Draft

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

**PERMIT NUMBER: OK0100382
ID NUMBER: S-20532**

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),

The City of El Reno/El Reno Municipal Authority
P.O. Drawer 700
El Reno, OK 73036

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

NW¼, NE¼,
Section 4, Township 12 North, Range 7 West, Indian Meridian,
Canadian County, Oklahoma
or at 101 North Choctaw Ave., El Reno, OK 73036

to receiving waters: The North Canadian River at the point located at approximately

Latitude: 35° 33' 24.879" N [GPS: NAD 1983 CONUS]
Longitude: 97° 56' 43.698" W [GPS: NAD 1983 CONUS]

Planning Segment No. 520530 (Water Body ID No. 520530000010_10)

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 May 11, 2015

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 (Outfall 001)

1. Effluent Limitations

During the period beginning the effective date and lasting through date of expiration the permittee is authorized to discharge treated wastewater in accordance with the following limitations:

Pollutants		Discharge Limitations				Monitoring Requirements	
		Mass Loading (lb/d)	Concentrations (mg/l unless otherwise specified)			Frequency	Sample Type
		Monthly Avg.	Monthly Avg.	Weekly Avg.	Daily Max.		
Flow (mgd) [50050]	Year round	Report Monthly Average and Daily Maximum				Daily	Totalized
Carbonaceous Biochemical Oxygen Demand - 5 Day ($CBOD_5$) [80082]	Year round	333.6	20	30	---	1/Week	2-cycle SBR Comp
Total Suspended Solids (TSS) [00530]	Year round	500.4	30	45	---	1/Week	2-cycle SBR Comp
Ammonia as N (NH_3-N) [00610]	Year round	68.4	4.1	---	9.9	3/Week [a]	2-cycle SBR Comp
Total Phosphorus (P) [00665]	Year round	---	Report	---	---	1/Month	2-cycle SBR Comp
E. coli (MPN/100 ml) [51040]	May – Sep	---	126 Geo. Mean	---	406	2/Week	Grab
Dissolved Oxygen (DO) [00300]	Year round	---	Minimum: 5.0			Daily	Grab
pH (standard unit) [00400]	Year round	---	6.5 – 9.0			Daily	Grab

[a] At any time during the terms of the permit, the permittee may request a toxicity based ammonia monitoring frequency reduction from 3 per week to 1 per week if the highest result obtained during 12 consecutive reporting periods is ≤ 1.5 × monthly average limit (i.e., ≤ 6.15 mg/l) and there are no exceedances of monthly average limit.

Other Year Round Requirements

- 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.

Sampling Location

Samples taken for compliance with permit limits and monitoring requirements (except for dissolved oxygen) shall be taken at the effluent lift station post UV disinfection.

Samples taken for compliance with permit limits and monitoring requirements for dissolved oxygen shall be taken at the bottom of the cascade aerator at the North Canadian River.

2. 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.

B. Whole Effluent Toxicity Reporting and Monitoring Requirements (Outfall TX1)

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 (functionally identical to Outfall 001). Such discharges 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)

Effluent Characteristic				Reporting/Monitoring Requirements [a]		
Test		Critical Dilution [b]	Parameter	7-day Min	Testing Frequency [f]	Sample Type
Routine Testing	*Ceriodaphnia dubia*, 7-day chronic NOEC static renewal, freshwater	100%	Pass/Fail Survival [TLP3B]	Report	1/Quarter [e]	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		
	Pimephales promelas (Fathead minnow), 7-day chronic NOEC static renewal, freshwater	100%	Pass/Fail Survival [TLP6C]	Report	1/Quarter [e]	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		
Retesting	Retest #1 [22415] [c]			Report	As Required [d]	24-hr Comp
	Retest #2 [22416] [c]			Report		

[a] See Part II, Section E, Whole Effluent Toxicity Testing, 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] Applies to either or both test species according to results of test failure triggering monthly retests.

[d] Monthly retesting required only if routine test for reporting period (for either species) fails. Fill out ONLY these two retest parameters on the retest DMRs, do not change the original results, and put the correct submission date in the lower right hand corner of the DMR.

[e] Results of retests conducted pursuant to prior test failure shall <u>not</u> be substituted on DMRs in lieu of routine test results (See Part II, Section E, Item 2.a).

[f] See provision for monitoring frequency reduction after the first year (Part II, Section E, Item 5.)

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 _____.

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.

Concurrent Testing for Chronic Whole Effluent Toxicity (WET) Testing

Concurrent Testing is a provision for chronic Whole Effluent Toxicity (WET) 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 tale below.

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

Effluent Characteristic	Concentration			Monitoring Requirements	
	Daily Min.	Monthly Avg.	Daily Max.	Monitoring Frequency [b]	Sample Type
Ammonia as N, (NH_3-N) (mg/l) [a] [STORET 00610]	Report	Report	Report	1/Quarter	24-hr Comp
pH (std units) [a] [STORET 00400]	Report	N/A	Report	1/Quarter	Measured in each composite effluent sample, including static renewals, just prior to first use

[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.

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 (NH_3-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.

[b] See provision for WET testing monitoring frequency reduction after the first year (Part II, Section E, Item 5).

Sampling Location

Samples taken in compliance with the biomonitoring and concurrent testing requirements specified above for Outfall TX1 shall be taken at the following location: at the effluent lift station post UV disinfection (same location as for Outfall 001).

C. Sanitary Sewer Overflows

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

PERMIT PART II - OTHER PERMIT REQUIREMENTS

A. CONTRIBUTING INDUSTRIES AND PRETREATMENT REQUIREMENTS

1. The following pollutants shall not be introduced into a Publicly Owned Treatment Works (POTW) facility, 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 also includes sewers, pipes and other conveyances only if they convey wastewater to a POTW Treatment Plant. The term also means the municipality as defined in Section 502(4) of the Act, which has jurisdiction over the Indirect Discharges to and from such treatment works."

   a. Pollutants which create a fire or explosion hazard in the POTW facility, including, but not limited to, wastestreams with a closed cup flashpoint of less than 60°C (140°F) using the test methods specified in 40 CFR 261.21;

   b. Pollutants which will cause corrosive structural damage to the POTW, but in no case discharges with pH lower than 5.0, unless the works are specifically designed to accommodate such discharges;

   c. Solid or viscous pollutants in amounts which will cause obstruction to the flow in the POTW, resulting in interference;

   d. Any pollutant, including oxygen demanding pollutants (e.g., BOD), released in a discharge at a flow rate and/or pollutant concentration which will cause interference with the POTW;

   e. Heat in amounts which will inhibit biological activity in the POTW resulting in interference but in no case heat in such quantities that the temperature at the POTW treatment plant exceeds 40°C (104°F) unless the Approval Authority, upon request of the POTW, approves alternate temperature limits;

   f. Petroleum oil, non-biodegradable cutting oil, or products of mineral oil origin in amounts that will cause interference or pass through;

   g. Pollutants which result in the presence of toxic gases, vapors, or fumes within the POTW in a quantity that may cause acute worker health and safety problems; and

   h. Any trucked or hauled pollutants, except at discharge points designated by the POTW.

2. The permittee shall require any indirect discharger to the treatment works to comply with the reporting requirements of Sections 204(b), 307, and 308 of the Act, including any requirements established under 40 CFR Part 403.

3. 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 Act 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.

c. Any 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.

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 landfills, biosolids/sewage sludge, and solid waste disposal established at 40 CFR Part 257, 503, and the DEQ rules governing Sludge Management (OAC 252:515 and OAC 252:606) as applicable.

The biosolids/sewage sludge disposal shall also comply with the requirements of Sludge Disposition Plan, approved by Department of Environmental Quality on March 8, 2017, for disposal of sludge in Canadian County Solid Waste Disposal Authority Landfill, located in Section 15, Township 11 North, Range 7 West, I.M., Canadian County, Oklahoma.

The permittee is required to maintain all records relevant to 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.

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.

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 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. 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 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 *Ceriodaphnia dubia* and/or *Pimephales promelas* during routine testing, the frequency of testing for *Ceriodaphnia dubia* 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 *Ceriodaphnia dubia* and/or *Pimephales promelas* are required. The two additional tests shall be conducted monthly during the next two consecutive months. The permittee shall not substitute either of the two 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 additional tests results in an $NOEC_L$ and/or $NOEC_S$ value less than the critical dilution, persistent lethality and/or sublethality is exhibited. Then the permittee shall initiate a Toxicity Reduction Evaluation (TRE) as specified in Item 6 below. 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 effect aquatic toxicity reduction measures.

c. Intermittent toxicity – If both additional tests result in an $NOEC_L$ and/or $NOEC_S$ value greater than or equal to the critical dilution, persistent lethality and/or sublethality is <u>not</u> exhibited. However, if any routine lethal and/or sublethal effect test failure occurs within 18 months of a prior lethal and/or sublethal effect test failure, intermittent lethality and/or sublethality is exhibited, and the permittee may be required by DEQ to initiate a TRE, as described in Item 6 below, based on the severity and pattern of such lethal and/or sublethal effect over time.

d. Suspension of retesting requirements during a 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 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 requirements specified 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 sample shall be used to initiate each test. The permittee must initiate the toxicity test within 36 hours after the collection of the last portion of the first composite sample. Collection of the second and third composite samples must be timed so as to permit an approximately equal use distribution of the three composite samples for daily static renewals. The permittee must collect the composite samples so that the maximum holding time for any effluent sample shall not exceed 72 hours. 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 third composite sample, the permittee must ensure that the second 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. The 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 in accordance with the Report Preparation Section of 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.

As of October 22, 2015, the EPA published the "National Pollutant Discharge Eliminations System (NPDES) Electronic Reporting" final rule, with an effective date of December 21, 2015, which requires the electronic reporting and sharing of Clean Water Act National Pollutant Discharge Elimination System (NPDES) program information. DEQ has developed electronic systems so that NPDES-regulated entities can submit the required electronic DMRs and other reports to DEQ as the initial recipient. Instructions on how to access and use the appropriate electronic reporting tool 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 deqreporting@deq.ok.gov.

b. A valid test for *Ceriodaphnia dubia / 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 quarter; 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 and/or sublethal test failure is experienced for *Ceriodaphnia dubia / 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 valid test (excluding retests) is performed on a species during a reporting period, the permittee shall report the lowest lethality and sublethality NOEC 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 $NOEC_L$ 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 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 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.

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.

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 *Ceriodaphnia dubia* / Fathead minnow results in an $NOEC_L$ and/or $NOEC_S$ less than the critical dilution, report a "1"; otherwise, report a "0".

(2) Retest #2 (STORET 22416): If the second monthly retest following failure of a routine test for *Ceriodaphnia dubia*/ Fathead minnow results in an $NOEC_L$ and/or $NOEC_S$ less than the critical dilution, 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 *Ceriodaphnia dubia* and/or Fathead minnow with no lethal or sublethal 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 6 months (actual testing must occur during the periods June 1 through September 30 and December 1 through March 31) for the approved test specie(s).

b. Certification – The permittee must certify in writing that no lethal or sublethal 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, $NOEC_L$ values percent mortality at the critical dilution, $NOEC_S$ values, and coefficients of variation for the control and critical dilutions. 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 and/or sublethal failures after a monitoring frequency reduction – If any lethal or sublethal endpoint test is failed at any time after the granting of a monitoring frequency reduction, two 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 (TRE)

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 Toxicity Reduction Evaluation (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 (TIE) 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 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 Discharge Monitoring Report 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 twenty-eight (28) months after confirming lethality and/or sublethality 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 the level at which there is no significant lethality and/or sublethality at the critical dilution. 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 CFR 122.44(d)(1)(v).

MINIMUM QUANTIFICATION LEVELS (MQLs)

METALS AND CYANIDE	(ug/L)	EPA METHOD
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

DIOXIN		
2,3,7,8-Tetrachlorodibenzo-P-Dioxin (TCDD) [2,4]	0.00001	1613

VOLATILE COMPOUNDS		
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-Chloronapthalene[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

PESTICIDES

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