromoform ⁴	10	624.1
Carbon Tetrachloride ⁴	10	624.1
Chlorobenzene ⁴	10	624.1

MINIMUM QUANTIFICATION LEVELS (MQLs)

Chlorodibromomethane ⁴	10	624.1
Chloroethane	50	624.1
2-Chloroethylvinyl Ether ³	10	624.1
Chloroform ⁴	10	624.1
Dichlorobromomethane ⁴	10	624.1
1,1-Dichloroethane ⁴	10	624.1
1,2-Dichloroethane ⁴	10	624.1
1,1-Dichloroethylene ⁴	10	624.1
1,2-Dichloropropane ⁴	10	624.1
1,3-Dichloropropylene ⁴	10	624.1
Ethylbenzene ⁴	10	624.1
Methyl Bromide [Bromomethane]	50	624.1
Methyl Chloride [Chloromethane]	50	624.1
Methylene Chloride ⁴	20	624.1
1,1,2,2-Tetrachloroethane ⁴	10	624.1
Tetrachloroethylene ⁴	10	624.1
Toluene ⁴	10	624.1
1,2-Trans-Dichloroethylene ⁴	10	624.1
1,1,1-Trichloroethane ⁴	10	624.1
1,1,2-Trichloroethane ⁴	10	624.1
Trichloroethylene ⁴	10	624.1
Vinyl Chloride ⁴	10	624.1

ACID COMPOUNDS

2-Chlorophenol ⁴	20	625.1
2,4-Dichlorophenol ⁴	20	625.1
2,4-Dimethylphenol ¹	20	625.1
4,6-Dinitro-o-Cresol [12 methyl 4,6-dinitrophenol] ⁴	50	625.1
2,4-Dinitrophenol ⁴	50	625.1
2-Nitrophenol ⁴	20	625.1
4-Nitrophenol ⁴	50	625.1
p-Chloro-m-cresol [4 chloro-3-methylphenol] ¹	20	625.1
Pentachlorophenol ⁴	50	625.1
Phenol ⁴	20	625.1
2,4,6-Trichlorophenol ⁴	20	625.1

BASE/NEUTRAL COMPOUNDS

Acenaphthene ⁴	20	625.1
Acenaphthylene ⁴	20	625.1
Anthracene ⁴	20	625.1
Benzidine ³	50	625.1
Benzo(a)Anthracene ⁴	20	625.1
Benzo(a)Pyrene ⁴	20	625.1
3,4-Benzofluoranthene ⁴	20	625.1

MINIMUM QUANTIFICATION LEVELS (MQLs)

Benzo(ghi)Perylene	20	625.1
Benzo(k)Fluoranthene ⁴	20	625.1
Bis(2-Chloroethoxy) Methane ⁴	20	625.1
Bis(2-Chloroethyl) Ether ⁴	20	625.1
Bis(2-Chloroisopropyl) Ether ⁴	20	625.1
Bis(2-Ethylhexyl) Phthalate ⁴	20	625.1
4-Bromophenyl Phenyl Ether ⁴	20	625.1
Butylbenzyl Phthalate ⁴	20	625.1
2-Chloronaphthalene ⁴	20	625.1
4-Chlorophenyl Phenyl Ether ⁴	20	625.1
Chrysene ⁴	20	625.1
Dibenzo (a,h) Anthracene	20	625.1
1,2-Dichlorobenzene ⁴	20	625.1
1,3-Dichlorobenzene ⁴	20	625.1
1,4-Dichlorobenzene ⁴	20	625.1
3,3'-Dichlorobenzidine	20	625.1
Diethyl Phthalate ⁴	20	625.1
Dimethyl Phthalate ⁴	20	625.1
Di-n-butyl Phthalate ⁴	20	625.1
2,4-Dinitrotoluene ⁴	20	625.1
2,6-Dinitrotoluene ⁴	20	625.1
Di-n-octyl Phthalate ⁴	20	625.1
1,2-Diphenylhydrazine ³	20	625.1
Fluoranthene ⁴	20	625.1
Fluorene ⁴	20	625.1
Hexachlorobenzene ⁴	10	625.1
Hexachlorobutadiene ⁴	20	625.1
Hexachlorocyclopentadiene ⁴	20	625.1
Hexachloroethane	20	625.1
Indeno (1,2,3-cd) Pyrene (2.3-o-phenylene pyrene)	20	625.1
Isophorone ⁴	20	625.1
Naphthalene ⁴	10	625.1
Nitrobenzene ⁴	20	625.1
N-nitrosodimethylamine	50	625.1
N-nitrosodi-n-propylamine	20	625.1
N-nitrosodiphenylamine	20	625.1
Phenanthrene ⁴	20	625.1
Pyrene ⁴	20	625.1
1,2,4-Trichlorobenzene ⁴	20	625.1
 <u>PESTICIDES</u>		
Aldrin ¹	0.05	608.3
Alpha-BHC ¹	0.05	608.3

MINIMUM QUANTIFICATION LEVELS (MQLs)

Beta-BHC ¹	0.05	609
Gamma-BHC (Lindane) ¹	0.05	608.3
Delta-BHC ¹	0.05	608.3
Chlordane ¹	0.2	608.3
4,4'-DDT ¹	0.05	608.3
4,4'-DDE (p,p-DDX) ¹	0.05	608.3
4,4'-DDD (p,p-TDE) ¹	0.05	608.3
Dieldrin ¹	0.05	608.3
Alpha-endosulfan ¹	0.05	608.3
Beta-endosulfan ¹	0.05	608.3
Endosulfan sulfate ¹	0.05	608.3
Endrin ¹	0.05	608.3
Endrin aldehyde ¹	0.05	608.3
Heptachlor ¹	0.05	608.3
Heptachlor epoxide ¹ (BHC-hexachlorocyclohexane)	0.05	608.3
PCB-1242 ¹	0.25	608.3
PCB-1254	0.25	608.3
PCB-1221	0.25	608.3
PCB-1232	0.25	608.3
PCB-1248	0.25	608.3
PCB-1260	0.25	609
PCB-1016	0.25	608.3
PCB, total	0.25	608.3
Toxaphene ¹	0.3	608.3

¹ Based on Contract Required Quantitation Level (CRQL) developed pursuant to 40 CFR Part 122

² Dioxin National Strategy

³ No CRQL(Contract Required Quantification Level developed pursuant to 40 CFR Part 122) established

⁴ CRQL basis, equivalent to MQL

MQL based on 3.3 times LOD published in 40 CFR 136, Appendix B

Methods/MQL List modified 6/20/08