

**PART II. OTHER PERMIT REQUIREMENTS**

**A. WHOLE EFFLUENT TOXICITY LIMIT FOR CERIODAPHNIA DUBIA SPECIES  
(7-DAY CHRONIC NOEC, STATIC RENEWAL, FRESHWATER)**

1. SCOPE AND METHODOLOGY

- a. The permittee shall test the effluent for toxicity in accordance with the provisions in this section. Applicability to multiple outfalls is described in Item 2.d.5 of this section. The permittee shall biomonitor for *Ceriodaphnia dubia* 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 so as to ensure sufficient time remains in the reporting period should repeat tests be necessary. Intervals between test initiation dates shall be a function of the required testing frequency, as follows:

- Monthly retests: No less than 20 days and no more than 40 days.
- Quarterly: No less than 2 months and no more than 4 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%, and 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-R-02-013 (October 2002), or most recent update thereof. A minimum of ten (10) replicates consisting of one (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 these criteria are not met at the end of 8 days, the test must be repeated.

b. CHRONIC LETHAL EFFECT TEST FAILURE

The NOEC<sub>L</sub> (No Observed Lethal Effect Concentration) is defined as the greatest effluent dilution at and below which lethality that is statistically different from the control (0% effluent) at the 95% confidence level does not occur. Chronic lethal test failure (chronic NOEC<sub>L</sub> test) is defined as a demonstration of a statistically significant lethal effect at test completion to a test species at or below the critical dilution.

c. CHRONIC SUBLETHAL EFFECT TEST FAILURE

The NOEC<sub>S</sub> (No Observed Sublethal Effect Concentration) is defined as the greatest effluent dilution at and below which sublethality (inhibited reproduction in the *Ceriodaphnia dubia* test) that is statistically different from the control (0% effluent) at the 95% confidence level does not occur. Chronic sublethal test failure (chronic NOEC<sub>S</sub> 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 I of this permit. Whenever a whole effluent toxicity test for *Ceriodaphnia dubia* results in an NOEC<sub>L</sub> value less than the critical dilution, the permittee shall be considered in violation of this permit, and the frequency of testing for both species will increase to monthly until such time as compliance with the NOEC<sub>L</sub> whole effluent toxicity limitation is demonstrated for a period of three (3) consecutive months, at which time the permittee may return to the testing frequency stated in Part I of this permit. Testing conducted pursuant to this 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 notify the DEQ Water Quality Division Toxics Coordinator immediately, and in writing 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.

2. 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* control females must produce three broods.
- (4) 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.
- (5) 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.
- (6) As documented at test termination, no more than forty (40) percent of the daphnid test organisms in any effluent dilution or in the control (0% effluent) shall be male.

Test failure may not be construed or reported as invalid due to a coefficient of variation value of greater than 40% in the critical dilution. A repeat test shall be conducted within the reporting period of any test determined to be invalid.

b. Statistical Interpretation

- (1) For the *Ceriodaphnia dubia* survival test, the statistical analyses 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) For the *Ceriodaphnia dubia* reproduction test the statistical analyses 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 2.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 3 below.

c. Dilution Water

- (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. 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 on an effluent discharge to a receiving stream classified as intermittent or to a receiving stream with no flow due to zero flow conditions.
- (2) If the receiving water is unsatisfactory as a result of instream toxicity (fails to fulfill the test acceptance criteria of Item 2.a), the permittee must submit the test results exhibiting receiving water toxicity with the full test report required in Item 3 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 2.a. was run concurrently with the receiving water control;
  - (b) the test indicating receiving water toxicity was carried out to completion (i.e., 7 days); and
  - (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.

d. Samples and Composites

- (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 effluent sample shall be used to initiate each test and must be collected so that its holding time (between collection of the last portion of the sample and test initiation) does not exceed 36 hours. Collection of the second and third composite effluent samples must be timed so as to permit an approximately equal use distribution of the three composite samples for daily static renewals. In no case shall the holding time of the second and third composite samples (between collection of the last portion of the sample and its first use) exceed 72 hours. All samples shall be chilled to  $4^{\circ}\text{C} \pm 2^{\circ}\text{C}$  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 all required effluent samples, the permittee must ensure that the first and second composite effluent samples are 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. 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.
- (5) MULTIPLE OUTFALLS: If the provisions of this section are applicable to multiple outfalls, as specified in Part I of the permit, the permittee shall combine the composite effluent samples in proportion to the average flow from the outfalls listed in Item 1.a of this section for the day the sample was collected. The permittee shall perform the toxicity test on the flow-weighted composite of the outfall samples.

3. REPORTING

- a. The permittee shall prepare a full report of the results of all tests conducted pursuant to this section 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. The permittee shall retain each full report pursuant to the records retention provisions of Part III of this permit. The permittee shall submit full test reports for all tests initiated, regardless of whether the tests are carried to completion, to the DEQ no later than the 15<sup>th</sup> day of the month following the end of the reporting period, including any test which is considered invalid, is terminated early for any reason, or which indicates receiving water toxicity.
- b. A valid test (excluding retests) must be reported on the DMR for each reporting period specified in Part I of this permit. DMRs must be submitted by the 15<sup>th</sup> day of the month following the end of the reporting

period. If more than one valid test (excluding retests) is performed during a reporting period, the permittee shall report the lowest survival test results as the 7-day minimum. The permittee shall report the test results on separate DMRs denoting the specific dates of each test on the relevant DMR in the “comments” section. The “monitoring period” dates should always reflect the original monitoring period. The date in the lower right hand corner of the DMR should be the date the DMR is sent to the DEQ.

If any test results in anomalous NOEC<sub>L</sub> or NOEC<sub>S</sub> findings (i.e., it indicates an interrupted dose response across the dilution series), the DEQ recommends that the permittee contact its DEQ toxicity coordinator for a technical review of the test results prior to submitting the full 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 a result of a previously invalid test. A test is a RETEST if it is performed as a result of a previously failed test.

- (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 3.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 3.c below.
- c. The permittee shall report the following results for all VALID toxicity tests (excluding retests) initiated during the reporting period on the DMR for that reporting period in accordance with Item 3.b above and Part III of this permit.
- (a) Parameter TLP3B: If the *Ceriodaphnia dubia* NOEC<sub>L</sub> for survival is less than the critical dilution, report a "1"; otherwise, report a "0".
  - (b) Parameter TOP3B: Report the *Ceriodaphnia dubia* NOEC<sub>L</sub> value for survival.
  - (c) Parameter TJP3B: Report the *Ceriodaphnia dubia* percent mortality in the critical dilution at test completion.
  - (d) Parameter TGP3B: If the *Ceriodaphnia dubia* NOEC<sub>S</sub> for reproduction is less than the critical dilution, report a "1"; otherwise, report a "0".

- (e) Parameter TPP3B: Report the *Ceriodaphnia dubia* NOEC<sub>S</sub> value for reproduction.
- (f) Parameter TQP3B: Report the highest coefficient of variation (critical dilution or control) for *Ceriodaphnia dubia* reproduction.

d. WHOLE EFFLUENT TOXICITY LIMIT

The permittee shall report the lowest NOEC<sub>L</sub> value for daphnids for the 7-day minimum under STORET No. 22414 on the DMR for the reporting period in accordance with Part III of this permit. If more than one valid test is performed during the reporting period the permittee shall report the results of all valid tests during the reporting period on separate DMRs under STORET No. 22414.

**B. WHOLE EFFLUENT TOXICITY TESTING FOR THE FATHEAD MINNOW SPECIES  
(7-DAY CHRONIC NOEC, STATIC RENEWAL, FRESHWATER)**

1. SCOPE AND METHODOLOGY

- a. The permittee shall test the effluent for toxicity in accordance with the provisions in this section. Applicability to multiple outfalls is described in Item 3.d.5 of this section. The permittee shall biomonitor for *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 so as to ensure sufficient time remains in the reporting period should repeat tests be necessary. Intervals between test initiation dates shall be a function of the required testing frequency, as follows:

- Monthly retests: No less than 20 days and no more than 40 days.
- Quarterly: No less than 2 months and no more than 4 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%, and 100%
SAMPLE TYPE:	Defined at Part I
TEST SPECIES/METHODS:	40 CFR 136, except for changes required by EPA, Region 6.

*Pimephales promelas* (Fathead minnow) chronic static renewal 7-day larval survival and growth test, Method 1000.0, EPA-821-R-02-013 (October 2002) (except as required by EPA, Region 6) 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 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 effect at test completion 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 (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 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 CHRONIC TEST FAILURE

Upon becoming aware of the failure of any test, the permittee shall notify the DEQ Water Quality Division Toxics Coordinator immediately, and in writing 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 lethal effect test failure during routine testing, the frequency of testing for the affected species 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) 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. Additional tests are not required for a sublethal effect test failure. A full laboratory report for the failed routine test and both additional tests, if required, shall be prepared and submitted to the DEQ in accordance with procedures outlined in Item 4 of this section.

b. PERSISTENT LETHALITY

If either of the two additional tests result in an  $NOEC_L$  value less than the critical dilution, persistent lethality is exhibited, and the permittee shall initiate a Toxicity Reduction Evaluation (TRE) as specified in Item 6 of this section. The TRE initiation date will be the test completion date of the first failed retest. The permittee may request a temporary exemption to this TRE-triggering criterion if, and only if, the permittee is under a compliance schedule defined in an OPDES permit or a Section 308 order to effect aquatic toxicity reduction measures, regardless of whether such measures resulted from a previous TRE.

c. INTERMITTENT LETHALITY

If both additional tests result in an  $NOEC_L$  value greater than or equal to the critical dilution, persistent lethality is not exhibited. However, if any routine test lethal effect failure occurs within 18 months of a prior lethal effect test failure, intermittent lethality is exhibited, and the permittee may be required by the DEQ to initiate a TRE, as described in Item 5 of this section, based on the severity and pattern of such lethal effect over time.

d. PERSISTENT SUBLETHALITY

Barring persistent lethality, if two consecutive routine tests result in a sublethal effect failure for a species, persistent sublethality is exhibited, and the permittee:

- (1) Shall increase the frequency of testing for the affected species to, or continue at, as appropriate, the WET testing frequency prescribed in Part I for the remaining life of the permit; and
- (2) May be required by the DEQ to initiate a TRE, as specified in Item 5 of this section, based on the severity and pattern of such sublethal effect over time.

e. SUSPENSION OF RETESTING REQUIREMENTS DURING TRE

Retesting requirements in Item 2.a are temporarily suspended upon submittal of a TRE Action Plan. Such suspension of retesting requirements applies only to the species under evaluation by a TRE and only to the period during which a TRE is being performed.

3. REQUIRED TOXICITY TESTING CONDITIONS

a. Test Acceptance

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

- (1) The toxicity test control (0% effluent) must have survival equal to or greater than 80%.
- (2) 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.
- (3) The percent coefficient of variation between replicates shall be 40% or less in the control (0% effluent) for the growth and survival endpoints of the Fathead minnow test.
- (4) 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 growth and survival endpoints of the Fathead minnow test.

Test failure may not be construed or reported as invalid due to a coefficient of variation value of greater than 40% in the critical dilution. A repeat test shall be conducted within the reporting period of any test determined to be invalid.

b. Statistical Interpretation

- (1) For the Fathead minnow larval survival and growth test, the statistical analyses 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.
- (2) 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<sub>L</sub> of not less than the critical dilution for the DMR reporting requirements found in Item 4 below.

c. Dilution Water

- (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. 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 on an effluent discharge to a receiving stream classified as intermittent or to a receiving stream with no flow due to zero flow conditions.
- (2) If the receiving water is unsatisfactory as a result of instream toxicity (fails to fulfill the test acceptance criteria of 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; and
  - (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.

d. Samples and Composites

- (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 effluent sample shall be used to initiate each test and must be collected so that its holding time (between collection of the last portion of the sample and test initiation) does not exceed 36 hours. Collection of the second and third composite effluent samples must be timed so as to permit an approximately equal use distribution of the three composite samples for daily static renewals. In no case shall the holding time of the second and third composite samples (between collection of the last portion of the sample and its first use) exceed 72 hours. All samples shall be chilled to  $4^{\circ}\text{C} \pm 2^{\circ}\text{C}$  during collection, shipping and/or storage.
- (3) The permittee shall collect the 24-hour 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 all required effluent samples, the permittee must ensure that the first and second composite effluent samples are 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. 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.

- (5) MULTIPLE OUTFALLS: If the provisions of this section are applicable to multiple outfalls, as specified in Part I of the permit, the permittee shall combine the composite effluent samples in proportion to the average flow from the outfalls listed in Item 1.a of this section for the day the sample was collected. The permittee shall perform the toxicity test on the flow-weighted composite of the outfall samples.

#### 4. REPORTING

- a. The permittee shall prepare a full report of the results of all tests conducted pursuant to this section 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. The permittee shall retain each full report pursuant to the records retention provisions of Part III of this permit. The permittee shall submit full test reports for all tests initiated, regardless of whether the tests are carried to completion, to the DEQ no later than the 15<sup>th</sup> day of the month following completion of the test, including any test which is considered invalid, is terminated early for any reason, or which indicates receiving water toxicity.
- b. A valid test (excluding retests) 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. A DMR must be submitted by the 15<sup>th</sup> day of the month following completion of any valid test. The full report for the test (see Item 4.a above) shall be submitted along with the DMR. If a survival test failure is experienced, two copies of the blank DMR for the applicable reporting period shall be made in advance of completing and submitting the DMR so that the DMR copies may be used to report results of the required retests. If more than one valid test (excluding retests) is performed during a reporting period, the permittee shall report the lowest lethality and sublethality NOEC effluent concentrations over all such tests as the 7-day minimum on the DMR for the reporting period in question, denoting the specific dates of each test in the comments section of the DMR. Under no circumstance shall the reporting period dates at the top of the DMR form be altered.

If any test results in anomalous NOEC<sub>L</sub> or NOEC<sub>S</sub> findings (i.e., it indicates an interrupted dose response across the dilution series), the DEQ recommends that the permittee contact its DEQ toxicity coordinator for a technical review of the test results prior to submitting the full 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 a result of a previously invalid test. A test is a RETEST if it is performed as a result of a previously failed test.

- (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.
- c. 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.
- (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.
- d. 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 results in an  $NOEC_L$  for survival 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 results in an  $NOEC_L$  for survival 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 submitted by no later than the 15<sup>th</sup> day of the month following completion of 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 on 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. TOXICITY REDUCTION EVALUATION (TRE)

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

- (1) Specific Activities. 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 obtained through the National Technical Information Service (NTIS) by phone at (703) 487-4650, or by writing:

U.S. Department of Commerce  
National Technical Information Service  
5285 Port Royal Road  
Springfield, VA 22161

- (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 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 lethality 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 plan and schedule submittal. The permittee shall assume all risks for failure to achieve the required toxicity reduction.

- c. The permittee shall submit to the DEQ a quarterly TRE Activities Report with the Discharge Monitoring Report in months to be specified, containing information on toxicity reduction evaluation activities including:
  - (1) any data and/or substantiating documentation which identifies the pollutant(s) and/or source(s) of effluent toxicity;
  - (2) any studies/evaluations and results on the treatability of the facility's effluent toxicity; and
  - (3) any data which identifies effluent toxicity control mechanisms that will reduce effluent toxicity to the level necessary to meet no significant lethality at the critical dilution.
- d. The permittee shall submit to the DEQ a Final Report on Toxicity Reduction Evaluation Activities no later than twenty-eight (28) months from confirming lethality in the retests, which provides information pertaining to the specific control mechanism selected that will, when implemented, result in reduction of effluent toxicity to no significant lethality at the critical dilution. The report will also provide a specific corrective action schedule for implementing the selected control mechanism.
- e. Quarterly testing during the TRE is a minimum monitoring requirement. The DEQ recommends that permittees required to perform a TRE not rely on quarterly testing alone to ensure success in the TRE, and that additional tests be performed to capture toxic samples for identification of toxicants. Failure to identify the specific chemical compound 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).

#### **C. SEWAGE SLUDGE REQUIREMENTS**

The sludge produced at the facility is currently treated by anaerobic digestion and land applied (liquid).

Sewage sludge disposal practices shall comply with 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).

Sewage sludge disposal practices shall comply with the requirements of the Sludge Management Plan Number SP3514006 approved by the Oklahoma Department of Environmental Quality (formerly Oklahoma State Department of Health) on September 19, 1984 and modified on January 16, 1997 for land application of sludge at various approved sites in Cleveland County, State of Oklahoma.

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

In addition, the permittee shall comply with other sludge requirements specified in Part IV of this permit. The permittee is required to maintain all records relevant to sewage sludge disposal for the life of the permit. These records shall be made available to DEQ upon request.

#### **D. POLLUTION PREVENTION REQUIREMENTS**

- 1. The permittee shall institute a program within 12 months of the effective date of the permit (or continue on existing one) 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 sewage sludge generated by the facility.
- a. An annual quantitative tabulation of the ultimate disposition of all sewage sludge (including, but not limited to, the amount beneficially reused, landfilled, surface disposed, and incinerated).
  - b. An assessment of technological processes and an economic analysis evaluating the potential for beneficial reuse of all sewage sludge not currently beneficially reused including a listing of any steps which would be required to achieve the sludge quality necessary to beneficially reuse the 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 sewage sludge.
  - d. An analysis of one composite sample of the 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 of the permit.
  - e. A listing of the specific steps (controls/changes) which would be necessary to achieve and sustain the quality of the sludge so that the pollutant concentrations in the sludge fall below the pollutant concentration criteria listed in Part IV, Element I, Section III, Table 3 of the permit.
  - 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 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. 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 approved POTW pretreatment program submitted by the permittee. The pretreatment program was approved on December 24, 1983 and modified on October 19, 1989; September 30, 1993; March 1, 2001; and August 15, 2003. 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 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.” The 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. However, in keeping with the requirements of 40 CFR 403.8 (f)(2)(v), the permittee must inspect and sample the effluent from each Significant Industrial User at least once a year. 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(t), this control shall be achieved through permits or equivalent individual control mechanisms issued to each such user. Such control mechanisms must be enforceable and contain, at a minimum, the following conditions:
  - i. Statement of duration (in no case more than five years);
  - ii. 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;
  - iii. Effluent limits based on applicable general pretreatment standards, categorical pretreatment standards, local limits, and State and local law;
  - iv. Self-monitoring, sampling, reporting, notification and record keeping requirements, including an identification of the pollutants to be monitored, sampling location, sampling frequency, and sample type, based on the applicable general pretreatment standards in 40 CFR 403, categorical pretreatment standards, local limits, and State and local law; and
  - v. 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.
- e. The permittee shall evaluate, at least once every two years, whether each Significant Industrial User needs a plan to control slug discharges. If the POTW decides that a slug control plan is needed, the plan shall contain at least the minimum elements required in 40 CFR 403.8 (f)(2)(v);
- 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 enforce specific limits to implement the provisions of 40 CFR Parts 403.5(a) and (b), as required by 40 CFR Part 403.5(c). Each POTW with an approved pretreatment program shall continue to develop these limits as necessary and effectively enforce such limits.

Updated local limits were incorporated into the approved program with the August 15, 2003 modification.

All specific prohibitions or limits developed under this requirement are deemed to be conditions of this permit. The specific prohibitions set out in 40 CFR Part 403.5(b) shall be enforced by the permittee unless modified under this provision.

3. The permittee shall analyze 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 once per year and the toxic pollutants in Table III at least once every 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 once every three months on both the influent and the effluent.

The influent and effluent samples collected shall be composite samples consisting of at least 12 aliquots collected at approximately equal intervals over a representative 24 hour period and composited according to flow. 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, at least 4 grab samples, taken at equal intervals over a representative 24-hour period, shall be taken.

4. The permittee shall prepare annually a list of Industrial Users which during the preceding twelve months were in significant noncompliance 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)(vii) [rev. 7/24/90] or criteria established in the approved POTW pretreatment program. This list is to be published annually in the largest daily newspaper in the municipality during the month of December.

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

- a. An updated list of all significant industrial users. For each industrial user listed the following information shall be included:
  - i. Standard Industrial Classification (SIC) code and categorical determination;
  - ii. 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 12 months);
  - iii. A summary of all monitoring activities performed within the previous 12 months. The following information shall be reported:
    - total number of inspections performed;
    - total number of sampling visits made;

- iv. Status of compliance with both effluent limitations and reporting requirements. Compliance status shall be defined as follows:
    - Compliant (C) - no violations during the previous 12 month period;
    - Non-compliant (NC) - one or more violations during the previous 12 months but does not meet the criteria for significantly non-compliant industrial users;
    - Significant Noncompliance (SN) - in accordance with requirements described in d. above; and
  - v. 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 12 month period 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. The results of all influent and effluent analyses performed pursuant to “item 3 above”;
  - e. A copy of the newspaper publication of the significantly non-compliant industrial users giving the name of the newspaper and the date published;
  - f. The monthly average water quality based effluent concentration necessary to meet the state water quality standards as developed in the approved technically based local limits.
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 in accordance with “item 3 above” shall meet the Minimum Quantification Levels (MQLs) shown in the following tables:

**MINIMUM QUANTIFICATION LEVELS (MQLs)**

<b><u>METALS AND CYANIDE</u></b>	<b><u>(ug/L)</u></b>	<b><u>EPA METHOD</u></b>	<b><u>VOLATILE COMPOUNDS</u></b>	<b><u>(ug/L)</u></b>	<b><u>EPA METHOD</u></b>
Antimony (Total) <sup>1</sup>	60	200.7	1,1,2,2-Tetrachloroethane <sup>5</sup>	10	624
Arsenic (Total) <sup>1</sup>	10	206.2	Tetrachloroethylene <sup>5</sup>	10	624
Beryllium (Total) <sup>1</sup>	5	200.7	Toluene <sup>5</sup>	10	624
Cadmium (Total) <sup>2</sup>	1	213.2	1,2-trans-Dichloroethylene <sup>5</sup>	10	624
Chromium (Total) <sup>1</sup>	10	200.7	1,1,1-Trichloroethane <sup>5</sup>	10	624
Chromium (3+) <sup>1</sup>	10	200.7	1,1,2-Trichloroethane <sup>5</sup>	10	624
Chromium (6+) <sup>1</sup>	10	200.7	Trichloroethylene <sup>5</sup>	10	624
Copper (Total) <sup>2</sup>	10	220.2	Vinyl Chloride <sup>5</sup>	10	624
Lead (Total) <sup>2</sup>	5	239.2	<b><u>ACID COMPOUNDS</u></b>		
Mercury (Total) <sup>1</sup>	0.2	245.1	2-Chlorophenol <sup>5</sup>	10	625
Molybdenum (Total) <sup>9</sup>	30	200.7	2,4-Dichlorophenol <sup>5</sup>	10	625
Nickel (Total) <sup>1</sup> [Freshwater]	40	200.7	2,4-Dimethylphenol <sup>7</sup>	10	625
Nickel (Total) <sup>2</sup> [Marine]	5	249.2	4,6-Dinitro-o-Cresol		
Selenium (Total) <sup>1</sup>	5	270.2	12 methyl 4,6-dinitrophenol <sup>5</sup>	50	625
Silver (Total) <sup>2</sup>	2	272.2	2,4-Dinitrophenol <sup>5</sup>	50	625
Thallium (Total) <sup>1</sup>	10	279.2	2-Nitrophenol <sup>5</sup>	20	625
Zinc (Total) <sup>1</sup>	20	200.7	4-Nitrophenol <sup>5</sup>	50	625
Cyanide (Total) <sup>1</sup>	10	335.3	p-Chloro-m-Cresol		
<b><u>DIOXIN</u></b>			[4 chloro-3-methylphenol] <sup>6</sup>	10	625
1,7,8-Tetrachloro-dibenzo- p-dioxin (TCDD) <sup>5</sup>	.00001	1613	Pentachlorophenol <sup>5</sup>	50	625
			Phenol <sup>5</sup>	10	625
<b><u>VOLATILE COMPOUNDS</u></b>			2,4,6-Trichlorophenol <sup>5</sup>	10	625
Acrolein <sup>4</sup>	50	624	<b><u>BASE/NEUTRAL COMPOUNDS</u></b>		
Acrylonitrile <sup>4</sup>	50	624	Acenaphthene <sup>5</sup>	10	625
Benzene <sup>4</sup>	10	624	Acenaphthylene <sup>5</sup>	10	625
Bromoform <sup>5</sup>	10	624	Anthracene <sup>5</sup>	10	625
Carbon Tetrachloride <sup>5</sup>	10	624	Benzidine <sup>4</sup>	50	625
Chlorobenzene <sup>5</sup>	10	624	Benzo(a)anthracenes <sup>5</sup>	10	625
Chlorodibromomethane <sup>5</sup>	10	624	Benzo(a)pyrene <sup>5</sup>	10	625
Chloroethane <sup>6</sup>	50	624	3,4-Benzofluoranthene <sup>5</sup>	10	625
2-Chloroethyl vinyl ether <sup>4</sup>	10	624	Benzo(ghi)perylene <sup>6</sup>	20	625
Chloroform <sup>5</sup>	10	624	Benzo(k)fluoranthene <sup>5</sup>	10	625
Dichlorobromomethane <sup>5</sup>	10	624	Bis(2-chloroethoxy) methane <sup>5</sup>	10	625
1,1-Dichloroethane <sup>5</sup>	10	624	Bis(2-chloroethyl) ether <sup>5</sup>	10	625
1,2-Dichloroethane <sup>5</sup>	10	624	Bis(2-chloroisopropyl) ether <sup>5</sup>	10	625
1,1-Dichloroethylene <sup>5</sup>	10	624	Bis(2-ethylhexyl) phthalate <sup>5</sup>	10	625
1,2-Dichloropropane <sup>5</sup>	10	624	4-Bromophenyl phenyl ether <sup>7</sup>	10	625
1,3-Dichloropmpylenel <sup>5</sup>	10	624	Butyl benzyl phthalate <sup>5</sup>	10	625
Ethylbenzene <sup>5</sup>	10	624	2-Chloronaphthalene <sup>5</sup>	10	625
Methyl Bromide [Bromomethane] <sup>6</sup>	50	624	4-Chlorophenyl phenyl ethers <sup>5</sup>	10	625
Methyl Chloride [Chloromethane] <sup>6</sup>	50	624	Chrysene <sup>5</sup>	10	625
Methylene Chloride <sup>5</sup>	20	624			

**MINIMUM QUANTIFICATION LEVELS (MQLs)**

<b><u>BASE/NUETRAL COMPOUNDS</u></b>	<b><u>(ug/L)</u></b>	<b><u>EPA METHOD</u></b>	<b><u>PESTICIDES</u></b>	<b><u>(ug/L)</u></b>	<b><u>EPA METHOD</u></b>
Dibenzo (a,h) anthracene <sup>6</sup>	20	625	Endrin <sup>7</sup>	.1	609
1,2-Dichlorobenzene <sup>5</sup>	10	625	Endrin aldehyde <sup>7</sup>	.1	609
1,3-Dichlorobenzene <sup>5</sup>	10	625	Heptachlor <sup>7</sup>	.05	608
1,4-Dichlorobenzene <sup>5</sup>	10	625	Heptachlor epoxide <sup>7</sup>	.1	608
3,3'-Dichlorobenzidirm <sup>6</sup>	50	625	(BHC-hexachlorocyclohexane)		
Diethyl Phthalate <sup>5</sup>	10	625	PCB-1242 <sup>7</sup>	1.0	608
Dimethyl Phthalate <sup>5</sup>	10	625	PCB-1254	1.0	608
Di-n-Butyl Phthalate <sup>5</sup>	10	625	PCB-1221	1.0	608
2,4-Dinitrotoluene <sup>5</sup>	10	625	PCB-1232	1.0	608
2,6-Dinitrotoluene <sup>5</sup>	10	625	PCB-1248	1.0	608
Di-n-octyl Phthalate <sup>5</sup>	10	625	PCB-1260	1.0	609
1,2-Diphenylhydrazine <sup>4</sup>	20	625	PCB,1016	1.0	608
Fluoranthene <sup>5</sup>	10	625	Toxaphene <sup>7</sup>	5.0	608
Fluorene <sup>5</sup>	10	625			
Hexachlorobenzene <sup>5</sup>	10	625			
Hexachlorobutadiene <sup>5</sup>	10	625			
Hexachlorocyclopentadiene <sup>5</sup>	10	625			
Hexachloroethane <sup>6</sup>	20	625			
Indeno (1,2,3-cd) pyrene <sup>6</sup>	20	625			
(2,3-o-phenylene pyrene)					
Isophorone <sup>5</sup>	10	625			
Naphthalene <sup>5</sup>	10	625			
Nitrobenzene <sup>5</sup>	10	625			
N-nitrosodimethylamine <sup>6</sup>	50	625			
N-nitrosodi-n-propylamine <sup>6</sup>	20	625			
N-nitrosodiphenylamine <sup>6</sup>	20	625			
Phenanthrene <sup>5</sup>	10	625			
Pyrene <sup>5</sup>	10	625			
1,2,4-Trichlorobenzene <sup>5</sup>	10	625			
<b><u>PESTICIDES</u></b>					
Aldrin <sup>7</sup>	0.05	608			
Alpha-BHC <sup>7</sup>	0.05	608			
Beta-BHC <sup>7</sup>	0.05	608			
Gamma-BHC (Lindane) <sup>7</sup>	0.05	608			
Delta-BHC <sup>7</sup>	0.05	608			
Chlordane <sup>7</sup>	0.2	608			
4,4 <sup>9</sup> -DDV <sup>7</sup>	0.1	608			
4,4 <sup>9</sup> -DDE (p,p-DDX) <sup>7</sup>	0.1	608			
4,4 <sup>9</sup> -DDD (p,p-TDE) <sup>7</sup>	0.1	608			
Dieldrin <sup>7</sup>	0.1	608			
Alpha-endosulfan <sup>7</sup>	0.1	608			
Beta-endosulfan <sup>7</sup>	0.1	608			
Endosulfan sulfate <sup>7</sup>	0.1	608			

<sup>1</sup>Based on Contract Required Detection level (CRDL) developed

pursuant to 40 CFR Part 300.430(b)(8)

<sup>2</sup> Method 213.2, 239.2, 220.2, 272.2

<sup>3</sup>Dioxin National Strategy

<sup>4</sup>No CRQL(Contract required Quantification Level developed

pursuant to 40 CFR Part 300.430(b)(8)) established

<sup>5</sup>CRQL basis, equivalent to ML

<sup>6</sup>ML basis, higher than CRQL

<sup>7</sup>CRQL basis, no ML established

<sup>8</sup>CRQL basis, higher than ML

<sup>9</sup>Based on 3.3 times IDL published in 40 CFR 136, Appendix C