

**ATTACHMENT E – MONITORING AND REPORTING PROGRAM NO. R1-2011-0054  
(REVISED January 9, 2017)**

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**ATTACHMENT E – MONITORING AND REPORTING PROGRAM (MRP) (REVISED JANUARY 9, 2017)**

Title 40 of the Code of Federal Regulations section 122.48 (section 122.48) requires that all National Pollutant Discharge Elimination System (NPDES) permits specify monitoring and reporting requirements. California Water Code (Water Code) sections 13267 and 13383 also authorize the Regional Water Quality Control Board (Regional Water Board) to require technical and monitoring reports. This MRP establishes monitoring and reporting requirements, which implement the federal and California regulations.

**I. GENERAL MONITORING PROVISIONS**

- A.** Composite samples may be taken by a proportional sampling device approved by the Executive Officer or by grab samples composited in proportion to flow. In compositing grab samples, the sampling interval shall not exceed 1 hour.
- B.** If the Discharger monitors any pollutant more frequently than required by this Order, using test procedures approved by section Part 136, or as specified in this Order, the results of monitoring shall be included in the calculation and reporting of the data submitted in the monthly and annual discharger monitoring reports.
- C.** Laboratories analyzing monitoring samples shall be certified by the California Department of Public Health (DPH; formerly the Department of Health Services), in accordance with the provision of Water Code section 13176, and must include quality assurance/quality control data with their reports.
- D.** Compliance and reasonable potential monitoring analyses shall be conducted using commercially available and reasonably achievable detection limits that are lower than the applicable effluent limitation. If no minimum level (ML) value is below the effluent limitation, the lowest ML shall be selected as the reporting level (RL).

**II. MONITORING LOCATIONS**

The Discharger shall establish the following monitoring locations to demonstrate compliance with the effluent limitations, discharge specifications, and other requirements in this Order:

**Table E-1. Monitoring Station Locations**

Discharge Point Name	Monitoring Location Name	Monitoring Location Description
--	INF-001	A representative point preceding primary treatment.
--	INT-001	Internal monitoring location for purposes of monitoring chlorine residual in chlorine treated wastewater within the contact chamber prior to dechlorination.

**Table E-1. Monitoring Station Locations**

Discharge Point Name	Monitoring Location Name	Monitoring Location Description
001	EFF-001	Treated effluent from the wastewater treatment facility (WWTF) downstream of disinfection processes, before contact with the receiving water.
002	EFF-002	Treated effluent from the WWTF downstream of disinfection processes, before discharge to the percolation pond.
003	EFF-003	Treated effluent from the WWTF downstream of disinfection processes, before discharge to the Irrigation Site.
--	RSW-001	Lower Eel River surface water upstream of and beyond influence of the discharge.
--	RSW-002	Lower Eel River surface water at the point of discharge of Discharge Point 001.
--	MW-1 thru MW-4	Existing monitoring wells, located on irrigation parcel

### III. INFLUENT MONITORING REQUIREMENTS

#### A. Monitoring Location INF-001

1. The Discharger shall monitor influent to the WWTF at Monitoring Location INF-001 as follows:

**Table E-2. Influent Monitoring – Monitoring Location INF-001**

Parameter	Units	Sample Type	Minimum Sampling Frequency	Required Analytical Test Method <sup>1</sup>
Flow (Mean) <sup>2</sup>	mgd	Meter	Continuous	--
Biochemical Oxygen Demand (5-day @ 20°C) <sup>3</sup>	mg/L	24-hr Composite	Weekly	Std Method 5210B
Total Suspended Solids <sup>3</sup>	mg/L	24-hr Composite	Weekly	Std Method 2540D

### IV. EFFLUENT MONITORING REQUIREMENTS

#### A. Monitoring Location EFF-001

1. When discharging at Discharge Point 001, the Discharger shall monitor treated effluent at Monitoring Location EFF-001 as follows:

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<sup>1</sup> In accordance with the current edition of *Standard Methods (Std Method) for the Examination of Water and Wastewater* (American Public Health Administration) or current test procedures specified in section Part 136.  
<sup>2</sup> In addition to daily flows, the Discharger shall report average monthly flow calculated over a calendar month.  
<sup>3</sup> Monitoring of 5-day biochemical oxygen demand (BOD<sub>5</sub>) and total suspended solids (TSS) in the influent shall occur near simultaneously with effluent monitoring for the same parameters.

**Table E-3. Effluent Monitoring – Monitoring Location EFF-001**

Parameter	Units	Sample Type	Minimum Sampling Frequency	Required Analytical Test Method <sup>1</sup>
Flow (Mean Daily) <sup>2</sup>	mgd	Meter	Continuous	--
Chlorine, Total Residual	mg/L	Grab	Daily	Part 136
Biochemical Oxygen Demand (5-day @ 20°C)	mg/L	24-hr Composite	Weekly	Std Method 5210B
Total Suspended Solids	mg/L	24-hr Composite	Weekly	Std Method 2540D
Settleable Solids	mL/L	Grab	Weekly	Std Method 2540F
pH	std units	Grab	Weekly	Part 136
Temperature	°C	Grab	Weekly	Part 136
Total Coliform Organisms	MPN/100 mL	Grab	Weekly	Std Method 9221
Ammonia Nitrogen, (as N)	mg/L	Grab	Monthly <sup>4</sup>	Std Method 4130
Nitrate Nitrogen	mg/L	Grab	Monthly	Std Method 4130
Nitrite Nitrogen	mg/L	Grab	Monthly	Std Method 4130
Organic Nitrogen	mg/L	Grab	Monthly	Std Method 4500
Nitrogen, Total (as N)	mg/L	Calculation	Monthly	Std Method
Phosphorus, Total (as P)	mg/L	Grab	Monthly	Std Method 4130
Acute Toxicity	% Survival	24-hr Composite	2X / Year <sup>5</sup>	MRP section V
Chronic Toxicity	TUc	24-hr Composite	2X / Year <sup>5</sup>	MRP section V
CTR Pollutants <sup>6</sup>	µg/L	Grab	1X / Permit Term	Std Methods
Dichlorobromomethane	µg/L	Grab	Monthly	Std Method
Chlorodibromomethane	µg/L	Grab	Monthly	Std Method
Total Trihalomethanes <sup>a</sup>	µg/L	Grab	Monthly	Std Method
Monochloroacetic Acid	µg/L	Grab	Monthly	Std Method
Dichloroacetic Acid	µg/L	Grab	Monthly	Std Method
Trichloroacetic Acid	µg/L	Grab	Monthly	Std Method
Monobromoacetic Acid	µg/L	Grab	Monthly	Std Method
Dibromoacetic Acid	µg/L	Grab	Monthly	Std Method
Haloacetic Acids <sup>b</sup>	µg/L	Grab	Monthly	Std Method

Table Notes:

a. The sum of dichlorobromomethane, chlorodibromomethane, bromoform, and chloroform.

b. The sum of monochloroacetic acid, dichloroacetic acid, trichloroacetic acid, monobromoacetic acid, and dibromoacetic acid.

<sup>4</sup> Receiving water measurements for pH and temperature monitoring must coincide with monthly effluent monitoring for ammonia.

<sup>5</sup> Monitoring shall occur during the first month of surface water discharge and during the second consecutive month thereafter (i.e., if monitoring occurs in November, consecutive monitoring shall be performed in January).

<sup>6</sup> Those pollutants identified by the California Toxics Rule (CTR) at section 131.38. Monitoring shall occur simultaneously with receiving water monitoring for CTR pollutants and hardness required by section VIII.A.1 of this MRP.

## V. WHOLE EFFLUENT TOXICITY TESTING REQUIREMENTS

### A. Acute Toxicity Testing

The Discharger shall conduct whole effluent toxicity (WET) testing to determine compliance with the acute toxicity effluent limitations established in section IV.A.1. and IV.A.2 of the Order. The Discharger shall meet the following acute toxicity testing requirements:

- 1. Test Frequency.** The Discharger shall conduct acute WET testing in accordance with the schedule established by this MRP, as summarized in Table E-3, above, when discharging to surface water.
- 2. Sample Type.** For 96-hour static renewal or 96-hour static non-renewal testing, the samples shall be a 24-hr composite sample and shall be representative of the volume and quality of the discharge. Effluent samples shall be collected at Monitoring Location EFF-001. Ammonia, pH, and temperature shall be recorded at 24-hour intervals during the test and shall be reported with the toxicity test results.
- 3. Test Species.** Test species for acute testing shall be an invertebrate, the water flea, *Ceriodaphnia dubia*, and a vertebrate, the rainbow trout, *Oncorhynchus mykiss*, for at least the first two suites of tests conducted within 12 months after the effective date of the Order. After this screening period, monitoring shall be conducted using the most sensitive species. At least one time every 5 years, the Discharger shall re-screen with the two species described above and continue routine monitoring with the most sensitive species.
- 4. Test Methods.** The presence of acute toxicity shall be estimated as specified in *Methods for Measuring the Acute Toxicity of Effluents and Receiving Waters to Freshwater and Marine Organisms* (USEPA Report No. EPA-821-R-02-012, 5<sup>th</sup> edition or subsequent editions), or other methods approved by the Executive Officer. Test procedures related to pH control, sample filtration, aeration, temperature control, and sample dechlorination shall be performed in accordance with the USEPA method and fully explained and justified in each acute toxicity report submitted to the Regional Water Board. Control of the pH in acute toxicity tests is allowed, provided the test pH is maintained at the measured effluent pH, and the control of pH is done in a manner that has the least influence on the test water chemistry and on the toxicity of other pH sensitive materials such as some heavy metals, sulfide, and cyanide.
- 5. Test Dilutions.** The acute toxicity test shall be conducted using 100 percent effluent collected at Monitoring Location EFF-001.
- 6. Test Failure.** If an acute toxicity test does not meet all test acceptability criteria, as specified in the test method, the Discharger shall re-sample and re-test as soon as possible, not to exceed 7 days following notification of test failure.

- 7. Accelerated Monitoring.** If the result of any acute toxicity test fails to meet the single test minimum limitation established in section IV.A.1.d or IV.A.2.d of the Order (70 percent survival), and the testing meets all test acceptability criteria, the Discharger shall take two more samples, one within 14 days, and one within 21 days of receiving the initial sample result. If any of the additional samples do not comply with the three sample median minimum limitation (90 percent survival), the Discharger shall initiate a Toxicity Reduction Evaluation (TRE) in accordance with section VI.C.2.a of the Order. If the two additional samples are in compliance with the acute toxicity requirement, and the testing meets all test acceptability criteria, then TRE implementation will not be required. If the discharge has ceased before the additional samples could be collected, the Discharger shall contact the Executive Officer within 21 days with a plan to demonstrate compliance with the acute toxicity effluent limitation.
- 8. Notification.** The Discharger shall notify the Regional Water Board in writing 14 days after the receipt of test results exceeding an effluent limitation or trigger. The notification will describe actions the Discharger has taken or will take to investigate and correct the cause(s) of toxicity. It may also include a status report on any actions required by this Order, with a schedule for actions not yet completed. If no actions have been taken, the reasons shall be given.
- 9. Reporting.** Test results for acute toxicity tests shall be reported according to section 12 (Report Preparation) of *Methods for Measuring the Acute Toxicity of Effluents and Receiving Waters to Freshwater and Marine Organisms* or in an equivalent format that clearly demonstrates that the Discharger is in compliance with effluent limitations and other permit requirements.
- 10. Ammonia Toxicity.** The acute toxicity test shall be conducted without modifications to eliminate ammonia toxicity.

## **B. Chronic Toxicity Testing**

The Discharger shall conduct chronic WET testing to demonstrate compliance with the Basin Plan's narrative water quality objective for toxicity. The Discharger shall meet the following chronic toxicity testing requirements:

- 1. Test Frequency.** The Discharger shall conduct chronic WET testing in accordance with the schedule established by this MRP, as summarized in Table E-3 when discharging to surface water.
- 2. Sample Type.** For 96-hour static renewal or 96-hour static non-renewal testing, the samples shall be 24-hr composite samples and shall be representative of the volume and quality of the discharge. Effluent samples shall be collected at Monitoring Location EFF-001.

- 3. Test Species.** Test species for chronic testing shall be a vertebrate, the fathead minnow, *Pimephales promelas* (larval survival and growth test); an invertebrate, the water flea, *Ceriodaphnia dubia* (survival and reproduction test); and a plant, the green alga, *Selenastrum capricornutum* (growth test). ). Based upon results from the first two suites of toxicity tests, the Discharger will determine the most sensitive aquatic species and continue to monitor with the most sensitive species. At least once every 5 years, the Discharger will rescreen to reconfirm the most sensitive species for the chronic toxicity test.
- 4. Test Methods.** The presence of chronic toxicity shall be estimated as specified in USEPA's *Short-Term Methods for Estimating the Chronic Toxicity of Effluents and Receiving Water to Freshwater Organisms* (USEPA Report No. EPA-821-R-02-013, 4<sup>th</sup> or subsequent editions). Test procedures related to pH control, sample filtration, aeration, temperature control, and sample dechlorination shall be performed in accordance with the USEPA method and fully explained and justified in each chronic toxicity report submitted to the Regional Water Board. Control of the pH in chronic toxicity tests is allowed, provided the test pH is maintained at the measured pH of the downstream receiving water, and the control of pH is done in a manner that has the least influence on the test water chemistry and on the toxicity of other pH sensitive materials such as some heavy metals, sulfide, and cyanide.
- 5. Test Dilutions.** The chronic toxicity test shall be conducted using a series of at least five dilutions and a control. The series shall consist of the following dilution series: 12.5, 25, 50, 75, and 100 percent effluent. Control and dilution water should be receiving water at an appropriate location upstream of the discharge point. Laboratory water may be substituted for receiving water, as described in the manual, upon approval by the Regional Water Board Executive Officer. Specifically, for the *Selenastrum capricornutum* test, synthetic laboratory water with a hardness similar to the receiving water shall be used as the control and dilution water. If the dilution water used is different from the culture water, a second control using culture water shall be used.
- 6. Reference Toxicant.** If organisms are not cultured in-house, concurrent testing with a reference toxicant shall be conducted. Where organisms are cultured in-house, monthly reference toxicant testing is sufficient. Reference toxicant tests also shall be conducted using the same test conditions as the effluent toxicity tests (e.g., same test duration, etc.).
- 7. Test Failure.** If either the reference toxicant test or the chronic toxicity test does not meet all test acceptability criteria, as specified in the test method, the Discharger shall re-sample and re-test as soon as possible, not to exceed 14 days following notification of test failure.
- 8. Notification.** The Discharger shall notify the Regional Water Board in writing within 14 days after the receipt of test results that indicate an exceedance of the monitoring trigger for chronic toxicity during regular or accelerated monitoring.

**9. Accelerated Monitoring Requirements.** If the result of any chronic toxicity test exceeds a chronic toxicity trigger of 1.0 TUc, and the testing meets all test acceptability criteria, the Discharger shall initiate accelerated monitoring. Accelerated monitoring shall consist of four additional effluent samples, on test conducted approximately every week, over a 4-week period. Testing shall commence within 14 days of receipt of the sample results of the exceedance of the chronic toxicity trigger. If the discharge will cease before the additional samples can be collected, the Discharger shall contact the executive Officer within 21 days with a plan to demonstrate compliance with the Basin Plan's narrative water quality objective for toxicity. The following protocol shall be used for accelerated monitoring and TRE implementation.

- a. If the results of four consecutive accelerated monitoring tests do not exceed the chronic toxicity trigger, the Discharger may cease accelerated monitoring and resume regular chronic toxicity monitoring. If there is adequate evidence of a pattern of effluent toxicity, however, the Regional Water Board Executive Officer may require that the Discharger initiate a TRE.
- b. If the source(s) of the toxicity is easily identified (i.e., temporary plant upset), the Discharger shall make necessary corrections to the Facility and shall continue accelerated monitoring until four consecutive accelerated tests do not exceed the chronic toxicity trigger. Upon confirmation that the effluent toxicity has been removed, the Discharger may cease accelerated monitoring and resume regular chronic toxicity monitoring.
- c. If the result of any accelerated toxicity test exceeds the chronic toxicity trigger, the Discharger shall cease accelerated monitoring and initiate a TRE to investigate the cause(s) of, and identify corrective actions to reduce or eliminate effluent toxicity. Within thirty (30) days of notification by the laboratory of the test results exceeding the chronic toxicity trigger during accelerated monitoring, the Discharger shall submit a TRE Action Plan to the Regional Water Board including, at minimum:
  - i. Specific actions the Discharger took to investigate and identify the cause(s) of toxicity, including a TRE WET monitoring schedule;
  - ii. Specific actions the Discharger took to mitigate the impact of the discharge and prevent the recurrence of toxicity;
  - iii. Recommendations for further actions to mitigate continued toxicity, if needed; and
  - iv. A schedule for implementation of recommended actions.

**10. Ammonia Toxicity.** The chronic toxicity test shall be conducted without modifications to eliminate ammonia toxicity.

### C. Chronic Toxicity Reporting Requirements

1. **Routine Reporting.** Test results for chronic tests shall be reported according to the acute and chronic manuals and this MRP and shall be attached to the corresponding monthly self-monitoring report. Test results shall include, at a minimum, for each test:
  - a. Sample date(s);
  - b. Test initiation date;
  - c. Test species;
  - d. End point values for each dilution (e.g., number of young, growth rate, percent survival);
  - e. NOEC value(s) in percent effluent;
  - f. IC15, IC25, IC40, and IC50 values (or EC15, EC25...etc.) in percent effluent;
  - g. TUc values (100/NOEC);
  - h. Mean percent mortality ( $\pm$ s.d.) after 96 hours in 100 percent effluent (if applicable);
  - i. NOEC and LOEC values for reference toxicant test(s);
  - j. IC50 and EC50 value(s) for reference toxicant test(s);
  - k. Available water quality measurements for each test (e.g., pH, dissolved oxygen, temperature, conductivity, hardness, salinity, ammonia);
  - l. Statistical methods used to calculate endpoints; and
  - m. The statistical output page, which includes the calculation of percent minimum significant difference (PMSD).
  
2. **Quality Assurance Reporting.** Because the permit requires sublethal hypothesis testing endpoints from Methods 1000.0, 1002.0, and 1003.0 in the test methods manual titled *Short-term Methods for Estimating the Chronic Toxicity of Effluents and Receiving Waters to Freshwater Organisms* (EPA-821-R-02-013, 2002), with-in test variability must be reviewed for acceptability, and variability criteria (upper and lower PMSD bounds) must be applied, as directed under section 10.2.8 – *Test Variability* of the test methods manual. Under section 10.2.8, the calculated PMSD for both reference toxicant test and effluent toxicity test results must be compared with the upper and lower PMSD bounds variability criteria specified in Table 6 – *Variability Criteria (Upper and Lower PMSD Bounds) for Sublethal Hypothesis Testing Endpoints Submitted Under NPDES Permits*, following the review criteria in paragraphs 10.2.8.2.1 through 10.2.8.2.5 of the test methods manual. Based on this review, only accepted effluent toxicity test results shall be reported.
  
3. **Compliance Summary.** Monthly self-monitoring reports submitted by the Discharger shall contain an updated chronology of chronic toxicity test results expressed in TUc, and organized by test species, type of test (survival, growth, or reproduction), and monitoring frequency (routine, accelerated, or TRE). The final

report shall clearly demonstrate that the Discharger is in compliance with effluent limitations and other permit requirements.

**VI. LAND DISCHARGE MONITORING REQUIREMENTS**

**A. Monitoring Location EFF-002**

1. When discharging at Discharge Point 002, the Discharger shall monitor treated effluent at Monitoring Location EFF-002 as follows:

**Table E-4. Land Discharge Monitoring – Monitoring Location EFF-002**

Parameter	Units	Sample Type	Minimum Sampling Frequency	Required Analytical Test Method <sup>1</sup>
Flow (Mean Daily) <sup>2</sup>	mgd	Meter	Continuous	--
Biochemical Oxygen Demand (5-day @ 20°C)	mg/L	24-hr Composite	Weekly	Std Method 5210B
Total Suspended Solids	mg/L	24-hr Composite	Weekly	Std Method 2540D
Settleable Solids	mL/L	Grab	Weekly	Std Method 2540F
pH	std units	Grab	Weekly	Part 136
Total Coliform Organisms	MPN/100 mL	Grab	Weekly	Std Method 9221

**B. Monitoring Location EFF-003**

2. When discharging at Discharge Point 003, the Discharger shall monitor treated effluent at Monitoring Location EFF-002 as follows:

**Table E-5. Land Discharge Monitoring – Monitoring Location EFF-003**

Parameter	Units	Sample Type	Minimum Sampling Frequency	Required Analytical Test Method <sup>1</sup>
Flow (Mean Daily) <sup>2</sup>	mgd	Meter	Continuous	--
Biochemical Oxygen Demand (5-day @ 20°C)	mg/L	24-hr Composite	Weekly	Std Method 5210B
Total Suspended Solids	mg/L	24-hr Composite	Weekly	Std Method 2540D
Settleable Solids	mL/L	Grab	Weekly	Std Method 2540F
pH	std units	Grab	Weekly	Part 136
Total Coliform Organisms	MPN/100 mL	Grab	Weekly	Std Method 9221
Nitrogen, Total (as N)	mg/L	24-hr Composite	Monthly	Std Method 4130
Nitrate Nitrogen	mg/L	24-hr Composite	Monthly	Std Method 4130
Title 22 Pollutants <sup>7</sup>	µg/L	Grab	1x / 3 Years	Std Methods

## VII. RECLAMATION MONITORING REQUIREMENTS

This section is not applicable to the Discharger as treated wastewater is not discharged to or applied to land for the purpose of reclamation. The Discharger disposes of treated wastewater to land, thus the Discharger has Land Discharge Monitoring Requirements rather than Reclamation Monitoring Requirements.

## VIII. RECEIVING WATER MONITORING REQUIREMENTS

### A. Surface Water Monitoring Location RSW-001

1. The Discharger shall monitor the Lower Eel River at Monitoring Location RSW-001 when discharging to surface water as follows:

**Table E-6. Receiving Water Monitoring – Monitoring Location RSW-001**

Parameter	Units	Sample Type	Minimum Sampling Frequency	Required Analytical Test Method <sup>1</sup>
Flow	mgd	Gauge <sup>8</sup>	Daily	--
Visual Observations	--	Visual <sup>9</sup>	Monthly	--
pH	std units	Grab	Monthly <sup>4</sup>	Part 136
Dissolved Oxygen	mg/L	Grab	Monthly	Part 136
Electrical Conductivity @ 25°C	µmhos/cm	Grab	Monthly	Part 136
Total Dissolved Solids	mg/L	Grab	Monthly	Part 136
Hardness, Total (as CaCO <sub>3</sub> )	mg/L	Grab	Monthly	Std Methods
Temperature	°C	Grab	Monthly <sup>4</sup>	Part 136
Turbidity	NTU	Grab	Monthly	Std Method 2130B
CTR Pollutants <sup>6</sup>	µg/L	Grab	1X / Permit Term	Std Methods

### B. Surface Water Monitoring Location RSW-002

1. The Discharger shall monitor the Lower Eel River at Monitoring Location RSW-002 when discharging to surface water as follows:

<sup>7</sup> Title 22 Pollutants refers to those chemical constituents specified in the Basin Plan and/or constituents for which Maximum Contaminant Levels (MCLs) have been established in title 22, Division 4, Chapter 15, Articles 4 and 5.5 of the California Code of Regulations

<sup>8</sup> The flow in the Lower Eel River shall be measured daily during the discharge season (October 1 through May 14) at the Scotia gauging station.

<sup>9</sup> Visual observations shall be made for evidence of floatables (i.e., solids, liquids, foam, and scum), visible films (i.e., oils, greases, and waxes), aquatic growths, and discoloration. Observations shall be recorded and included in the monthly self-monitoring reports.

**Table E-7. Receiving Water Monitoring – Monitoring Location RSW-002**

Parameter	Units	Sample Type	Minimum Sampling Frequency	Required Analytical Test Method <sup>1</sup>
Visual Observations	--	Visual <sup>9</sup>	Monthly	--
pH	std units	Grab	Monthly <sup>4</sup>	Part 136
Dissolved Oxygen	mg/L	Grab	Monthly	Part 136
Electrical Conductivity @ 25°C	µmhos/cm	Grab	Monthly	Part 136
Total Dissolved Solids	mg/L	Grab	Monthly	Part 136
Temperature	°C	Grab	Monthly <sup>4</sup>	Part 136
Turbidity	NTU	Grab	Monthly	Std Method 2130B

**C. Groundwater Monitoring Locations MW-1 through MW-4**

1. The Discharger shall monitor groundwater at the irrigation site from Monitoring Well Locations MW-1 through MW-4 as follows:

**Table E-8. Groundwater Monitoring – Monitoring Locations MW-1 thru MW-4**

Parameter	Units	Sample Type	Minimum Sampling Frequency	Required Analytical Test Method <sup>1</sup>
Depth to Groundwater	0.01 feet	Grab	Semiannually	Measurement
Nitrate Nitrogen	Mg/L	Grab	Semiannually	Part 136
Total Coliform Organisms	MPN/100 mL	Grab	Semiannually	Std Method 9221
Total Dissolved Solids	Mg/L	Grab	Semiannually	Part 136
Title 22 Pollutants <sup>7</sup>	µg/L	Grab	1x / 3 Years	Std Methods

**IX. OTHER MONITORING REQUIREMENTS**

**A. Monitoring Location INT-001**

The Discharger shall monitor the discharge from the chlorine contact chamber prior to dechlorination at Monitoring Location INT-001 as follows:

**Table E-9. Internal Monitoring Requirements – Monitoring Location INT-001**

Parameter	Units	Sample Type	Minimum Sampling Frequency	Required Analytical Test Method <sup>1</sup>
Chlorine, Total Residual	mg/L	Grab	Daily	Part 136

**X. REPORTING REQUIREMENTS**

**A. General Monitoring and Reporting Requirements**

1. The Discharger shall comply with all Standard Provisions (Attachment D) related to monitoring, reporting, and recordkeeping.
2. **Special Study.** No Special studies are required in accordance with this Order.

**B. Self Monitoring Reports (SMRs)**

1. At any time during the term of this permit, the State or Regional Water Board may notify the Discharger to electronically submit Self-Monitoring Reports (SMRs) using the State Water Board's California Integrated Water Quality System (CIWQS) Program Web site (<http://www.waterboards.ca.gov/ciwqs/index.html>). Until such notification is given, the Discharger shall submit hard copy SMRs. The CIWQS Web site will provide additional directions for SMR submittal in the event there will be service interruption for electronic submittal.
2. The Discharger shall report in the SMR the results for all monitoring specified in this MRP under sections III through IX. The Discharger shall submit monthly SMRs including the results of all required monitoring using USEPA-approved test methods or other test methods specified in this Order. If the Discharger monitors any pollutant more frequently than required by this Order, the results of this monitoring shall be included in the calculations and reporting of the data submitted in the SMR.
3. All monitoring results shall include complete laboratory data sheets for each analysis and be submitted in conjunction with the monthly SMR on the first day of the second month following sample collection. Annual summary reports shall be submitted by March 1<sup>st</sup> each year.
4. Monitoring periods for all required monitoring shall be completed according to the following schedule:

**Table E-10. Monitoring Periods and Reporting Schedule**

Sampling Frequency	Monitoring Period Begins On	Monitoring Period
Continuous	November 1, 2011	All
Daily	November 1, 2011	(Midnight through 11:59 PM) or any 24-hour period that reasonably represents a calendar day for purposes of sampling.
Weekly	November 1, 2011	Sunday through Saturday
Monthly	November 1, 2011	1 <sup>st</sup> day of calendar month through last day of calendar month

**Table E-10. Monitoring Periods and Reporting Schedule**

Sampling Frequency	Monitoring Period Begins On	Monitoring Period
2X / Year	October 1, 2011	1 <sup>st</sup> month of surface water discharge and during the 2 <sup>nd</sup> consecutive month thereafter
Quarterly	October 1, 2011	January 1 through March 31 April 1 through June 30 July 1 through September 30 October 1 through December 31
2x Annually	November 1, 2011	January 1 through June 30 July 1 through December 31
Semiannually	January 1, 2012	January 1 through March 31 July 1 through September 30
Annually	January 1, 2011	January 1 through December 31

**5. Reporting Protocols.** The Discharger shall report with each sample result the applicable ML, the RL and the current MDL, as determined by the procedure in section Part 136.

The Discharger shall report the results of analytical determinations for the presence of chemical constituents in a sample using the following reporting protocols:

- a. Sample results greater than or equal to the reported ML shall be reported as measured by the laboratory (i.e., the measured chemical concentration in the sample).
- b. Sample results less than the RL, but greater than or equal to the laboratory’s MDL, shall be reported as “Detected, but Not Quantified,” or DNQ. The estimated chemical concentration of the sample shall also be reported.

For the purposes of data collection, the laboratory shall write the estimated chemical concentration next to DNQ as well as the words “Estimated Concentration” (may be shortened to “Est. Conc.”). The laboratory may, if such information is available, include numerical estimates of the data quality for the reported result. Numerical estimates of data quality may be percent accuracy (+ a percentage of the reported value), numerical ranges (low to high), or any other means considered appropriate by the laboratory.

- c. Sample results less than the laboratory’s MDL shall be reported as “Not Detected,” or ND.
- d. Dischargers are to instruct laboratories to establish calibration standards so that the ML value (or its equivalent if there is differential treatment of samples relative to calibration standards) is the lowest calibration standard. At no time is the Discharger to use analytical data derived from extrapolation beyond the lowest point of the calibration curve.

**6. Self Monitoring Reports.** The Discharger shall submit self monitoring reports (SMRs) in accordance with the following requirements:

- a. The Discharger shall arrange all reported data in a tabular format. The data shall be summarized to clearly illustrate whether the facility is operating in compliance with interim and/or final effluent limitations. The Discharger is not required to duplicate the submittal of data that is entered in a tabular format within CIWQS. When electronic submittal of data is required and CIWQS does not provide for entry into a tabular format within the system, the Discharger shall electronically submit the data in a tabular format as an attachment.
- b. The Discharger shall attach a cover letter to the SMR. The information contained in the cover letter shall clearly identify:
  - i. Facility name and address;
  - ii. WDID number;
  - iii. Applicable period of monitoring and reporting;
  - iv. Violations of the WDRs (identified violations must include a description of the requirement that was violated and a description of the violation);
  - v. Corrective actions taken or planned; and
  - vi. The proposed time schedule for corrective actions.
- c. SMRs must be submitted to the Regional Water Board, signed and certified as required by the Standard Provisions (Attachment D), to the address listed below:

**Regional Water Quality Control Board  
North Coast Region  
5550 Skylane Blvd., Suite A  
Santa Rosa, CA 95403**

**C. Discharge Monitoring Reports (DMRs)**

DMRs are required for facilities designated as Major dischargers.

1. As described in section X.B.1 above, at any time during the term of this permit, the State or Regional Water Board may notify the Discharger to electronically submit SMRs that will satisfy federal requirements for submittal of Discharge Monitoring Reports (DMRs). Until such notification is given, the Discharger shall submit DMRs in accordance with the requirements described below.

2. DMRs must be signed and certified as required by the standard provisions (Attachment D). The Discharger shall submit the original DMR and one copy of the DMR to the address listed below:

<b>STANDARD MAIL</b>	<b>FEDEX/UPS/ OTHER PRIVATE CARRIERS</b>
State Water Resources Control Board Division of Water Quality c/o DMR Processing Center PO Box 100 Sacramento, CA 95812-1000	State Water Resources Control Board Division of Water Quality c/o DMR Processing Center 1001 I Street, 15 <sup>th</sup> Floor Sacramento, CA 95814

3. All discharge monitoring results must be reported on the official USEPA pre-printed DMR forms (EPA Form 3320-1). Forms that are self-generated or modified cannot be accepted.

**D. Other Reports**

1. **Special Study Submittals.** No Special studies are required under VI.C.2 of this Order.
2. **Annual Report.** The Discharger shall submit an annual report to the Regional Water Board for each calendar year. The report shall be submitted by March 1<sup>st</sup> of the following year. The report shall, at a minimum, include the following:
  - a. **Monitoring Data Summaries.** Both tabular and, where appropriate, graphical summaries of the monitoring data and disposal records from the previous year. If the Discharger monitors any pollutant more frequently than required by this Order, using test procedures approved under section Part 136 or as specified in this Order, the results of this monitoring shall be included in the calculation and report of the data submitted in the SMR.
  - b. **Compliance Reporting.** A comprehensive discussion of the Facility's compliance (or lack thereof) with all effluent limitations and other WDRs, and the corrective actions taken or planned, which may be needed to bring the discharge into full compliance with the Order.
  - c. **Sanitary Sewer System Reporting.** The Discharger shall submit, as part of its annual report to the Regional Water Board, a description of the Discharger's activities within the sanitary sewer system over the previous calendar year. The report shall contain:
    - i. A description of any change in the local legal authorities enacted to implement the Sewer System Management Plan (SSMP).

- ii. A summary of the SSOs that occurred in the past year. The summary shall include the date, location of overflow point, affected receiving water (if any), estimated volume, and cause of the SSO, and the names and addresses of the responsible parties as well as the names and addresses of the property owner(s) affected by the SSO.
  - iii. A summary of compliance and enforcement activities during the past year. The summary shall include fines, other penalties, or corrective actions taken as a result of the SSO. The summary shall also include a description of public participation activities to involve and inform the public.
  - iv. Documentation that all feasible steps to stop and mitigate impacts of SSOs have been taken.
- d. **Source Control Activity Reporting.** The Discharger shall submit, as part of its annual report to the Regional Water Board, a description of the Discharger's source control activities, during the past year. This annual report is due on March 1<sup>st</sup> of each year.
  - i. A copy of the source control standards.
  - ii. A description of the waste hauler permit system.
  - iii. A summary of the compliance and enforcement activities during the past year. The summary shall include the names and addresses of any industrial or commercial users under surveillance by the Discharger, an explanation of whether they were inspected, sampled, or both, the frequency of these activities at each user, and the conclusions or results from the inspection or sampling of each user.
  - iv. A summary of any waste survey results.
  - v. A summary of public participation activities to involve and inform the public.
- e. **Biosolids Handling and Disposal Activity Reporting.** The Discharger shall submit, as part of its annual report to the Regional Water Board, a description of the Discharger's solids handling, disposal, and reuse activities over the previous calendar year. At a minimum, the report shall contain:
  - i. Annual sludge production, in dry tons and percent solids.
  - ii. A schematic diagram showing sludge handling facilities (e.g., digesters, thickeners, drying beds), if any, and a solids flow diagram.
  - iii. Methods of final disposal of sludge:

- (a) For any portion of sludge discharged to a sanitary landfill, the Discharger shall provide the volume of sludge transported to the land fill or other appropriately permitted facility, the names and locations of the facilities receiving sludge, the Regional Water Board's WDRs order number for the regulated facility, and the landfill classification.
- (b) For any portion of sludge discharged through land application, the Discharger shall provide the volume of biosolids applied, the date and locations where biosolids were applied, the Regional Water Board's WDRs order number for the regulated discharge, a demonstration that the discharge was conducted in compliance with applicable permits and regulations, and, if applicable, corrective actions taken or planned to bring the discharge into compliance with WDRs.
- (c) For any portion of sludge further treated through composting, the Discharger shall provide a summary of the composting process, the volume of sludge composted, and a demonstration and signed certification statement that the composting process and final product met all requirements for Class A biosolids.

#### E. Spills and Overflows Notification

1. All spills, unauthorized discharges, and SSOs equal to or in excess of 1,000 gallons or any size spill or SSO that results in a discharge to a drainage channel or a surface water:
  - a. As soon as possible, **but not later than two (2) hours** after becoming aware of the discharge, the Discharger shall notify the California Emergency Management Agency (Cal EMA), the local health officer or directors of environmental health with jurisdiction over affected water bodies or land areas, and the Regional Water Board.<sup>10</sup>

Information to be provided verbally to the Regional Water Board includes:

- i. Name and contact information of caller;
- ii. Date, time and location of spill occurrence;
- iii. Estimates of spill volume, rate of flow, and spill duration;
- iv. Surface water bodies impacted, if any;
- v. Cause of spill;
- vi. Cleanup actions taken or repairs made; and
- vii. Responding agencies.

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<sup>10</sup> The contact number for spill reporting for Cal EMA is (800) 852-7550. The contact number of the Regional Water Board during normal business hours is (707) 576-2220. After normal business hours, spill reporting to OES will satisfy the 2 hour notification requirement for the Regional Water Board.

