California Regional Water Quality Control Board
North Coast Region
Geoffrey M. Hales, Chairman

Linda S. Adams
Acting Secretary for Environmental Protection

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Edmund G. Brown Jr.
Governor

ORDER NO. R1-2011-0001
NPDES NO. CA0023574

WASTE DISCHARGE REQUIREMENTS
FOR THE COVELO COMMUNITY SERVICES DISTRICT
WASTEWATER TREATMENT PLANT

The following Discharger is subject to waste discharge requirements as set forth in this Order:

Table 1. Discharger Information

Discharger	**Covelo Community Services District**
Name of Facility	**Wastewater Treatment Plant, Covelo CA**
Facility Address	**76001 Commercial Street**
	Covelo, California, 95428
	Mendocino County
The U.S. Environmental Protection Agency (USEPA) and the Regional Water Quality Control Board have classified this discharge as **a minor discharge**.	

The discharge by the Covelo Community Services District from the discharge points identified below is subject to waste discharge requirements as set forth in this Order:

Table 2. Discharge Location

Discharge Point	Effluent Description	Discharge Point Latitude	Discharge Point Longitude	Receiving Water
001	Secondary Treated Municipal Wastewater	39 º, 47', 01.1" N	123º, 14', 40.3" W	Grist Creek
002	Secondary Treated Municipal Wastewater	39 º, 47', 11.3" N	123 º, 14', 40.7" W	Groundwater

Table 3. Administrative Information

This Order was adopted by the Regional Water Quality Control Board on:	**May 5, 2011**
This Order shall become effective on:	**July 1, 2011**
This Order shall expire on:	**June 30, 2016**
The Discharger shall file a Report of Waste Discharge in accordance with title 23, California Code of Regulations, as application for issuance of new waste discharge requirements no later than:	**December 1, 2015**

IT IS HEREBY ORDERED, that this Order supersedes Order No. R1-2006-0007 upon the effective date specified in Table 3. This action in no way prevents the Regional Water Quality Control Board from taking any enforcement action for past violations of the previous permit. If any part of this Order is subject to a temporary stay of enforcement, unless otherwise specified, the Discharger shall comply with the analogous portions of Order No. R1-2006-0007, which shall remain in effect for all purposes during the pendency of the stay.

I, Catherine Kuhlman, Executive Officer, do hereby certify that this Order with all attachments is a full, true, and correct copy of an Order adopted by the California Regional Water Quality Control Board, North Coast Region, May 5, 2011.

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Catherine Kuhlman, Executive Officer

CALIFORNIA REGIONAL WATER QUALITY CONTROL BOARD
REGION 1, NORTH COAST REGION

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I. FACILITY INFORMATION

The following Discharger is authorized to discharge in accordance with the conditions set forth in this Order:

Table 4. Facility Information

Discharger	Covelo Community Services District
Name of Facility	Wastewater Treatment Plant, Covelo
Facility Address	76001 Commercial Street
	Covelo, California 95428
	Mendocino County
Facility Contact, Title, and Phone	Tim Dennis, District Manager, (707) 983-6888
Mailing Address	P.O. Box 65, Covelo, CA 95428
Type of Facility	Publicly Owned Treatment Works
Facility Design Flow	0.057 million gallons per day (mgd), Average Dry Weather Flow (ADWF)
	0.097 mgd, Average Wet Weather Flow (AWWF)
	0.394 mgd, Peak Instantaneous Flow Treatment Capacity (PWWF)
	0.077 mgd, Average Annual Flow

II. FINDINGS

The California Regional Water Quality Control Board, North Coast Region (hereinafter Regional Water Board), finds:

A. Background. Covelo Community Service District (hereinafter Discharger) is currently discharging pursuant to Order No. R1-2006-0007 and National Pollutant Discharge Elimination System (NPDES) Permit No. CA0023574. The Discharger submitted a Report of Waste Discharge (ROWD), dated December 17, 2009, for upgrades to the existing wastewater treatment facility (WWTF) and applied for a NPDES permit renewal to operate. At the request of Regional Water Board staff, the Discharger submitted an addendum to the ROWD, dated November 23, 2010. The application was deemed complete on November 23, 2010.

For the purposes of this Order, references to the "discharger" or "permittee" in applicable federal and state laws, regulations, plans, or policy are held to be equivalent to references to the Discharger herein.

B. Facility Description. The Discharger owns and operates a municipal WWTF and associated wastewater collection, and disposal facilities that serve approximately 750 residential, commercial, and institutional users.

The existing treatment system was designed to operate using a flow-metering flume, bar screen and comminutor, two oxidation ponds that can be operated in series or parallel, two holding ponds, gravity sand filters, and chlorination / dechlorination capability. Over time the clay liners in the oxidation ponds developed leaks and other components of the WWTF have aged requiring improvements to ponds and other areas of the WWTF. The Discharger proposed upgrades to the existing treatment facility which included addition of a new headworks and septage receiving station, lining the oxidation ponds, planting a lined wetland, and installing an ozone disinfection system. Chlorination / dechlorination capability may be maintained as a back-up disinfection system for surface water discharges. The proposed upgrades to the Facility were designed to improve effluent water quality discharged to Grist Creek (Discharge Point 001) and allow a land discharge location (Discharge Point 002) in former holding pond No. 3. Upgrades to the WWTF result in an average annual treatment design capacity of 0.077 mgd.

Upgrades to the existing WWTF are well underway with completion anticipated prior to 2012. The upgraded WWTF system will continue to provide secondary level treatment of wastewater including enhanced nutrient management in the wetland treatment cell.

From October 1 through May 14, treated wastewater may be discharged at Discharge Point 001 to Grist Creek, a water of the United States and a tributary to the Middle Fork Eel River within the Upper Eel Watershed. Compliance with surface water effluent limitations shall continue to be measured at M-001. Upon completion of WWTF upgrades secondary treated wastewater may be discharged to land via the percolation pond at Discharge Point 002 with compliance measured at M-002.

Attachment B provides a map of the area around the facility. Attachment C provides flow schematics of both the existing and upgraded Facility.

C. Legal Authorities. This Order is issued pursuant to section 402 of the federal Clean Water Act (CWA) and implementing regulations adopted by the U.S. Environmental Protection Agency (USEPA) and chapter 5.5, division 7 of the California Water Code (commencing with section 13370). It shall serve as a NPDES permit for point source discharges from this facility to surface waters. This Order also serves as Waste Discharge Requirements (WDRs) for discharges to land.

D. Background and Rationale for Requirements. The Regional Water Board developed the requirements in this Order based on information submitted as part of the application, through monitoring and reporting programs, and other available information. The Fact Sheet (Attachment F), which contains background information and rationale for Order requirements, is hereby incorporated into this Order and constitutes part of the Findings for this Order. Attachments A through E are also incorporated into this Order.

E. California Environmental Quality Act (CEQA). Under Water Code section 13389, this action to adopt an NPDES permit is exempt from the provisions of CEQA, Public Resources Code sections 21100-21177.

This action also involves the adoption of WDRs for percolation of treated effluent. For the portion of the permit that addresses WDRs for discharges to land, the Regional Water Board has prepared a notice of exemption that the project is categorically exempt from CEQA pursuant to title 14, section 15301 of the California Code of Regulations because the Regional Water Board is issuing the WDRs for discharges from an existing facility for which no expansion of design flow is being permitted. The previous Order permitted a flow of 80,000 gallons per day (gpd) (0.08 million gallons per day). Internal upgrades to the treatment system will result in production of higher quality effluent with a reduced permitted flow of 77,000 gpd. This project meets the requirements of the categorical exemption, including the requirements set forth in section 15300.2 that the project not have any significant effects or result in cumulative impacts. For any

expansion of the land disposal/reclamation areas, the Discharger will be the lead agency for CEQA.

F. Technology-based Effluent Limitations. Section 301(b) of the CWA and implementing USEPA permit regulations at section 122.44, title 40 of the Code of Federal Regulations (40 CFR 122.44[1]), require that permits include conditions meeting applicable technology-based requirements at a minimum, and any more stringent effluent limitations necessary to meet applicable water quality standards. The discharge authorized by this Order must meet minimum federal technology-based requirements based on Secondary Treatment Standards at 40 CFR Part 133 and/or Best Professional Judgment (BPJ) in accordance with 40 CFR 125.3. A detailed discussion of the technology-based effluent limitations development is included in the Fact Sheet (Attachment F).

G. Water Quality-Based Effluent Limitations. Section 301(b) of the CWA and 40 CFR 122.44(d) require that permits include limitations more stringent than applicable federal technology-based requirements where necessary to achieve applicable water quality standards.

40 CFR 122.44(d)(1)(i) mandates that permits include effluent limitations for all pollutants that are or may be discharged at levels that have the reasonable potential to cause or contribute to an exceedance of a water quality standard, including numeric and narrative objectives within a standard. Where reasonable potential has been established for a pollutant, but there is no numeric criterion or objective for the pollutant, water quality-based effluent limitations (WQBELs) must be established using: (1) USEPA criteria guidance under CWA section 304(a), supplemented where necessary by other relevant information; (2) an indicator parameter for the pollutant of concern; or (3) a calculated numeric water quality criterion, such as a proposed state criterion or policy interpreting the state's narrative criterion, supplemented with other relevant information, as provided in 40 CFR 122.44(d)(1)(vi).

H. Water Quality Control Plans. The Regional Water Board adopted a Water Quality Control Plan for the North Coast Region (hereinafter Basin Plan) that designates beneficial uses, establishes water quality objectives, and contains implementation programs and policies to achieve those objectives for all waters addressed through the plan. The Basin Plan at page 2-1 states that the beneficial uses of any specifically identified water body generally apply to its tributary streams. The Basin Plan does not specifically identify beneficial uses

[1] All further statutory references are to title 40 of the Code of Federal Regulations unless otherwise indicated

for Grist Creek, but does identify present and potential uses for the Eel River, to which Grist Creek is tributary. In addition, the Basin Plan implements State Water Resources Control Board (State Water Board) Resolution No. 88-63, which established state policy that all waters, with certain exceptions, should be considered suitable or potentially suitable for municipal or domestic supply. Thus, as discussed in detail in the Fact Sheet, beneficial uses applicable to areal groundwater and Grist Creek are as follows:

Table 5. Basin Plan Beneficial Uses

	Receiving Water Name Discharge Points	
Beneficial Use (s)	Grist Creek EFF-001	Groundwater EFF-002
Municipal and Domestic Water Supply (MUN)	E	E
Agricultural Supply (AGR)	E	E
Industrial Service Supply (IND)	E	E
Industrial Process Supply (PRO)	P	P
Groundwater Recharge (GWR)	E	---
Freshwater Replenishment (FRESH)	---	E
Navigation (NAV)	E	---
Hydropower Generation (POW)	P	---
Water Contact Recreation (REC-1)	E	---
Non-contact Water Recreation (REC-2)	E	---
Commercial and Sport Fishing (COMM)	E	---
Warm Freshwater Habitat (WARM)	E	---
Cold Freshwater Habitat (COLD)	E	---
Wildlife Habitat (WILD)	E	---
Preservation of Rare, Threatened or Endangered Species (RARE)	E	---
Migration of Aquatic Organisms (MIGR)	E	---
Spawning, Reproduction, and/or Early Development (SPWN)	E	---
Aquaculture (AQUA)	E	P
Native American Culture (CUL)	E	E

Requirements of this Order implement the Basin Plan.

In June 2007, USEPA provided final approval of the list of impaired water bodies prepared by the State pursuant to CWA section 303(d), which requires identification of specific water bodies where it is expected that water quality standards will not be met after implementation of technology-based effluent

limitations on point sources. The Upper Main Fork of the Eel River is 303(d) listed as impaired by sedimentation/siltation and temperature. Pursuant to CWA section 303(d), the Regional Water Board must adopt Total Maximum Daily Loads (TMDLs) to address impairing pollutants in 303(d) listed waters, and then implement TMDLs in NPDES permits. TMDLs establish the maximum quantity of a given pollutant that can be added to a water body from all sources without exceeding the applicable water quality standard for that pollutant and determine wasteload allocations (the portion of a TMDL allocated to existing and future point sources) for point sources and load allocations (the portion of a TMDL attributed to existing and future non-point sources) for non-point sources.

In December 2007, USEPA established a technical TMDL for sediment and temperature in the Upper Main Eel River and tributaries. This Order is consistent with the technical TMDL.

I. National Toxics Rule (NTR) and California Toxics Rule (CTR). USEPA adopted the NTR on December 22, 1992, and later amended it on May 4, 1995 and November 9, 1999. About 40 criteria in the NTR applied in California. On May 18, 2000, USEPA adopted the CTR. The CTR promulgated new toxics criteria for California and, in addition, incorporated the previously adopted NTR criteria that were applicable in the state. The CTR was amended on February 13, 2001. These rules contain water quality criteria for priority pollutants.

J. State Implementation Policy. On March 2, 2000, the State Water Board adopted the Policy for Implementation of Toxics Standards for Inland Surface Waters, Enclosed Bays, and Estuaries of California (State Implementation Policy or SIP). The SIP became effective on April 28, 2000 with respect to the priority pollutant criteria promulgated for California by the USEPA through the NTR and to the priority pollutant objectives established by the Regional Water Board in the Basin Plan. The SIP became effective on May 18, 2000 with respect to the priority pollutant criteria promulgated by the USEPA through the CTR. The State Water Board adopted amendments to the SIP on February 24, 2005 that became effective on July 13, 2005. The SIP establishes implementation provisions for priority pollutant criteria and objectives and provisions for chronic toxicity control. Requirements of this Order implement the SIP.

K. Compliance Schedules and Interim Requirements. The State Water Board adopted Resolution No. 2008-0025 on April 15, 2008, titled *Policy for Compliance Schedules in National Pollutant Discharge Elimination System Permits*, which includes compliance schedule policies for pollutants that are not addressed by the SIP. This Policy became effective on August 27, 2008. This Order does not include compliance schedules or interim effluent limitations.

L. Alaska Rule. On March 30, 2000, USEPA revised its regulation that specifies when new and revised state and tribal water quality standards (WQS) become effective for CWA purposes. (40 CFR 131.21; 65 Fed. Reg. 24641 (April 27, 2000).) Under the revised regulation (also known as the Alaska rule), new and revised standards submitted to USEPA after May 30, 2000, must be approved by USEPA before being used for CWA purposes. The final rule also provides that standards already in effect and submitted to USEPA by May 30, 2000 may be used for CWA purposes, whether or not approved by USEPA.

M. Stringency of Requirements for Individual Pollutants. This Order contains both technology-based effluent limitations and WQBELs for individual pollutants. The technology-based effluent limitations consist of restrictions on 5-day biochemical oxygen demand (BOD_5) and total suspended solids (TSS). Restrictions on these pollutants are discussed in section IV.B.2 of the Fact Sheet (Attachment F). This Order's technology-based pollutant restrictions implement the minimum, applicable federal technology-based requirements. In addition, this Order contains effluent limitations more stringent than the minimum, federal technology-based requirements that are necessary to meet water quality standards.

WQBELs have been scientifically derived to implement water quality objectives that protect beneficial uses. Both the beneficial uses and the water quality objectives have been approved pursuant to federal law and are the applicable federal water quality standards. To the extent that toxic pollutant WQBELs were derived from the CTR, the CTR is the applicable standard pursuant to 40 CFR 131.38. The scientific procedures for calculating the individual WQBELs for priority pollutants are based on the CTR-SIP, which was approved by USEPA on May 18, 2000. All beneficial uses and water quality objectives contained in the Basin Plan were approved under state law and submitted to and approved by USEPA prior to May 30, 2000. Any water quality objectives and beneficial uses submitted to USEPA prior to May 30, 2000, but not approved by USEPA before that date, are nonetheless "applicable water quality standards for purposes of the CWA" pursuant to 40 CFR 131.21(c)(1). Collectively, this Order's restrictions on individual pollutants are no more stringent than required to implement the requirements of the CWA.

N. Antidegradation Policy. 40 CFR 131.12 requires that the state water quality standards include an antidegradation policy consistent with the federal policy. The State Water Board established California's antidegradation policy in State Water Board Resolution No. 68-16. Resolution No. 68-16 incorporates the federal antidegradation policy where the federal policy applies under federal law. Resolution No. 68-16 requires that existing quality of waters be maintained unless degradation is justified based on specific findings. The Regional Water Board's Basin Plan implements, and incorporates by reference, both the state

and federal antidegradation policies. As discussed in detail in the Fact Sheet the permitted discharge is consistent with the antidegradation provision of 40 CFR 131.12 and State Water Board Resolution No. 68-16.

O. Anti-Backsliding Requirements. Sections 402(o)(2) and 303(d)(4) of the CWA and federal regulations at 40 CFR 122.44(l) prohibits backsliding in NPDES permits. These anti-backsliding provisions require effluent limitations in a reissued permit to be as stringent as those in the previous permit, with some exceptions where limitations may be relaxed. All effluent limitations in this Order are at least as stringent as the effluent limitations in the previous Order**.**

P. Endangered Species Act. This Order does not authorize any act that results in the taking of a threatened or endangered species or any act that is now prohibited, or becomes prohibited in the future, under either the California Endangered Species Act (Fish and Game Code sections 2050 to 2097) or the Federal Endangered Species Act (16 U.S.C.A. sections 1531 to 1544). This Order requires compliance with effluent limits, receiving water limits, and other requirements to protect the beneficial uses of waters of the state. The discharger is responsible for meeting all requirements of the applicable Endangered Species Act.

Q. Monitoring and Reporting. 40 CFR 122.48 requires that all NPDES permits specify requirements for recording and reporting monitoring results. Water Code sections 13267 and 13383 authorizes the Regional Water Board to require technical and monitoring reports. The Monitoring and Reporting Program establishes monitoring and reporting requirements to implement federal and State requirements. This Monitoring and Reporting Program is provided in Attachment E.

R. Standard and Special Provisions. Standard Provisions, which apply to all NPDES permits in accordance with 40 CFR 122.41, and additional conditions applicable to specified categories of permits in accordance with 40 CFR 122.42, are provided in Attachment D. The discharger must comply with all standard provisions and with those additional conditions that are applicable under 40 CFR 122.42. The Regional Water Board has also included in this Order special provisions applicable to the Discharger. A rationale for the special provisions contained in this Order is provided in the attached Fact Sheet.

S. Provisions and Requirements Implementing State Law. The provisions/requirements in subsections IV.D. and VI.C.2.b of this Order are included to implement State law only. These provisions/requirements are not required or authorized under the federal CWA; consequently, violations of these

provisions/requirements are not subject to the enforcement remedies that are available for NPDES violations.

T. Notification of Interested Parties. The Regional Water Board has notified the Discharger and interested agencies and persons of its intent to prescribe Waste Discharge Requirements for the discharge and has provided them with an opportunity to submit their written comments and recommendations. Details of notification are provided in the Fact Sheet of this Order.

U. Consideration of Public Comment. The Regional Water Board, in a public meeting, heard and considered all comments pertaining to the discharge. Details of the Public Hearing are provided in the Fact Sheet of this Order.

III. DISCHARGE PROHIBITIONS

A. The discharge of any waste not disclosed by the Discharger or not within the reasonable contemplation of the Regional Water Board is prohibited.

B. Creation of pollution, contamination, or nuisance, as defined by Water Code Section 13050 is prohibited.

C. The discharge of sludge or digester supernatant is prohibited, except as authorized under Section IV. E of this Order (Solids Disposal and Handling Requirements).

D. The discharge or reclamation use of untreated or partially treated waste (receiving a lower level of treatment than described in section II.B of the Order) from anywhere within the collection, treatment, or disposal systems is prohibited, except as provided for in Prohibition III. I. and in Attachment D, Standard Provisions (Bypass).

E. The discharge of waste to land that is not owned by or subject to an agreement for use by the Discharger is prohibited.

F. The discharge of waste at any point except Discharge Point 001 – the constructed outfall to Grist Creek, or Discharge Point 002 – the percolation pond as described on page 1 of this Order, or as authorized by another State Board or Regional Water Board Order, is prohibited.

G. The discharge of treated wastewater from the wastewater treatment facility to the Eel River or its tributaries, including Grist Creek, is prohibited during the period May 15 through September 30 of each year.

H. During the period of October 1 through May 14 of each year, discharges of wastewater shall not exceed one percent of the flow of Grist Creek. To comply with

this flow prohibition, (1) the Discharger shall adjust the discharge rate of treated wastewater at least once daily to avoid exceeding, to the extent practicable, one percent of the most recent daily flow measurement of Grist Creek; and (2) the total volume of treated wastewater discharged in a calendar month shall not exceed, in any circumstances, one percent of the total volume of Grist Creek flow, in the same calendar month.

During periods of discharge, flow in Grist Creek shall be measured at least once daily, and the discharge flow rate shall be set for no greater than one percent of the flow of the creek at the time of the daily measurement. At the beginning of the discharge season, the first monthly flow comparisons shall be determined from the date when the discharge commenced to the end of the calendar month. At the end of the discharge season, the final monthly flow volume shall be determined from the first day of the calendar month to the date when the discharge ended for the season.

I. Any SSO that results in a discharge of untreated or partially treated wastewater to (a) waters of the State, (b) groundwater, or (c) land that creates pollution, contamination, or nuisance, as defined in Water Code section 13050(m) is prohibited

IV. EFFLUENT LIMITATIONS AND DISCHARGE SPECIFICATIONS

A. Effluent Limitations – Discharge Point 001

1. Final Effluent Limitations – Discharge Point 001

a. The discharge of treated wastewater shall maintain compliance with the following effluent limitations for secondary treatment at Discharge Point 001, with compliance measured at Monitoring Location M-001, as described in the attached Monitoring and Reporting Program (Attachment E).

Table 6. Effluent Limitations for Grist Creek– Discharge Point 001

Parameter	Units	Effluent Limitations				
		Average Monthly	Average Weekly	Maximum Daily	Instantaneous Minimum	Instantaneous Maximum
Biochemical Oxygen	mg/L	30	45	60	--	--

Table 6. Effluent Limitations for Grist Creek– Discharge Point 001						
Parameter	Units	Effluent Limitations				
		Average Monthly	Average Weekly	Maximum Daily	Instantaneous Minimum	Instantaneous Maximum
Demand (5-day @ 20°C)	lbs/day[2,3]	19	29	39	--	--
Total Suspended Solids	mg/L	30	45	60	--	--
	lbs/day[1,2]	19	29	39	--	--
pH	std units	--	--	--	6.5	8.5
Settleable Solids	ml/L	0.1	--	0.2	--	--
Total Coliform Organisms	MPN/100 mL	23[4]	--	240	--	--
Chlorine, Total Residual	mg/L	0.01	--	0.02	--	--
Dichlorobromomethane	ug/L	0.56	--	1.12	--	--

b. **Percent Removal:** The average monthly percent removal of BOD_5 and TSS shall not be less than 85 percent. Percent removal shall be determined from the 30-day average value of influent wastewater concentration in comparison to the 30-day average value of effluent concentration for the same constituent over the same time period as measured at Monitoring Locations INF-001 and M-001, respectively.

c. **Flow**: The mean daily dry weather flow shall not exceed 0.057 mgd averaged over a period of a calendar month. The mean annual flow shall not exceed 0.077 mgd averaged over a period of a calendar year.

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[2] The mass discharge (lbs/day) is obtained from the following calculation for any calendar day, week or month:

$$\frac{8.34}{N}\sum^{N} Q_i C_i$$

in which N is the number of samples analyzed, Q_i and C_i are the flow rate (mgd) and the constituent concentration (mg/L) respectively, which are associated with each of the N grab samples, which may be taken in the sampling period. If a composite sample is taken, C_i is the concentration measured in the composite sample and Q_i is the average flow rate occurring during the period over which samples are composited.

[3] Mass-based effluent limitations are based on the average annual flow of 0.077 mgd.

[4] The median of all samples collected in a 30-day period. Compliance with the 30-day median shall be calculated upon a continuous basis.

d. **Acute Toxicity:** There shall be no acute toxicity in the effluent when discharging to Grist Creek, as measured at Monitoring Location M-001. The Discharger will be considered in compliance with this limitation when the survival of aquatic organisms in a 96-hour bioassay using undiluted effluent complies with the following.

i. Minimum for any one bioassay: 70 percent survival. Median for any three or more consecutive bioassays: at least 90 percent survival.

V. LAND DISCHARGE SPECIFICATIONS

A. Effluent Limitations – Discharge Point 002

1. Beginning October 15, 2011, the Discharger shall maintain compliance with the following limitations at Discharge Point 002, with compliance measured at Monitoring Location M-002 as described in the attached Monitoring and Reporting Program (Attachment E).

Table 7. Effluent Limitations for Percolation Pond – Discharge Point 002

Parameter	Units	Effluent Limitations				
		Average Monthly	Average Weekly	Maximum Daily	Instantaneous Minimum	Instantaneous Maximum
Biochemical Oxygen Demand (5-day @ 20°C)	mg/L	30	45	60	--	--
	lbs/day[23]	19	29	39	--	--
Total Suspended Solids	mg/L	30	45	60	--	--
	lbs/day[23]	19	29	39	--	--
pH	std units	--	--	--	6.0	9.0
Total Coliform Organisms	MPN/100 mL	23[4]	--	240	--	--
Nitrate as Nitrogen[5]	mg/L	10	--	--	--	--

2. **Flow**: The mean daily dry weather flow shall not exceed 0.057 mgd averaged over a period of a calendar month. The mean annual flow shall not exceed 0.077 mgd averaged over a period of a calendar year.

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[5] The nitrate limitation shall go into effect on November 1, 2013, allowing two full growing seasons to establish the wetland treatment marsh.

VI. RECLAMATION SPECIFICATIONS

This section of the Order is not applicable as this Order does not permit treated wastewater to be land applied for the purpose of reclamation.

VII. OTHER REQUIREMENTS

A. Ozone System Disinfection Process Requirements. Upon completion and testing of the ozone disinfection system, the Discharger shall operate the ozone disinfection system in accordance with the site specific manufacturer's specifications, protocol and technical and administrative procedures in order to demonstrate compliance with Effluent Limitations at Discharge Point 002.

B. Ozone System Disinfection Monitoring and Reporting Requirements. The Discharger shall provide continuous, reliable monitoring of flow, initial ozone dose, disinfection contact time, and ozone residual measured immediately prior to discharge from the ozone contact chamber.

VIII. RECEIVING WATER LIMITATIONS

A. Surface Water Limitations

Receiving water limitations are based on water quality objectives contained in the Basin Plan and are a required part of this Order. The discharge shall not cause the following conditions in Grist Creek:

1. The waste discharge shall not cause the dissolved oxygen concentration of the receiving waters to be depressed below 7.0 mg/l. Additionally, the discharge shall not cause the dissolved oxygen content of the receiving water to fall below 10.0 mg/l more than 50 percent of the time, or below 7.5 mg/l more than 10 percent of the time. In the event that the receiving waters are determined to have dissolved oxygen concentration of less than 7.0 mg/l, the discharge shall not depress the dissolved oxygen concentration below the existing level.

2. The discharge shall not cause the pH of the receiving waters to be depressed below 6.5 nor raised above 8.5. If the pH of the receiving water is less than 6.5, the discharge shall not cause a further depression of the pH of the receiving water. If the pH of the receiving water is greater than 8.5, the discharge shall not cause a further increase in the pH of the receiving water. The discharge shall not cause receiving water pH to change more than 0.5 pH units at any time.

3. The discharge shall not cause the turbidity of the receiving waters to be increased more than 20 percent above naturally occurring background levels.

4. The discharge shall not cause the receiving waters to contain floating materials, including, but not limited to, solids, liquids, foams, and scum, in concentrations that cause nuisance or adversely affect beneficial uses.

5. The discharge shall not cause the receiving waters to contain taste or odor producing substances in concentrations that impart undesirable tastes or odors to fish flesh or other edible products of aquatic origin, that cause nuisance, or that adversely affect beneficial uses.

6. The discharge shall not cause coloration of the receiving waters that causes nuisance or adversely affects beneficial uses.

7. The discharge shall not cause bottom deposits in the receiving waters to the extent that such deposits cause nuisance or adversely affect beneficial uses.

8. The discharge shall not cause or contribute to receiving water concentrations of biostimulants that promote objectionable aquatic growths to the extent that such growths cause nuisance or adversely affect beneficial uses of the receiving waters.

9. The discharge shall not cause the receiving waters to contain toxic substances in concentrations that are toxic to, or that produce detrimental physiological responses in human, plant, animal, or aquatic life. Compliance with this objective shall be determined according to Section V of the Monitoring and Reporting Plan, Attachment E of this Order.

10. The discharge shall not alter the natural temperature of the receiving waters.

11. The discharge shall not cause an individual pesticide or combination of pesticides to be present in concentrations that adversely affect beneficial uses. There shall be no bioaccumulation of pesticide concentrations found in bottom sediments or aquatic life as a result of the discharge. The discharge shall not cause the receiving waters to contain concentrations of pesticides in excess of the limiting concentrations set forth in the Basin Plan.

12. The discharge shall not cause the receiving waters to contain oils, greases, waxes, or other materials in concentrations that result in a visible film or

coating on the surface of the water or on objects in the water that cause nuisance or that otherwise adversely affect beneficial uses.

13. The discharge shall not cause a violation of any applicable water quality standard for receiving waters adopted by the Regional Water Board or the State Board as required by the CWA and regulations adopted thereunder. If more stringent applicable water quality standards are promulgated or approved pursuant to CWA Section 303 or amendments thereto, the Regional Water Board will revise and modify this Order in accordance with the more stringent standards.

14. The discharge shall not cause concentrations of chemical constituents to occur in excess of limiting concentrations specified in the Basin Plan or in excess of more stringent MCLs established for these pollutants in Title 22, Division 4, Chapter 15, Articles 4 and 5.5 of the California Code of Regulations.

B. Groundwater Limitations

1. The collection, storage, and use of wastewater or recycled water shall not cause or contribute to degradation that violates groundwater quality objectives or impacts beneficial uses of groundwater.

2. The collection, storage, use, and disposal of wastewater shall not cause alterations of groundwater that result in contaminant concentrations that cause nuisance or adversely affect beneficial uses.

3. The discharge shall not cause concentrations of chemical constituents to occur in excess of limiting concentrations specified in the Basin Plan or in excess of more stringent Maximum Contaminant Levels (MCLs) established for these pollutants in Title 22, Division 4, Chapter 15, Articles 4 and 5.5 of the California Code of Regulations.

IX. PROVISIONS

A. Standard Provisions

1. Federal Standard Provisions. The Discharger shall comply with all Standard Provisions included in Attachment D of this Order.

2. Regional Water Board Standard Provisions. The Discharger shall comply with the following provisions:

a. Failure to comply with provisions or requirements of this Order, or violation of other applicable laws or regulations governing discharges

from this facility, may subject the Discharger to administrative or civil liabilities, criminal penalties, and/or other enforcement remedies to ensure compliance. Additionally, certain violations may subject the Discharger to civil or criminal enforcement from appropriate local, state, or federal law enforcement entities.

b. In the event the Discharger does not comply or will be unable to comply for any reason, with any prohibition, interim or final effluent limitation, land discharge specification, receiving water limitation, or provision of this Order that may result in a significant threat to human health or the environment, such as inundation of treatment components, breach of pond containment, sanitary sewer overflow, irrigation runoff, etc., and/or that results in a discharge to a drainage channel or a surface water, the Discharger shall report orally and in writing to the Regional Water Board staff all unauthorized spills. Spill notification and reporting shall be conducted in accordance with section X.E. of the Monitoring and Reporting Program (Attachment E).

c. Prior to making any change in the point of discharge, place of use, or purpose of use of treated wastewater that results in a decrease of flow in any portion of a watercourse, the Discharger must file a petition with the State Water Board, Division of Water Rights, and receive approval for such a change. (Water Code § 1211)

d. Ponds used for the storage of recycled water shall be constructed in a manner that protects groundwater. The Discharger shall submit design proposals for new wastewater storage ponds to the Regional Water Board Executive Officer for review prior to construction and demonstrate that the pond complies with the Water Code and title 27 of the California Code of Regulations. Pond design and operation plan must include features and Best Management Practices (BMPs) to protect groundwater and prevent exceedances of groundwater quality objectives.

B. Monitoring and Reporting Program (MRP) Requirements

The Discharger shall comply with the MRP and future revisions thereto, in Attachment E of this Order.

C. Special Provisions

1. Reopener Provisions

a. **Standard Revisions.** If applicable water quality standards are promulgated or approved pursuant to section 303 of the CWA, or amendments thereto, the Regional Water Board may reopen this Order and make modifications in accordance with such revised standards.

b. **Reasonable Potential.** This Order may be reopened for modification to include an effluent limitation if monitoring establishes that the discharge causes, has the reasonable potential to cause, or contributes to an excursion above an applicable water quality objective.

c. **Whole Effluent Toxicity (WET).** As a result of a Toxicity Reduction Evaluation (TRE), this Order may be reopened to include a chronic toxicity limitation and/or a limitation for a specific toxic pollutant identified by a TRE or if there is a change in the WET compliance method pursuant to changes in State wide policy. In addition, if a numeric water quality objective for chronic toxicity is adopted by the State Water Board, this Order may be reopened to include an effluent limitation for chronic toxicity based on that objective.

d. **303 (d) Listed Pollutants.** If a new TMDL is adopted and is applicable to receiving waters for this discharge, this Order may be reopened to incorporate requirements of the TMDL.

e. **Biostimulatory Substances.** This Order contains effluent limitations for nitrate. If new water quality objectives for nutrients are established, or if monitoring data indicate the need for more stringent effluent limitations for these or other nutrient parameters, this Order may be reopened and modified to include new or modified effluent limitations, as necessary.

2. Special Studies, Technical Reports and Additional Monitoring Requirements

a. Toxicity Reduction Requirements

i. **Whole Effluent Toxicity (WET).** In addition to a limitation for whole effluent acute toxicity, the Monitoring and Reporting Program (MRP) of this Order requires routine monitoring for whole effluent chronic toxicity to determine compliance with the Basin Plan's narrative water quality objective for toxicity. As established by the MRP, if either of the effluent limitations for acute toxicity is exceeded (a single sample with less than 70% survival or a three sample median of less than 90%

survival) or if the chronic toxicity monitoring trigger of 1.0 TUc (where TUc = 100/NOEC)[6] is exceeded, the Discharger shall conduct accelerated monitoring as specified in section V. of the MRP.

Results of accelerated toxicity monitoring will indicate a need to conduct a Toxicity Reduction Evaluation (TRE), if toxicity persists; or it will indicate that a return to routine toxicity monitoring is justified because persistent toxicity has not been identified by accelerated monitoring. A TRE shall be conducted in accordance with the TRE Workplan prepared by the Discharger pursuant to Section VI.C.2.a.(2) of this Order, below.

ii. Toxicity Reduction Evaluations (TRE) Workplan. The Discharger shall prepare and submit to the Regional Water Board Executive Officer a TRE Workplan **within 180 days of the effective date of this Order**. This requirement may be met using an existing TRE Workplan which meets the criteria contained in this section. This plan shall be reviewed and updated as necessary in order to remain current and applicable to the discharge and discharge facilities. The workplan shall describe the steps the Discharger intends to follow if toxicity is detected, and should include at least the following items:

a.) A description of the investigation and evaluation techniques that would be used to identify potential causes and sources of toxicity, effluent variability, and treatment system efficiency.

b.) A description of the facility's methods of maximizing in house treatment efficiency and good housekeeping practices.

c.) If a toxicity identification evaluation (TIE) is necessary, an indication of the person who would conduct the TIEs (i.e., an in house expert or an outside contractor).

iii. Toxicity Reduction Evaluation (TRE). The TRE shall be conducted in accordance with the following:

a.) The TRE shall be initiated within 30 days of the date of completion of the accelerated monitoring test, required by section

[6] This Order does not allow any credit for dilution for the chronic condition. Therefore, a TRE is triggered when the effluent exhibits a pattern of toxicity at 100% effluent.

V of the MRP, observed to exceed either the acute or chronic toxicity parameter.

b.) The TRE shall be conducted in accordance with the Discharger's workplan.

c.) The TRE shall be in accordance with current technical guidance and reference material including, at a minimum, the USEPA manual EPA/833B 99/002.

d.) The TRE may end at any stage if, through monitoring results, it is determined that there is no longer consistent toxicity.

e.) The Discharger may initiate a TIE as part of the TRE process to identify the cause(s) of toxicity. As guidance, the Discharger shall use the USEPA acute and chronic manuals, EPA/600/6-91/005F (Phase I), EPA/600/R-92/080 (Phase II), and EPA-600/R-92/081 (Phase III).

f.) As toxic substances are identified or characterized, the Discharger shall continue the TRE by determining the source(s) and evaluating alternative strategies for reducing or eliminating the substances from the discharge. All reasonable steps shall be taken to reduce toxicity to levels consistent with chronic toxicity parameters.

g.) Many recommended TRE elements accompany required efforts of source control, pollution prevention, and storm water control programs. TRE efforts should be coordinated with such efforts. To prevent duplication of efforts, evidence of complying with requirements of recommendations of such programs may be acceptable to comply with requirements of the TRE.

h.) The Regional Water Board recognizes that chronic toxicity may be episodic and identification of a reduction of sources of chronic toxicity may not be successful in all cases. Consideration of enforcement action by the Regional Water Board will be based in part on the Discharger's actions and efforts to identify and control or reduce sources of consistent toxicity.

3. Best Management Practices and Pollution Prevention

The Discharger shall develop and conduct a Pollutant Minimization Program (PMP) as further described below when there is evidence (e.g., sample results reported as Detected, but Not Quantified (DNQ) when the effluent

limitation is less than the Method Detection Limit (MDL), sample results from analytical methods more sensitive than those methods required by this Order, presence of WET, health advisories for fish consumption, results of benthic or aquatic organism tissue sampling) that a priority pollutant is present in the effluent above an effluent limitation and either:

a. A sample result is reported as DNQ and the effluent limitation is less than the RL; or

b. A sample result is reported as Not Detected (ND) and the effluent limitation is less than the MDL, using definitions described in Attachment A and reporting protocols described in MRP section X.B.4.

c. The PMP shall include, but not be limited to, the following actions and submittals acceptable to the Regional Water Board:

i. An annual review and semi-annual monitoring of potential sources of the reportable priority pollutant(s), which may include fish tissue monitoring and other bio-uptake sampling;

ii. Quarterly monitoring for the reportable priority pollutant(s) in the influent to the wastewater treatment system;

iii. Submittal of a control strategy designed to proceed toward the goal of maintaining concentrations of the reportable priority pollutant(s) in the effluent at or below the effluent limitation;

iv. Implementation of appropriate cost-effective control measures for the reportable priority pollutant(s), consistent with the control strategy; and

v. An annual status report that shall be sent to the Regional Water Board including:

a.) All PMP monitoring results for the previous year;
b.) A list of potential sources of the reportable priority pollutant(s);
c.) A summary of all actions undertaken pursuant to the control strategy; and
d.) A description of actions to be taken in the following year.

4. Construction, Operation and Maintenance Specifications

a. The Discharger shall at all times properly operate and maintain all facilities and systems of treatment and control (and related appurtenances) that are installed or used by the Discharger to achieve

compliance with this Order. Proper operation and maintenance includes adequate laboratory quality control and appropriate quality assurance procedures. This provision requires the operation or backup or auxiliary facilities or similar systems that are installed by the Discharger only when necessary to achieve compliance with the conditions of this Order. (40 CFR 122.41 (e))

b. The Discharger shall maintain an updated Operation and Maintenance (O&M) Manual for the facility. The Discharger shall update the O&M Manual, as necessary, to conform to changes in operation and maintenance of the facility. The O&M Manual shall be readily available to operating personnel onsite. The O&M Manual shall include the following.

c. Description of the treatment plant table of organization showing the number of employees, duties and qualifications and plant attendance schedules (daily, weekends and holidays, part-time, etc). The description should include documentation that the personnel are knowledgeable and qualified to operate the treatment facility so as to achieve the required level of treatment at all times.

i. Detailed description of safe and effective operation and maintenance of treatment processes, process control instrumentation and equipment.

ii. Description of laboratory and quality assurance procedures.

iii. Process and equipment inspection and maintenance schedules.

iv. Description of safeguards to assure that, should there be reduction, loss, or failure of electric power, the Discharger will be able to comply with requirements of this Order.

v. Description of preventive (fail-safe) and contingency (response and cleanup) plans for controlling accidental discharges, and for minimizing the effect of such events. These plans shall identify the possible sources (such as loading and storage areas, power outage, waste treatment unit failure, process equipment failure, tank and piping failure) of accidental discharges, untreated or partially treated waste bypass, and polluted drainage.

5. Septage Handling Requirements

a. The Discharger shall implement any necessary legal authorities to monitor and enforce septage handling requirements, including restriction of

discharges of toxic materials to the collection system and WWTF and inspection facilities connected to the system.

b. The Discharger shall maintain a waste hauler manifest that identifies the name of the hauler, county ID number, the date and time the waste load was transferred, and the volume and source of the waste.

c. The Discharger shall accept the discharge of septage only during business hours and when the Discharger's operations staff is on site.

d. The Discharger shall accept septage only at an approved septage receiving station/location.

e. The Discharger shall collect representative grab samples of septage loads in accordance with monitoring and reporting program (Attachment E).

6. Special Provisions for Municipal Facilities (POTWs Only)

a. Wastewater Collection Systems

i. Statewide-General WDRs for Sanitary Sewer Systems

a.) On May 2, 2006, the State Water Board adopted State Water Board Order No. 2006-0003-DWQ, Statewide General WDRs for Sanitary Sewer Systems. Order No. 2006-0003-DWQ requires that all public agencies that currently own or operate sanitary sewer systems apply for coverage under the General WDRs by November 2, 2006. On February 20, 2008, the State Water Board adopted Order No. WQ-2008-0002-EXEC Adopting Amended Monitoring and Reporting Requirements for Statewide General Waste Discharge Requirements for Sanitary Sewer Systems. The Discharger shall maintain coverage under, and shall be subject to the requirements of Order Nos. 2006-0003-DWQ and WQ-2008-0002-EXEC and any future revisions thereto for operation of its wastewater collection system.

b.) In addition to the coverage obtained under Order No. 2006-0003, the Discharger's collection system is part of the system that is subject to this Order. As such, the Discharger must properly operate and maintain its collection system. (40 CFR 122.41 (e)) The Discharger must report any noncompliance (40 CFR 122.41 (l) (6) and (7)) and mitigate any discharge from the collection system in violation of this Order (40 CFR 122.41 (d)).

ii. Sanitary Sewer Overflows

a.) The Discharger shall take all feasible steps to stop spills and sanitary sewer overflows (SSOs) as soon as possible. All reasonable steps should be taken to collect spilled material and protect the public from contact with wastes or waste-contaminated soil or surfaces.

b.) The Discharger shall report orally and in writing to the Regional Water Board staff all SSOs and unauthorized spills of waste. Spill notification and reporting shall be conducted in accordance with the Monitoring and Reporting Program.

b. Source Control Provisions

The Discharger shall perform source control functions, to include the following.

i. Implement the necessary legal authorities to monitor and enforce source control standards, restrict discharges of toxic materials to the collection system and inspect facilities connected to the system.

ii. If waste haulers are allowed to discharge to the Facility, establish a waste hauler permit system, to be reviewed by the Executive Officer, to regulate waste haulers discharging to the collection system or facility.

iii. Conduct a waste survey one time every 5 years, or more frequently if required by the Executive Officer, to identify all industrial dischargers that might discharge pollutants that could pass through or interfere with the operation or performance of the facility.

iv. General prohibitions. Pollutants introduced into WWTFs by a non-domestic source shall not pass through [40 CFR403.3(n)] the WWTF or interfere [40 CFR 403.3(i)] with the operation or performance of the works. These general prohibitions and the specific prohibitions in paragraph (b) of this provision apply to all non-domestic sources introducing pollutants into a WWTF whether or not the source is subject to other National Pretreatment Standards or any national, state, or local pretreatment requirements.

v. Specific prohibitions. In addition, the following pollutants shall not be introduced into a WWTF:

a). Pollutants that create a fire or explosion hazard in the WWTF;

b). Pollutants that will cause corrosive structural damage to the WWTF, but in no case discharges with pH lower than 5.0, unless the WWTF is specifically designed to accommodate such discharges;

c). Solid or viscous pollutants in amounts that will cause obstruction to the flow in the WWTF resulting in interference;

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

e). Heat in amounts that will inhibit biological activity in the WWTF resulting in interference, but in no case heat in such quantities that the temperature at the WWTF exceeds 40ºC (104ºF) unless the Regional Water Board, upon request of the permittee, approves alternate temperature limits;

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

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

h). Any trucked or hauled pollutant, except at discharge points designated by the permittee.

vi. Perform ongoing industrial inspections and monitoring, as necessary, to ensure adequate source control.

vii. Perform public outreach to educate industrial, commercial, and residential users about the importance of preventing discharges of industrial and toxic wastes to the wastewater treatment plant.

c. Sludge Disposal and Handling Requirements

i. Sludge, as used in this document, means the solid, semisolid, and liquid residues removed during primary, secondary, or advanced wastewater treatment processes. Solid waste refers to grit and screenings generated during preliminary treatment. Biosolids refers to sludge that has been treated and tested and shown to be capable of being beneficially and legally used pursuant to federal and State regulations as a soil amendment for agriculture, silviculture, horticulture, and land reclamation activities.

ii. All collected sludges and other solid waste removed from liquid wastes shall be removed from screens, sumps, ponds, and tanks as needed to ensure optimal plant operation and disposed of in accordance with applicable federal and State regulations.

iii. The use and disposal of biosolids shall comply with all requirements of 40 CFR Part 503, which are enforceable by the USEPA, not the Regional Water Board. If, during the term of this Order, the State accepts primacy for implementation of 40 CFR Part 503, the Regional Water Board may also initiate enforcement, where appropriate.

iv. Sludge or biosolids that are disposed of in a municipal solid waste landfill or used as landfill daily cover shall meet the applicable requirements of 40 CFR Part 258. In its annual Self-Monitoring Report, the Discharger shall report the amount of sludge or biosolids disposed of, and the landfill(s) which received the sludge or biosolids.

v. The beneficial use of biosolids by application to land as soil amendment is not covered or authorized by this Order. Biosolids that are applied to land as soil amendment by the Discharger within the North Coast Region shall comply with State Water Board Water Quality Order No. 2004-0012-DWQ (General Waste Discharge Requirements for the Discharge of Biosolids to Land as a Soil Amendment in Agricultural, Silvicultural, Horticultural, and Land Reclamation Activities) or other permits issued by the Regional Water Board.

vi. The Discharger shall take all reasonable steps to prevent and minimize any sludge use or disposal in violation of this Order that is likely to adversely affect human health or the environment.

vii. Solids and sludge treatment, storage, and disposal or reuse shall not create a nuisance, such as objectionable odors and flies, and shall not result in ground water contamination.

viii. Solids and sludge treatment and storage sites shall have facilities adequate to divert surface water runoff from adjacent areas, to protect the boundaries of the site from erosion, and to prevent drainage from the treatment and storage site. Adequate protection is defined as protection from at least a 100-year storm event.

ix. The discharge of sewage sludge, biosolids, and other waste solids shall not cause waste material to be in a position where it is, or can be conveyed from the treatment and storage sites and deposited in the waters of the State.

d. Operator Certification

Supervisors and operators of municipal WWTFs shall possess a certificate of appropriate grade in accordance with title 23, California Code of Regulations section 3680. The State Water Board may accept experience in lieu of qualification training. In lieu of a properly certified WWTF operator, the State Water Board may approve use of a water treatment facility operator of appropriate grade certified by the California Department of Public Health (CDPH) where water reclamation is involved.

e. Adequate Capacity

If the Discharger's wastewater treatment plant will reach capacity within 4 years, the Discharger shall notify the Regional Water Board. A copy of such notification shall be sent to appropriate local elected officials, local permitting agencies, and the press. Factors to be evaluated in assessing reserve capacity shall include, at a minimum, (1) comparison of the wet weather design flow with the highest daily flow, and (2) comparison of the average dry weather design flow with the lowest 30-day flow. The Discharger shall demonstrate that adequate steps are being taken to address the capacity problem. The Discharger shall submit a technical report to the Regional Water Board showing how flow volumes will be prevented from exceeding capacity, or how capacity will be increased, within 120 days after providing notification to the Regional Water Board, or within 120 days after receipt of Regional Water Board notification, that the WWTP will reach capacity within four years. The time for filing the required technical report may be extended by the Regional Water Board. An extension of 30 days may be granted by the Executive Officer, and longer extensions may be granted by the Regional Water Board itself (title 23, Cal. Code of Regs., section 2232)

f. Statewide General WDRs for Discharge of Biosolids to Land

Operations conducted at the Covelo WWTF will not result in the need for routine biosolids management. For the discharge of biosolids from the WWTF, the Discharger shall obtain authorization to discharge under and meet the requirements of the State Water Resources Control Board Water Quality Order No. 2004-0012–DWQ *General Waste Discharge Requirements for the Discharge of Biosolids to Land or Use as a Soil Amendment In Agricultural, Silvicultural, Horticultural, and Land Reclamation Activities*, or other permit issued by the Regional Water Board as applicable. Alternatively, the Discharger may dispose of biosolids at another appropriately permitted facility.

7. Other Special Provisions

a. Storm Water

For the control of storm water discharged from the site of the WWTF, if applicable, the Discharger shall seek authorization to discharge under and meet the requirements of the State Water Board's Water Quality Order 97-03-DWQ, NPDES General Permit No. CAS000001, Waste Discharge Requirements for Discharges of Storm Water Associated with Industrial Activities Excluding Construction Activities (or subsequent renewed versions of the General Permit).

b. Compliance Schedules

This section of the Order is not applicable.

X. COMPLIANCE DETERMINATION

Compliance with the effluent limitations contained in Section IV of this Order will be determined as specified below:

A. Compliance with Single-Constituent Effluent Limitations

Dischargers are out of compliance with the effluent limitation if the concentration of the pollutant (see Section C, below) in the monitoring sample is greater than the effluent limitation and greater than or equal to the reporting level (RL).

B. Compliance with Effluent Limitations Expressed as a Sum of Several Constituents

Dischargers are out of compliance with an effluent limitation which applies to the sum of a group of chemicals (e.g., PCB's) if the sum of the individual pollutant concentrations is greater than the effluent limitation. Individual pollutants of the group will be considered to have a concentration of zero if the constituent is reported as ND or DNQ.

C. Multiple Sample Data

When determining compliance with an AMEL for priority pollutants, and more than one sample result is available, the Discharger shall compute the arithmetic mean unless the data set contains one or more reported determinations of "Detected, but Not Quantified" (DNQ) or "Not Detected" (ND). In those cases, the Discharger shall compute the median in place of the arithmetic mean in accordance with the following procedure.

1. The data set shall be ranked from low to high, ranking the reported ND determinations lowest, DNQ determinations next, followed by quantified

values (if any). The order of the individual ND or DNQ determinations is unimportant.

2. The median value of the data set shall be determined. If the data set has an odd number of data points, then the median is the middle value. If the data set has an even number of data points, then the median is the average of the two values around the middle unless one or both of the points are ND or DNQ, in which case the median value shall be the lower of the two data points where DNQ is lower than a value and ND is lower than DNQ.

B. Average Monthly Effluent Limitation (AMEL)

If the average (or when applicable, the median determined by subsection B above for multiple sample data) of daily discharges over a calendar month exceeds the AMEL for a given parameter, this will represent a single violation, though the Discharger will be considered out of compliance for each day of that month for that parameter (e.g., resulting in 31 days of non-compliance in a 31-day month). If only a single sample is taken during the calendar month and the analytical result for that sample exceeds the AMEL, the Discharger will be considered out of compliance for that calendar month. The Discharger will only be considered out of compliance for days when the discharge occurs. For any one calendar month during which no sample (daily discharge) is taken, no compliance determination can be made for that calendar month.

C. Average Weekly Effluent Limitation (AWEL)

If the average (or when applicable, the median determined by subsection B above for multiple sample data) of daily discharges over a calendar week exceeds the AWEL for a given parameter, this will represent a single violation, though the Discharger will be considered out of compliance for each day of that week for that parameter, resulting in 7 days of non-compliance. If only a single sample is taken during the calendar week and the analytical result for that sample exceeds the AWEL, the Discharger will be considered out of compliance for that calendar week. The Discharger will only be considered out of compliance for days when the discharge occurs. For any one calendar week during which no sample (daily discharge) is taken, no compliance determination can be made for that calendar week.

D. Maximum Daily Effluent Limitation (MDEL)

If a daily discharge (or when applicable, the median determined by subsection B, above, for multiple sample data of a daily discharge) exceeds the MDEL for a given parameter, the Discharger will be considered out of compliance for that parameter for that 1 day only within the reporting period. For any 1 day during

which no sample is taken, no compliance determination can be made for that day.

E. Instantaneous Minimum Effluent Limitation

If the analytical result of a single grab sample is lower than the instantaneous minimum effluent limitation for a parameter, the Discharger will be considered out of compliance for that parameter for that single sample. Non-compliance for each sample will be considered separately (e.g., the results of two grab samples taken within a calendar day that both are lower than the instantaneous minimum effluent limitation would result in two instances of non-compliance with the instantaneous minimum effluent limitation).

F. Instantaneous Maximum Effluent Limitation

If the analytical result of a single grab sample is higher than the instantaneous maximum effluent limitation for a parameter, the Discharger will be considered out of compliance for that parameter for that single sample. Non-compliance for each sample will be considered separately (e.g., the results of two grab samples taken within a calendar day that both exceed the instantaneous maximum effluent limitation would result in two instances of non-compliance with the instantaneous maximum effluent limitation).

G. Mass-Based Effluent Limitations

Compliance with mass- and concentration-based effluent limitations for the same parameter shall be determined separately.

1. **Daily Maximum.** Compliance with the daily maximum mass-based effluent limitation shall be determined using the following formula:

   lbs/day = 8.34 * Ce * Q, where

   Ce = daily maximum effluent concentration (µg/L)
   Q = instantaneous flow rate at the time of sample collection for a grab sample, or a daily average flow rate for a composite sample (mgd)

2. **Instantaneous Maximum.** Compliance with the instantaneous maximum mass-based limitation shall be determined using the following formula:

   lbs/day = 8.34 * Ce * Q, where

   Ce = daily maximum effluent concentration (µg/L)
   Q = instantaneous flow rate at the time of sample collection for a grab sample, or a daily average flow rate for a composite sample (mgd)

3. **30-Day Average.** Compliance with the 30-day mass-based average limitation shall be determined using the following formula:

   lbs/day = 8.34 * Ce * Q, where

   Ce = average of effluent concentrations collected during the 30-day period (µg/L)
   Q = average flow rate averaged over the same 30-day period (mgd)

4. **Monthly Average.** Compliance with the monthly mass-based average limitation shall be determined using the following formula:

   lbs/day = 8.34 * Ce * Q, where

   Ce = average of effluent concentrations collected during the calendar month (mg/L)
   Q = average flow rate averaged over the same calendar monthly (mgd)

5. **Weekly Average.** Compliance with the monthly mass-based average limitation shall be determined using the following formula:

   lbs/day = 8.34 * Ce * Q, where

   Ce = average of effluent concentrations collected during the calendar week (mg/L)
   Q = average flow rate averaged over the same calendar week (mgd)

H. Bacteriological Limitations

1. **Geometric Mean.** The geometric mean used for determining compliance with bacteriological standards is calculated using the following formula:

   Geometric Mean = $(C1 * C2 * \ldots * Cn)^{1/n}$, where

   n = number of days samples were collected during the period, and
   C = the concentration (MPN) of bacteria in the sample

   For example, to calculate a 5-sample geometric mean, the equation would be: $(C1*C2*C3*C4*C5)^{1/5}$

2. **Median.** The median is the central tendency concentration of the pollutant. The data set shall be ranked from low to high, ranking the ND concentrations lowest, DNQ determinations next, followed by quantified values. The order of

the individual ND and DNQ determinations is not important. The median value is determined based on the number of data points in the set. If the data set has an odd number of data points, then the median is the middle value. If the data set has an even number of data points, the median is the average of the two values around the middle, unless one or both points are ND or DNQ, in which case the median value shall be the lower of the data points. DNQ is lower than a detected value, and ND is lower than DNQ.

ATTACHMENT A – DEFINITIONS

Arithmetic Mean (μ)

Also called the average, is the sum of measured values divided by the number of samples. For ambient water concentrations, the arithmetic mean is calculated as follows:

Arithmetic mean = $\mu = \Sigma x / n$ where: Σx is the sum of the measured ambient water concentrations, and n is the number of samples.

Average Monthly Effluent Limitation (AMEL)

The highest allowable average of daily discharges over a calendar month, calculated as the sum of all daily discharges measured during a calendar month divided by the number of daily discharges measured during that month.

Average Weekly Effluent Limitation (AWEL)

The highest allowable average of daily discharges over a calendar week (Sunday through Saturday), calculated as the sum of all daily discharges measured during a calendar week divided by the number of daily discharges measured during that week.

Bioaccumulative

Those substances taken up by an organism from its surrounding medium through gill membranes, epithelial tissue, or from food and subsequently concentrated and retained in the body of the organism.

Carcinogenic

Pollutants are substances that are known to cause cancer in living organisms.

Coefficient of Variation (CV)

CV is a measure of the data variability and is calculated as the estimated standard deviation divided by the arithmetic mean of the observed values.

Daily Discharge

Daily Discharge is defined as either: (1) the total mass of the constituent discharged over the calendar day (12:00 am through 11:59 pm) or any 24-hour period that reasonably represents a calendar day for purposes of sampling (as specified in the permit), for a constituent with limitations expressed in units of mass or; (2) the unweighted arithmetic mean measurement of the constituent over the day for a constituent with limitations expressed in other units of measurement (e.g., concentration).

The daily discharge may be determined by the analytical results of a composite sample taken over the course of one day (a calendar day or other 24-hour period defined as a day) or by the arithmetic mean of analytical results from one or more grab samples taken over the course of the day.

For composite sampling, if 1 day is defined as a 24-hour period other than a calendar day, the analytical result for the 24-hour period will be considered as the result for the calendar day in which the 24-hour period ends.

Detected, but Not Quantified (DNQ)

DNQ are those sample results less than the RL, but greater than or equal to the laboratory's MDL.

Dilution Credit

Dilution Credit is the amount of dilution granted to a discharge in the calculation of a water quality-based effluent limitation, based on the allowance of a specified mixing zone. It is calculated from the dilution ratio or determined through conducting a mixing zone study or modeling of the discharge and receiving water.

Effluent Concentration Allowance (ECA)

ECA is a value derived from the water quality criterion/objective, dilution credit, and ambient background concentration that is used, in conjunction with the coefficient of variation for the effluent monitoring data, to calculate a long-term average (LTA) discharge concentration. The ECA has the same meaning as waste load allocation (WLA) as used in USEPA guidance (Technical Support Document For Water Quality-based Toxics Control, March 1991, second printing, EPA/505/2-90-001).

Enclosed Bays

Enclosed Bays means indentations along the coast that enclose an area of oceanic water within distinct headlands or harbor works. Enclosed bays include all bays where the narrowest distance between the headlands or outermost harbor works is less than 75 percent of the greatest dimension of the enclosed portion of the bay. Enclosed bays include, but are not limited to, Humboldt Bay, Bodega Harbor, Tomales Bay, Drake's Estero, San Francisco Bay, Morro Bay, Los Angeles-Long Beach Harbor, Upper and Lower Newport Bay, Mission Bay, and San Diego Bay. Enclosed bays do not include inland surface waters or ocean waters.

Estimated Chemical Concentration

The estimated chemical concentration that results from the confirmed detection of the substance by the analytical method below the ML value.

Estuaries

Estuaries means waters, including coastal lagoons, located at the mouths of streams that serve as areas of mixing for fresh and ocean waters. Coastal lagoons and mouths of streams that are temporarily separated from the ocean by sandbars shall be considered estuaries. Estuarine waters shall be considered to extend from a bay or the open ocean to a point upstream where there is no significant mixing of fresh water and seawater. Estuarine waters included, but are not limited to, the Sacramento-San Joaquin Delta, as defined in Water Code section 12220, Suisun Bay, Carquinez Strait downstream to the Carquinez Bridge, and appropriate areas of the Smith, Mad, Eel, Noyo, Russian, Klamath, San Diego, and Otay rivers. Estuaries do not include inland surface waters or ocean waters.

Inland Surface Waters

All surface waters of the State that do not include the ocean, enclosed bays, or estuaries.

Instantaneous Maximum Effluent Limitation
The highest allowable value for any single grab sample or aliquot (i.e., each grab sample or aliquot is independently compared to the instantaneous maximum limitation).

Instantaneous Minimum Effluent Limitation

The lowest allowable value for any single grab sample or aliquot (i.e., each grab sample or aliquot is independently compared to the instantaneous minimum limitation).

Maximum Daily Effluent Limitation (MDEL)

The highest allowable daily discharge of a pollutant, over a calendar day (or 24-hour period). For pollutants with limitations expressed in units of mass, the daily discharge is calculated as the total mass of the pollutant discharged over the day. For pollutants with limitations expressed in other units of measurement, the daily discharge is calculated as the arithmetic mean measurement of the pollutant over the day.

Median

The middle measurement in a set of data. The median of a set of data is found by first arranging the measurements in order of magnitude (either increasing or decreasing order). If the number of measurements (n) is odd, then the median = $X_{(n+1)/2}$. If n is even, then the median = $(X_{n/2} + X_{(n/2)+1})/2$ (i.e., the midpoint between the $n/2$ and $n/2+1$).

Method Detection Limit (MDL)

MDL is the minimum concentration of a substance that can be measured and reported with 99 percent confidence that the analyte concentration is greater than zero, as defined in title 40 of the Code of Federal Regulations, Part 136 (40 CFR Part 136), Attachment B, revised as of July 3, 1999.

Minimum Level (ML)

ML is the concentration at which the entire analytical system must give a recognizable signal and acceptable calibration point. The ML is the concentration in a sample that is equivalent to the concentration of the lowest calibration standard analyzed by a specific analytical procedure, assuming that all the method specified sample weights, volumes, and processing steps have been followed.

Mixing Zone

Mixing Zone is a limited volume of receiving water that is allocated for mixing with a wastewater discharge where water quality criteria can be exceeded without causing adverse effects to the overall water body.

Not Detected (ND)

Sample results which are less than the laboratory's MDL.

Ocean Waters

The territorial marine waters of the State as defined by California law to the extent these waters are outside of enclosed bays, estuaries, and coastal lagoons. Discharges to ocean waters are regulated in accordance with the State Water Board's California Ocean Plan.

Persistent Pollutants

Persistent pollutants are substances for which degradation or decomposition in the environment is nonexistent or very slow.

Pollutant Minimization Program (PMP)

PMP means waste minimization and pollution prevention actions that include, but are not limited to, product substitution, waste stream recycling, alternative waste management methods, and education of the public and businesses. The goal of the PMP shall be to reduce all potential sources of a priority pollutant(s) through pollutant minimization (control) strategies, including pollution prevention measures as appropriate, to maintain the effluent concentration at or below the water quality-based effluent limitation. Pollution prevention measures may be particularly appropriate for persistent bioaccumulative priority pollutants where there is evidence that beneficial uses are being impacted. The Regional Water Board may consider cost effectiveness when establishing the requirements of a PMP. The completion and implementation of a Pollution Prevention Plan, if required pursuant to Water Code section 13263.3(d), shall be considered to fulfill the PMP requirements.

Pollution Prevention

Pollution Prevention means any action that causes a net reduction in the use or generation of a hazardous substance or other pollutant that is discharged into water and

includes, but is not limited to, input change, operational improvement, production process change, and product reformulation (as defined in Water Code section 13263.3). Pollution prevention does not include actions that merely shift a pollutant in wastewater from one environmental medium to another environmental medium, unless clear environmental benefits of such an approach are identified to the satisfaction of the State or Regional Water Board.

Reporting Level (RL)

RL is the ML (and its associated analytical method) used for reporting and compliance determination from the MLs included in this Order. The MLs included in this Order correspond to approved analytical methods for reporting a sample result that are selected by the Regional Water Board either from Appendix 4 of the SIP in accordance with section 2.4.2 of the SIP or established in accordance with section 2.4.3 of the SIP. The ML is based on the proper application of method-based analytical procedures for sample preparation and the absence of any matrix interferences. Other factors may be applied to the ML depending on the specific sample preparation steps employed. For example, the treatment typically applied in cases where there are matrix-effects is to dilute the sample or sample aliquot by a factor of ten. In such cases, this additional factor must be applied to the ML in the computation of the RL.

Satellite Collection System

The portion, if any, of a sanitary sewer system owned or operated by a different public agency than the agency that owns and operates the wastewater treatment facility that a sanitary sewer system is tributary to.

Source of Drinking Water

Any water designated as municipal or domestic supply (MUN) in a Regional Water Board Basin Plan.

Standard Deviation (σ)

Standard Deviation is a measure of variability that is calculated as follows:

$\sigma = (\sum[(x - \mu)^2]/(n - 1))^{0.5}$ where:

x is the observed value;

μ is the arithmetic mean of the observed values; and

n is the number of samples.

Toxicity Reduction Evaluation (TRE)

TRE is a study conducted in a step-wise process designed to identify the causative agents of effluent or ambient toxicity, isolate the sources of toxicity, evaluate the effectiveness of toxicity control options, and then confirm the reduction in toxicity. The first steps of the TRE consist of the collection of data relevant to the toxicity, including additional toxicity testing, and an evaluation of facility operations and maintenance

practices, and best management practices. A Toxicity Identification Evaluation (TIE) may be required as part of the TRE, if appropriate. (A TIE is a set of procedures to identify the specific chemical(s) responsible for toxicity. These procedures are performed in three phases (characterization, identification, and confirmation) using aquatic organism toxicity tests.)

Attachment B – Topographic Map

ATTACHMENT C – FACILITY

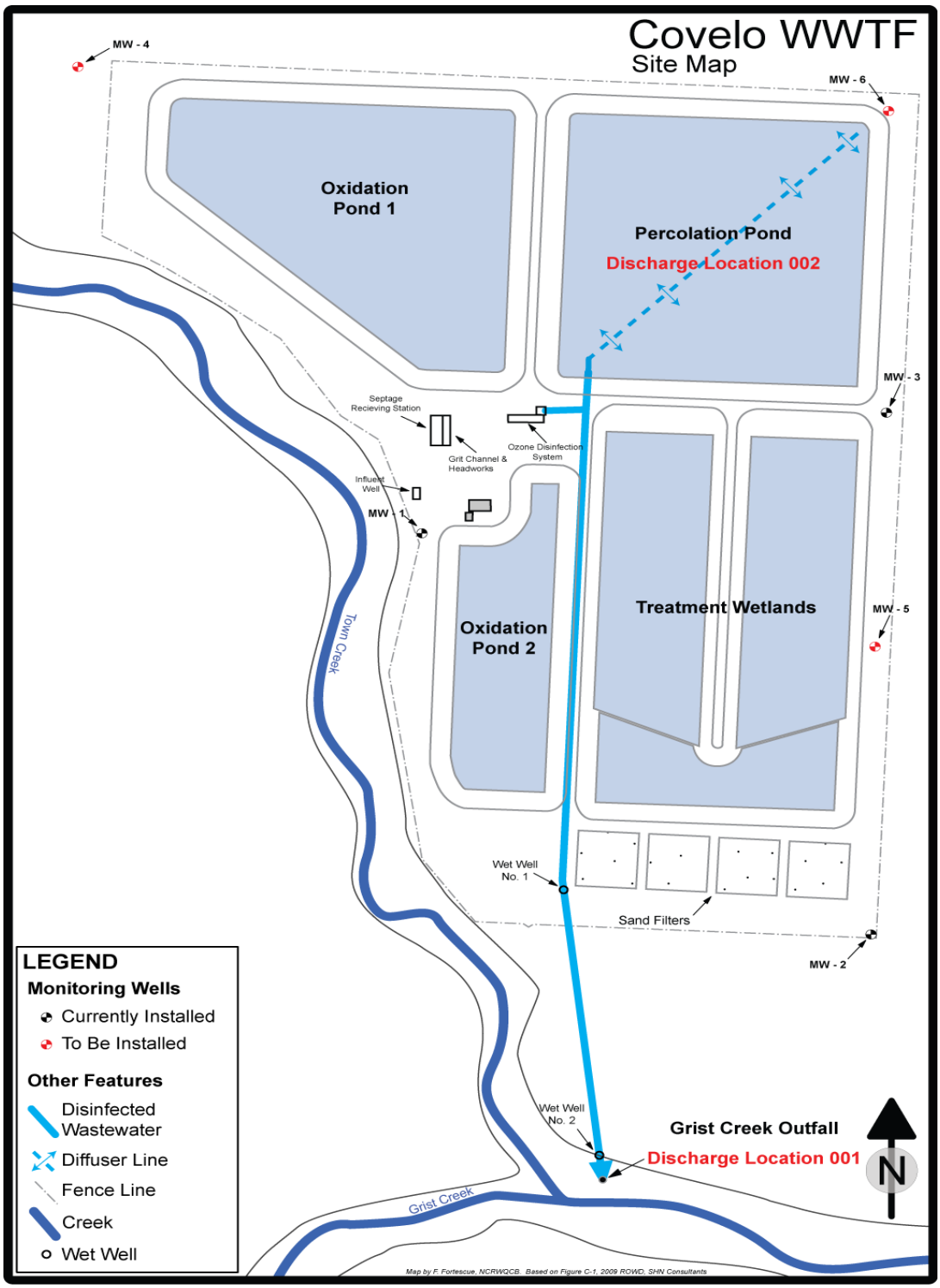
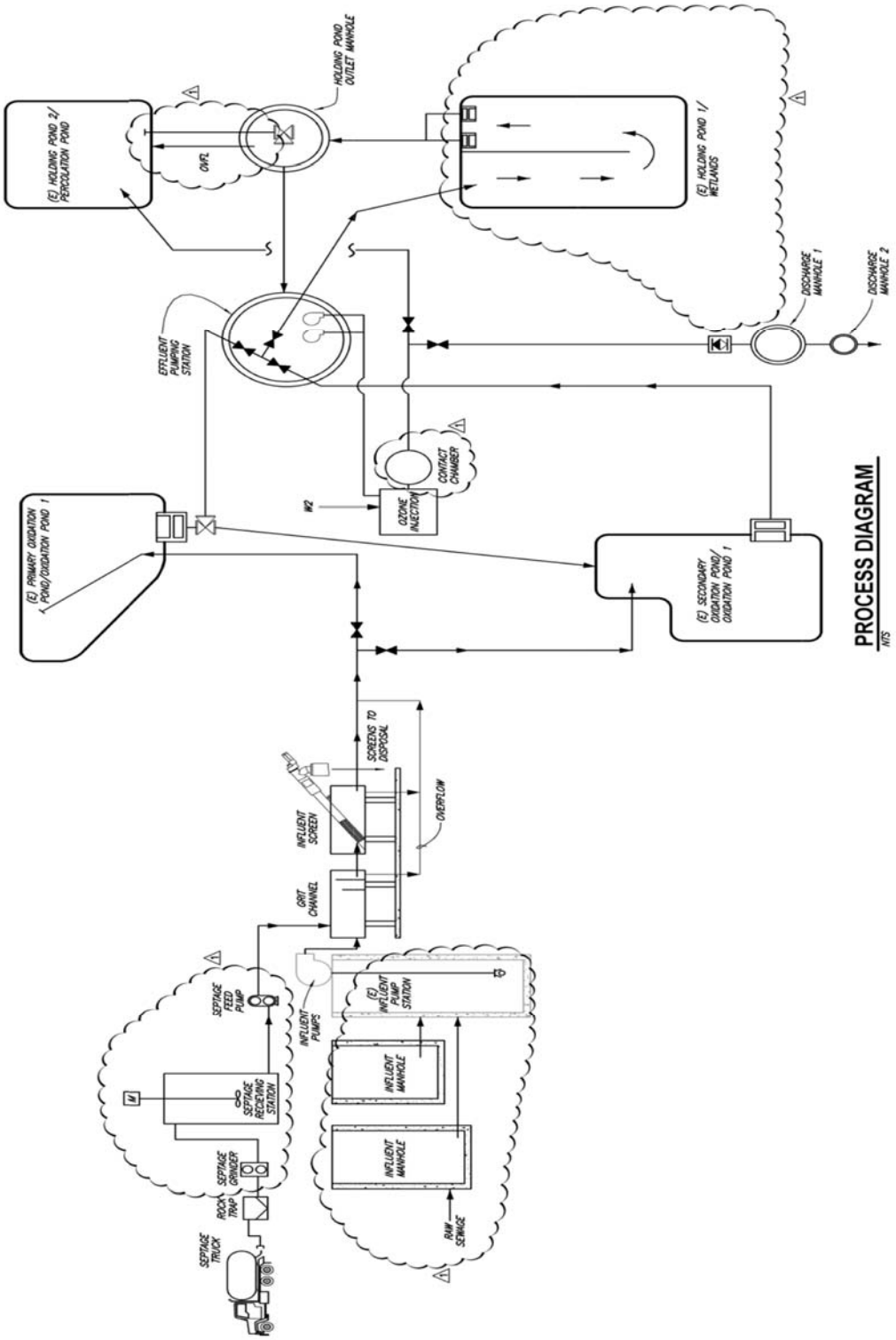


Figure C-2. Facility Flow Schematic



ATTACHMENT D – STANDARD PROVISIONS

I. STANDARD PROVISIONS – PERMIT COMPLIANCE

A. Duty to Comply

1. The Discharger must comply with all of the conditions of this Order. Any noncompliance constitutes a violation of the Clean Water Act (CWA) and the California Water Code and is grounds for enforcement action, for permit termination, revocation and reissuance, or modification; or denial of a permit renewal application. (40 CFR 122.41(a).)

2. The Discharger shall comply with effluent standards or prohibitions established under section 307(a) of the CWA for toxic pollutants and with standards for sewage sludge use or disposal established under section 405(d) of the CWA within the time provided in the regulations that establish these standards or prohibitions, even if this Order has not yet been modified to incorporate the requirement. (40 CFR 122.41(a)(1).)

B. Need to Halt or Reduce Activity Not a Defense

It shall not be a defense for a Discharger in an enforcement action that it would have been necessary to halt or reduce the permitted activity in order to maintain compliance with the conditions of this Order. (40 CFR 122.41(c).)

C. Duty to Mitigate

The Discharger shall take all reasonable steps to minimize or prevent any discharge or sludge use or disposal in violation of this Order that has a reasonable likelihood of adversely affecting human health or the environment. (40 CFR 122.41(d).)

D. Proper Operation and Maintenance

The Discharger shall at all times properly operate and maintain all facilities and systems of treatment and control (and related appurtenances) which are installed or used by the Discharger to achieve compliance with the conditions of this Order. Proper operation and maintenance also includes adequate laboratory controls and appropriate quality assurance procedures. This provision requires the operation of backup or auxiliary facilities or similar systems that are installed by a Discharger only when necessary to achieve compliance with the conditions of this Order. (40 CFR 122.41(e).)

E. Property Rights

1. This Order does not convey any property rights of any sort or any exclusive privileges. (40 CFR 122.41(g).)

2. The issuance of this Order does not authorize any injury to persons or property or invasion of other private rights, or any infringement of state or local law or regulations. (40 CFR 122.5(c).)

F. Inspection and Entry

The Discharger shall allow the Regional Water Board, State Water Board, United States Environmental Protection Agency (USEPA), and/or their authorized representatives (including an authorized contractor acting as their representative), upon the presentation of credentials and other documents, as may be required by law, to (40 CFR 122.41(i); Wat. Code, § 13383):

1. Enter upon the Discharger's premises where a regulated facility or activity is located or conducted, or where records are kept under the conditions of this Order (40 CFR 122.41(i)(1));

2. Have access to and copy, at reasonable times, any records that must be kept under the conditions of this Order (40 CFR 122.41(i)(2));

3. Inspect and photograph, at reasonable times, any facilities, equipment (including monitoring and control equipment), practices, or operations regulated or required under this Order (40 CFR 122.41(i)(3)); and

4. Sample or monitor, at reasonable times, for the purposes of assuring Order compliance or as otherwise authorized by the CWA or the Water Code, any substances or parameters at any location. (40 CFR 122.41(i)(4).)

G. Bypass

1. Definitions

   a. “Bypass” means the intentional diversion of waste streams from any portion of a treatment facility. (40 CFR 122.41(m)(1)(i).)

   b. “Severe property damage” means substantial physical damage to property, damage to the treatment facilities, which causes them to become inoperable, or substantial and permanent loss of natural resources that can reasonably be expected to occur in the absence of a bypass. Severe property damage does not mean economic loss caused by delays in production. (40 CFR 122.41(m)(1)(ii).)

c. Bypass not exceeding limitations. The Discharger may allow any bypass to occur which does not cause exceedances of effluent limitations, but only if it is for essential maintenance to assure efficient operation. These bypasses are not subject to the provisions listed in Standard Provisions – Permit Compliance I.G.3, I.G.4, and I.G.5 below. (40 CFR 122.41(m)(2).)

d. Prohibition of bypass. Bypass is prohibited, and the Regional Water Board may take enforcement action against a Discharger for bypass, unless (40 CFR 122.41(m)(4)(i)):

e. Bypass was unavoidable to prevent loss of life, personal injury, or severe property damage (40 CFR 122.41(m)(4)(i)(A));

f. There were no feasible alternatives to the bypass, such as the use of auxiliary treatment facilities, retention of untreated wastes, or maintenance during normal periods of equipment downtime. This condition is not satisfied if adequate back-up equipment should have been installed in the exercise of reasonable engineering judgment to prevent a bypass that occurred during normal periods of equipment downtime or preventive maintenance (40 CFR 122.41(m)(4)(i)(B)); and

g. The Discharger submitted notice to the Regional Water Board as required under Standard Provisions – Permit Compliance I.G.5 below. (40 CFR 122.41(m)(4)(i)(C).)

h. The Regional Water Board may approve an anticipated bypass, after considering its adverse effects, if the Regional Water Board determines that it will meet the three conditions listed in Standard Provisions – Permit Compliance I.G.3 above. (40 CFR 122.41(m)(4)(ii).)

2. Notice

a. Anticipated bypass. If the Discharger knows in advance of the need for a bypass, it shall submit a notice, if possible at least 10 days before the date of the bypass. (40 CFR 122.41(m)(3)(i).)

b. Unanticipated bypass. The Discharger shall submit notice of an unanticipated bypass as required in Standard Provisions - Reporting V.E below (24-hour notice). (40 CFR 122.41(m)(3)(ii).)

H. Upset

1. Upset means an exceptional incident in which there is unintentional and temporary noncompliance with technology based permit effluent limitations because of factors beyond the reasonable control of the Discharger. An

upset does not include noncompliance to the extent caused by operational error, improperly designed treatment facilities, inadequate treatment facilities, lack of preventive maintenance, or careless or improper operation. (40 CFR 122.41(n)(1).)

2. Effect of an upset. An upset constitutes an affirmative defense to an action brought for noncompliance with such technology based permit effluent limitations if the requirements of Standard Provisions – Permit Compliance I.H.2 below are met. No determination made during administrative review of claims that noncompliance was caused by upset, and before an action for noncompliance, is final administrative action subject to judicial review. (40 CFR 122.41(n)(2).)

3. Conditions necessary for a demonstration of upset. A Discharger who wishes to establish the affirmative defense of upset shall demonstrate, through properly signed, contemporaneous operating logs or other relevant evidence that (40 CFR 122.41(n)(3)):

4. An upset occurred and that the Discharger can identify the cause(s) of the upset (40 CFR 122.41(n)(3)(i));

5. The permitted facility was, at the time, being properly operated (40 CFR 122.41(n)(3)(ii));

6. The Discharger submitted notice of the upset as required in Standard Provisions – Reporting V.E.2.b below (24-hour notice) (40 CFR 122.41(n)(3)(iii)); and

7. The Discharger complied with any remedial measures required under Standard Provisions – Permit Compliance I.C above. (40 CFR 122.41(n)(3)(iv).)

8. Burden of proof. In any enforcement proceeding, the Discharger seeking to establish the occurrence of an upset has the burden of proof. (40 CFR 122.41(n)(4).)

II. STANDARD PROVISIONS – PERMIT ACTION

A. General

This Order may be modified, revoked and reissued, or terminated for cause. The filing of a request by the Discharger for modification, revocation and reissuance, or termination, or a notification of planned changes or anticipated noncompliance does not stay any Order condition. (40 CFR 122.41(f).)

B. Duty to Reapply

If the Discharger wishes to continue an activity regulated by this Order after the expiration date of this Order, the Discharger must apply for and obtain a new permit. (40 CFR 122.41(b).)

C. Transfers

This Order is not transferable to any person except after notice to the Regional Water Board. The Regional Water Board may require modification or revocation and reissuance of the Order to change the name of the Discharger and incorporate such other requirements as may be necessary under the CWA and the Water Code. (40 CFR 122.41(l)(3) and 122.61.)

III. STANDARD PROVISIONS – MONITORING

A. Samples and measurements taken for the purpose of monitoring shall be representative of the monitored activity. (40 CFR 122.41(j)(1).)

B. Monitoring results must be conducted according to test procedures under 40 CFR Part 136 or, in the case of sludge use or disposal, approved under 40 CFR Part 136 unless otherwise specified in 40 CFR Part 503 unless other test procedures have been specified in this Order. (40 CFR 122.41(j)(4) and 122.44(i)(1)(iv).)

IV. STANDARD PROVISIONS – RECORDS

A. Except for records of monitoring information required by this Order related to the Discharger's sewage sludge use and disposal activities, which shall be retained for a period of at least five years (or longer as required by 40 CFR Part 503), the Discharger shall retain records of all monitoring information, including all calibration and maintenance records and all original strip chart recordings for continuous monitoring instrumentation, copies of all reports required by this Order, and records of all data used to complete the application for this Order, for a period of at least three (3) years from the date of the sample, measurement, report or application. This period may be extended by request of the Regional Water Board Executive Officer at any time. (40 CFR 122.41(j)(2).)

i. **Records of monitoring information shall include:**

1. The date, exact place, and time of sampling or measurements (40 CFR 122.41(j)(3)(i));

2. The individual(s) who performed the sampling or measurements (40 CFR 122.41(j)(3)(ii));

3. The date(s) analyses were performed (40 CFR 122.41(j)(3)(iii));

4. The individual(s) who performed the analyses (40 CFR 122.41(j)(3)(iv));

5. The analytical techniques or methods used (40 CFR 122.41(j)(3)(v)); and

6. The results of such analyses. (40 CFR 122.41(j)(3)(vi).)

B. **Claims of confidentiality for the following information will be denied (40 CFR 122.7(b)):**

1. The name and address of any permit applicant or Discharger (40 CFR 122.7(b)(1)); and

2. Permit applications and attachments, permits and effluent data. (40 CFR 122.7(b)(2).)

V. STANDARD PROVISIONS – REPORTING

A. Duty to Provide Information

The Discharger shall furnish to the Regional Water Board, State Water Board, or USEPA within a reasonable time, any information which the Regional Water Board, State Water Board, or USEPA may request to determine whether cause exists for modifying, revoking and reissuing, or terminating this Order or to determine compliance with this Order. Upon request, the Discharger shall also furnish to the Regional Water Board, State Water Board, or USEPA copies of records required to be kept by this Order. (40 CFR 122.41(h); Water. Code, § 13267.)

B. Signatory and Certification Requirements

1. All applications, reports, or information submitted to the Regional Water Board, State Water Board, and/or USEPA shall be signed and certified in accordance with Standard Provisions – Reporting V.B.2, V.B.3, V.B.4, and V.B.5 below. (40 CFR 122.41(k).)

2. All permit applications shall be signed by either a principal executive officer or ranking elected official. For purposes of this provision, a principal executive officer of a federal agency includes: (i) the chief executive officer of the agency, or (ii) a senior executive officer having responsibility for the overall operations of a principal geographic unit of the agency (e.g., Regional Administrators of USEPA). (40 CFR 122.22(a)(3).).

3. All reports required by this Order and other information requested by the Regional Water Board, State Water Board, or USEPA shall be signed by a

person described in Standard Provisions – Reporting V.B.2 above, or by a duly authorized representative of that person. A person is a duly authorized representative only if:

a. The authorization is made in writing by a person described in Standard Provisions – Reporting V.B.2 above (40 CFR 122.22(b)(1));

b. The authorization specifies either an individual or a position having responsibility for the overall operation of the regulated facility or activity such as the position of plant manager, operator of a well or a well field, superintendent, position of equivalent responsibility, or an individual or position having overall responsibility for environmental matters for the company. (A duly authorized representative may thus be either a named individual or any individual occupying a named position.) (40 CFR 122.22(b)(2)); and

c. The written authorization is submitted to the Regional Water Board and State Water Board. (40 CFR 122.22(b)(3).)

4. If an authorization under Standard Provisions – Reporting V.B.3 above is no longer accurate because a different individual or position has responsibility for the overall operation of the facility, a new authorization satisfying the requirements of Standard Provisions – Reporting V.B.3 above must be submitted to the Regional Water Board and State Water Board prior to or together with any reports, information, or applications, to be signed by an authorized representative. (40 CFR 122.22(c).)

5. Any person signing a document under Standard Provisions – Reporting V.B.2 or V.B.3 above shall make the following certification:

"I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations." (40 CFR 122.22(d).)

C. **Monitoring Reports**

1. Monitoring results shall be reported at the intervals specified in the Monitoring and Reporting Program (Attachment E) in this Order. (40 CFR 122.22(l)(4).)

2. Monitoring results must be reported on a Discharge Monitoring Report (DMR) form or forms provided or specified by the Regional Water Board or State Water Board for reporting results of monitoring of sludge use or disposal practices. (40 CFR 122.41(l)(4)(i).)

3. If the Discharger monitors any pollutant more frequently than required by this Order using test procedures approved under 40 CFR Part 136 or, in the case of sludge use or disposal, approved under 40 CFR Part 136 unless otherwise specified in 40 CFR Part 503, or as specified in this Order, the results of this monitoring shall be included in the calculation and reporting of the data submitted in the DMR or sludge reporting form specified by the Regional Water Board. (40 CFR 122.41(l)(4)(ii).)

4. Calculations for all limitations, which require averaging of measurements, shall utilize an arithmetic mean unless otherwise specified in this Order. (40 CFR 122.41(l)(4)(iii).)

D. **Compliance Schedules**

Reports of compliance or noncompliance with, or any progress reports on, interim and final requirements contained in any compliance schedule of this Order, shall be submitted no later than 14 days following each schedule date. (40 CFR 122.41(l)(5).)

E. **Twenty-Four Hour Reporting**

1. The Discharger shall report any noncompliance that may endanger health or the environment. Any information shall be provided orally within 24 hours from the time the Discharger becomes aware of the circumstances. A written submission shall also be provided within five (5) days of the time the Discharger becomes aware of the circumstances. The written submission shall contain a description of the noncompliance and its cause; the period of noncompliance, including exact dates and times, and if the noncompliance has not been corrected, the anticipated time it is expected to continue; and steps taken or planned to reduce, eliminate, and prevent reoccurrence of the noncompliance. (40 CFR 122.41(l)(6)(i).)

2. The following shall be included as information that must be reported within 24 hours under this paragraph (40 CFR 122.41(l)(6)(ii)):

   a. Any unanticipated bypass that exceeds any effluent limitation in this Order. (40 CFR 122.41(l)(6)(ii)(A).)

   b. Any upset that exceeds any effluent limitation in this Order. (40 CFR 122.41(l)(6)(ii)(B).)

3. The Regional Water Board may waive the above-required written report under this provision on a case-by-case basis if an oral report has been received within 24 hours. (40 CFR 122.41(l)(6)(iii).)

F. **Planned Changes**

The Discharger shall give notice to the Regional Water Board as soon as possible of any planned physical alterations or additions to the permitted facility. Notice is required under this provision only when (40 CFR 122.41(l)(1)):

1. The alteration or addition to a permitted facility may meet one of the criteria for determining whether a facility is a new source in 40 CFR 122.29(b) (40 CFR 122.41(l)(1)(i)); or

2. The alteration or addition could significantly change the nature or increase the quantity of pollutants discharged. This notification applies to pollutants that are not subject to effluent limitations in this Order. (40 CFR 122.41(l)(1)(ii).)

3. The alteration or addition results in a significant change in the Discharger's sludge use or disposal practices, and such alteration, addition, or change may justify the application of permit conditions that are different from or absent in the existing permit, including notification of additional use or disposal sites not reported during the permit application process or not reported pursuant to an approved land application plan. (40 CFR 122.41(l)(1)(iii).)

G. **Anticipated Noncompliance**

The Discharger shall give advance notice to the Regional Water Board or State Water Board of any planned changes in the permitted facility or activity that may result in noncompliance with General Order requirements. (40 CFR 122.41(l)(2).)

H. **Other Noncompliance**

The Discharger shall report all instances of noncompliance not reported under Standard Provisions – Reporting V.C, V.D, and V.E above at the time monitoring reports are submitted. The reports shall contain the information listed in Standard Provision – Reporting V.E above. (40 CFR 122.41(l)(7).)

I. **Other Information**

When the Discharger becomes aware that it failed to submit any relevant facts in a permit application, or submitted incorrect information in a permit application or in any report to the Regional Water Board, State Water Board, or USEPA, the Discharger shall promptly submit such facts or information. (40 CFR 122.41(l)(8).)

VI. STANDARD PROVISIONS – ENFORCEMENT

A. The Regional Water Board is authorized to enforce the terms of this permit under several provisions of the Water Code, including, but not limited to, sections 13385, 13386, and 13387.

VII. ADDITIONAL PROVISIONS – NOTIFICATION LEVELS

A. Publicly-Owned Treatment Works (POTWs)

All POTWs shall provide adequate notice to the Regional Water Board of the following (40 CFR 122.42(b)):

1. Any new introduction of pollutants into the POTW from an indirect discharger that would be subject to sections 301 or 306 of the CWA if it were directly discharging those pollutants (40 CFR 122.42(b)(1)); and

2. Any substantial change in the volume or character of pollutants being introduced into that POTW by a source introducing pollutants into the POTW at the time of adoption of the Order. (40 CFR 122.42(b)(2).)

3. Adequate notice shall include information on the quality and quantity of effluent introduced into the POTW as well as any anticipated impact of the change on the quantity or quality of effluent to be discharged from the POTW. (40 CFR 122.42(b)(3).)

ATTACHMENT E – MONITORING AND REPORTING PROGRAM

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List of Tables

ATTACHMENT E – MONITORING AND REPORTING PROGRAM (MRP)

Title 40 of the Code of Federal Regulations section 122.48 (40 CFR 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 40 CFR Part 136, or as specified in this Order, the results of this 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 (CDPH; 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). Table E-1 lists the test methods the Discharger may use for compliance and reasonable potential monitoring to analyze priority pollutants with effluent limitations.

Table E-1. Test Methods and Minimum Levels for Priority Pollutants

CTR #	Constituent Types of Analytical Methods Minimum Levels (µg/L)	Types of Analytical Methods Minimum Levels (µg/L)	
		Gas Chromatography (GC)	Gas Chromatography/Mass Spectroscopy (GCMS)
27	Dichlorobromomethane	0.5	2

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-2. Monitoring Station Locations

Discharge Point Name	Monitoring Location Name	Monitoring Location Description
--	INF-001	Influent at the headworks of wastewater treatment facility (WWTF) prior to treatment and consisting of wastewater from both the collection system and septage receiving station.
---	CCC-001	Internal monitoring location for purposes of monitoring chlorine residual in chlorine treated wastewater within the contact chamber prior to dechlorination[1].
---	OCC-001	Internal monitoring location for purposes of monitoring ozone residual in treated wastewater within the contact chamber prior to discharge[2].
001	EFF-001	Treated effluent from the WWTF downstream of disinfection processes, before contact with the receiving water (Grist Creek).
002	EFF-002	Treated effluent from the WWTF downstream of disinfection processes, before land application (percolation pond).
--	RSW-001[3]	Grist Creek surface water below the confluence with Town Creek upstream of and beyond influence of the discharge.
--	RSW-002	Grist Creek surface water at the point of discharge of Discharge Point 001
--	MW-1	Existing monitoring well, located east of the wetland
--	MW-2	Existing monitoring well, located south east of the percolation pond
--	MW-3	Existing monitoring well, located south east of the percolation pond, north east of the wetland
--	MW-4	New monitoring well, located north west of oxidation pond 1
--	MW-5	New monitoring well, located east of the percolation pond
--	MW-6	New monitoring well, located north east of the wetland
--	SEP-001	Septage receiving station after complete mixing of septage wastes and prior to the WWTF headworks

[1] This requirement applies only when disinfection is performed using chlorination.

[2] This requirement applies only when disinfection is performed using ozonation.

[3] Only required when discharging at Discharge Point 001.

III. INFLUENT MONITORING REQUIREMENTS

A. Monitoring Location INF-001

1. The Discharger shall monitor influent to the WWTF at Monitoring Location INF-001 during months of discharge to surface water as follows:

Table E-3. Influent Monitoring – Monitoring Location INF-001

Parameter	Units	Sample Type	Minimum Sampling Frequency	
Flow (Mean Daily)	mgd	Meter	Continuous[5]	
Biochemical Oxygen Demand (5-day @ 20°C)[6]	mg/L	Grab or 8-hour Composite	Monthly	
Total Suspended Solids[13]	mg/L	Grab or 8-hour Composite	Monthly	

IV. EFFLUENT MONITORING REQUIREMENTS

A. Monitoring Location EFF-001

1. When discharging to Grist Creek at Discharge Point 001, the Discharger shall monitor effluent from the existing WWTF at Monitoring Location EFF-001 as follows.

Table E-4 - Monitoring Location EFF-001

Parameter	Units	Sample Type	Minimum Sampling Frequency
Flow (Mean Daily)	mgd	Meter	Continuous
Ozone Residual	mg/L	Grab	Daily
Chlorine, Total Residual[9]	mg/L	Grab	Daily

[4] 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 40 CFR Part 136.

[5] The average daily flow reading shall be derived and reported based upon continuous monitoring data.

[6] Monitoring of 5-day biochemical oxygen demand (BOD_5) and total suspended solids (TSS) in the influent shall occur as near simultaneously as practicable with effluent monitoring for the same parameters.

Parameter	Units	Sample Type	Minimum Sampling Frequency
Settleable Solids	mL/L-hr	Grab	Weekly
pH	std units	Grab	Weekly
Total Coliform Organisms	MPN/100 mL	Grab	Weekly
Biochemical Oxygen Demand (5-day @ 20°C)	mg/L	Grab	Monthly
Total Suspended Solids	mg/L	Grab	Monthly
Dichlorobromomethane[7]	µg/L	Grab	Monthly
Ammonia Nitrogen,(as N) [8]	mg/L	Grab	2x / Year
Nitrate Nitrogen	mg/L	Grab	2x / Year
Nitrite Nitrogen	mg/L	Grab	2x / Year
Organic Nitrogen	mg/L	Grab	2x / Year
Nitrogen, Total (as N)	mg/L	Calculation	2x / Year
Phosphorus, Total (as P)	mg/L	Grab	2x / Year
Acute Toxicity	% Survival	Grab	2x / Year
Chronic Toxicity	TUc	Grab	1x / Year
Priority Pollutants	µg/L	Grab	1x / 3 Years

V. WHOLE EFFLUENT TOXICITY TESTING REQUIREMENTS

A. Acute Toxicity Control

1. Test Species and Methods

   a. During the first discharge season after adoption of this Order, the Discharger shall conduct 96-hour static renewal tests with an invertebrate, the water flea, *Ceriodaphnia dubia*, and a vertebrate, the rainbow trout, *Oncorhychus mykiss*, for at least two suites of tests. At least one test during the screening period shall be conducted when the effluent is unaffected by storm-related inflow into the WWTF. After this screening period, monitoring shall be conducted using the most sensitive species determined for the given flow regime. At least once every five years, the Discharger shall re-screen once with the two species listed above and continue to monitor monthly with the most sensitive species.

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[7] Monitoring for the chlorine disinfection by-product Dichlorobromomethane required only when implementing chlorine disinfection processes.

[8] Receiving water pH and temperature monitoring conducted at RSW-001 must coincide with monitoring for ammonia.

b. 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 (U.S. EPA Report No. EPA-821-R-02-012, 5th edition or subsequent editions), or other methods approved by the Executive Officer, shall be used.

2. Definition of Toxicity Limits

a. Acute toxicity is defined as the effluent concentration that would cause death in 50 percent of the test organisms (LC50). Where the LC50 is calculated, results shall be reported in TUa, where TUa = 100/LC50 (in percent effluent).

b. Acute toxicity is significantly reduced survival at 100 percent effluent compared to a control, using a t-test. Where 100 percent effluent is used, results shall be reported as percent survival.

c. If the result of any single acute toxicity test does not comply with the acute toxicity effluent limitation, the Discharger shall take two more samples, one within 14 days, and one within 21 days of receiving the sample results. If two of the three samples do not comply with the acute toxicity limitation, the Discharger shall initiate a Toxicity Reduction Evaluation (TRE) in accordance with Section V.C., below. If the two additional samples are in compliance with the acute toxicity requirement, then a TRE 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.

B. Chronic Toxicity Control

1. In addition to results from acute toxicity tests, compliance with the Basin Plan narrative toxicity objective shall be demonstrated according to the following tiered requirements based on results from representative samples of the treated effluent:

a. Routine monitoring;

b. Accelerate monitoring after exceeding a three sample median value of 1.0 TUc or a single sample maximum of 2.0 TUc;

c. Return to routine monitoring if accelerated monitoring does not exceed either “trigger” in “b”;

d. Initiate approved TRE workplan and continue accelerated monitoring if monitoring confirms consistent toxicity above either “trigger” in “b”;

e. Return to routine monitoring after appropriate elements of TRE workplan are implemented and toxicity drops below "trigger" levels in "b", or as directed by the Executive Officer.

2. Test Species and Methods

a. The Discharger shall conduct short-term chronic toxicity tests with the water flea, *Ceriodaphnia dubia* (survival and reproduction test), the fathead minnow, *Pimephales promelas* (larval survival and growth test), and the green alga, *Selanastrum capricornutum* (growth test) for the first two suites of tests. At least one test during the screening period shall be conducted when the effluent is unaffected by storm-related inflow into the WWTF. After this screening period, monitoring shall be conducted using the most sensitive species. At least once every five years, the Discharger shall re-screen once with the three species listed above and continue to monitor with the most sensitive species.

b. The presence of chronic toxicity shall be estimated as specified in EPA's Short-Term Methods for Estimating the Chronic Toxicity of Effluents and Receiving Water to Freshwater Organisms (U.S. EPA Report No. EPA-821-R-02-013, 4th or subsequent editions).

3. Definition of Toxicity Limits

a. Chronic toxicity measures both mortality and a sublethal effect (e.g., reduced growth, reproduction) to experimental test organisms exposed to an effluent or ambient waters compared to that of the control organisms.

b. Results shall be reported in TUc, where TUc = 100/NOEC (in percent effluent). Results shall be reported for both mortality and the appropriate sublethal effect.

4. Quality Assurance

a. 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

b. Compliance Summary. The monthly discharger self-monitoring reports 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.

5. Accelerated Testing for Toxicity

a. If the initial investigation indicates the source of toxicity (for instance, a temporary plant upset), then only one additional test is necessary. If chronic toxicity is detected in this test, then this Section shall apply.

b. If chronic toxicity is detected, then the Discharger shall conduct two more tests, one test conducted approximately every two weeks, over a four–week period. Testing shall commence within two weeks of receipt of the sample results of the exceedance of the toxicity monitoring trigger.

c. The Discharger may return to routine monitoring after appropriate elements of the TRE workplan are implemented and toxicity drops below trigger levels in B. 4. b, above, or as directed by the Executive Officer.

6. Reporting for Toxicity Tests

a. Test results for chronic toxicity tests shall be reported according to EPA-821-R-02-013, 4th or subsequent editions, Chapter 10 (Report Preparation) and the Monitoring and Reporting Program and shall be attached to the self-monitoring report.

b. The Discharger shall notify the Regional Water Board in writing within 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 for such inaction shall be given.

C. Toxicity Reduction Evaluations (TREs)

1. The Discharger shall prepare and submit to the Regional Water Board Executive Officer a TRE workplan **within 180 days of the effective date of this Order**. This plan shall be reviewed and updated as necessary in order to remain current and applicable to the discharge and discharge facilities. The workplan shall describe the steps the Discharger intends to follow if toxicity is detected, and should include, at least the following items.

    a. A description of the investigation and evaluation techniques that would be used to identify potential causes and sources of toxicity, effluent variability, and treatment system efficiency.

    b. A description of the facility's methods of maximizing in house treatment efficiency and good housekeeping practices.

    c. If a toxicity identification evaluation (TIE) is necessary, an indication of the person who would conduct the TIEs (i.e., an in house expert or an outside contractor).

2. The TRE shall be conducted in accordance with the following.

    a. The TRE shall be initiated within 30 days of the date of completion of the accelerated monitoring test observed to exceed either the acute or chronic toxicity parameter.

    b. The TRE shall be conducted in accordance with the Discharger's workplan.

    c. The TRE shall be in accordance with current technical guidance and reference material including, at a minimum, the EPA manual EPA/833B-99/002. The TRE shall be conducted as a tiered evaluation process, as summarized below:

        i. Tier 1 consists of basic data collection (routine and accelerated monitoring).

        ii. Tier 2 consists of the evaluation of treatment plant optimization including operational practices, and in-plant process chemicals.

        iii. Tier 3 consists of a toxicity identification evaluation (TIE).

        iv. Tier 4 consists of the evaluation of options for additional treatment processes.

v. Tier 5 consists of the evaluation of options for modifications of in-plant treatment processes.

vi. Tier 6 consists of the implementation of selected toxicity control measures, and follow-up monitoring and confirmation of implementation success.

d. The TRE may end at any stage if, through monitoring results, it is determined that there is no longer consistent toxicity.

e. The Discharger may initiate a TIE as part of the TRE process to identify the cause(s) of toxicity. As guidance, the Discharger shall use the EPA acute and chronic manuals, EPA/600/6-91/005F(Phase I), EPA/600/R-92/080(Phase II), and EPA-600/R-92/081 (Phase III).

f. As toxic substances are identified or characterized, the Discharger shall continue the TRE by determining the source(s) and evaluating alternative strategies for reducing or eliminating the substances from the discharge. All reasonable steps shall be taken to reduce toxicity to levels consistent with chronic toxicity parameters.

g. Many recommended TRE elements accompany required efforts of source control, pollution prevention, and storm water control programs. TRE efforts should be coordinated with such efforts. To prevent duplication of efforts, evidence of complying with requirements of recommendations of such programs may be acceptable to comply with requirements of the TRE.

h. The Regional Water Board recognizes that chronic toxicity may be episodic and identification of a reduction of sources of chronic toxicity may not be successful in all cases. Consideration of enforcement action by the Regional Water Board will be based in part on the Discharger's actions and efforts to identify and control or reduce sources of consistent toxicity.

VI. LAND DISCHARGE MONITORING REQUIREMENTS

A. Monitoring Location EFF-002

1. When discharging to the percolation pond at Discharge Point 002, the Discharger shall monitor effluent from the existing WWTF at Monitoring Location EFF-002 as follows:

Table E-5 - Monitoring Location EFF-002

Parameter	Units	Sample Type	Minimum Sampling Frequency
Flow (Mean Daily)	mgd	Meter	Continuous[13]
pH	std units	Grab	Weekly
Total Coliform Organisms	MPN/100 mL	Grab	Weekly
Biochemical Oxygen Demand (5-day @ 20°C)	mg/L	Grab	Monthly
Total Suspended Solids	mg/L	Grab	Monthly
Nitrate Nitrogen	mg/L	Grab	Monthly
Nitrogen, Total (as N)	mg/L	Grab	Monthly
Phosphorus, Total (as P)	mg/L	Grab	2x / Year
Title 22 Pollutants[9]	µg/L	Grab	1x / 3 Years

VII. RECLAMATION MONITORING REQUIREMENTS

This section of the standardized Order is not applicable to the Covelo Community Services District.

VIII. RECEIVING WATER MONITORING REQUIREMENTS – SURFACE WATER AND GROUNDWATER

A. Surface Water Monitoring Grist Creek Location RSW-001

1. The Discharger shall monitor Grist Creek at Monitoring Location RSW-001 when discharging to surface water as follows:

Table E-6 - Monitoring Grist Creek Location RSW-001

Parameter	Units	Sample Type	Minimum Sampling Frequency
Flow	mgd	Gauge or Meter[10]	Daily
Visual Observations	--	Visual[11]	Weekly

[9] Title 22 Pollutants refers to those chemical constituents specified in Table 3-2 of 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

[10] The Discharger shall propose a method of measurement for the receiving water flow for approval by the Executive Officer.

Parameter	Units	Sample Type	Minimum Sampling Frequency
pH	std units	Grab	Monthly
Dissolved Oxygen	mg/L	Grab	Monthly
Electrical Conductivity @ 25°C	µmhos/cm	Grab	Monthly
Hardness, Total (as $CaCO_3$)[12]	mg/L	Grab	Monthly
Temperature	°C	Grab	Monthly
Turbidity	NTU	Grab	Monthly
CTR Pollutants[13]	µg/L	Grab	1x/ 3 Years

B. Surface Water Monitoring Grist Creek Location RSW-002

1. The Discharger shall monitor Grist Creek at Monitoring Location RSW-002 when discharging to surface water as follows:

Table E-7 - Monitoring Grist Creek Location RSW-002

Parameter	Units	Sample Type	Minimum Sampling Frequency
Visual Observations	--	Visual	Weekly
pH	std units	Grab	Monthly
Dissolved Oxygen	mg/L	Grab	Monthly
Electrical Conductivity @ 25°C	µmhos/cm	Grab	Monthly
Temperature	°C	Grab	Monthly
Turbidity	NTU	Grab	Monthly

C. Ground Water Monitoring Locations MW-001 through MW-006

1. The Discharger shall monitor groundwater at Monitoring Well Locations MW-001 through MW-006 as follows:

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[11] 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.

[12] Monitoring for Hardness shall be conducted concurrently with CTR Pollutant monitoring for comparison to hardness dependant metals.

[13] Those pollutants identified by the CTR at 40 CFR 131.38. Monitoring shall occur simultaneously with effluent monitoring for CTR pollutants required by section IV. of this MRP.

Table E-8 - Monitoring Locations MW-001 through MW-006

Parameter	Units	Sample Type	Minimum Sampling Frequency
Depth to Groundwater	0.01 feet	Grab	Semiannually
Nitrate Nitrogen	mg/L	Grab	Semiannually
Total Coliform Organisms	MPN/100 mL	Grab	Semiannually

IX. OTHER MONITORING REQUIREMENTS

A. Disinfection Process Monitoring for Ozone Disinfection System

Upon completion of the ozone disinfection system, the following monitoring requirements must be implemented.

1. **Monitoring.** The ozone disinfection system shall be monitored continuously and recorded. The disinfection dose shall be calculated from the initial ozone concentration, and disinfection contact time.

2. **Reporting.** The Discharger shall report daily average and lowest daily ozone dosage and contact time on its monthly monitoring reports.

B. Monitoring Locations CCC-001 and OCC-001

1. The Discharger shall monitor chlorine and or ozone residual at either CCC-001 or OCC-001 as applicable, as follows.

Table E-9 - Monitoring Locations CCC-001 and OCC-001

Parameter	Units	Sample Type	Minimum Sampling Frequency
Chlorine, Total Residual	mg/L	Grab	Daily
Ozone Residual	mg/L	Grab	Daily

C. Septage Station Monitoring

1. **Monitoring Location SEP-001**

   a. For each septage load delivered to the treatment facility, the Discharger shall require the hauler to collect and report a pH value representative of the load.

   b. The Discharger shall estimate, prior to the beginning of a quarterly and semiannual monitoring period, the number of anticipated septage

deliveries for the given monitoring frequency, and generate a random load number from this total. When the delivery corresponding to the pre-chosen random number is received, the Discharger will collect a representative septage sample and have the samples analyzed in accordance with Table E-10 and with standard sample collection and handling procedures. Each sample analyzed in accordance with the following table.

Table E-10 - Monitoring Location SEP-001

Parameter	Units	Sample Type	Minimum Sampling Frequency
pH	std units	Grab	Weekly
Chemical Oxygen Demand	mg/L	Grab	Quarterly
Oil and Grease	mg/L	Grab	Quarterly
Metals and Trace Elements	µg/L	Grab	Quarterly
Purgeable Organic Compounds	µg/L	Grab	Semiannually
Semivolatile Organic Compounds	µg/L	Grab	Semiannually

2. **Septage Hauler Tracking**

For any month when septage waste is received by the treatment facility or collection system, the source(s) of the waste shall be documented. A summary table of all septage discharged to the WWTF shall be submitted quarterly and shall include:

a. Date and time of discharge
b. Name, County ID number, and District ID number of the hauler
c. Volume discharged
d. Source(s) of the waste
e. pH of septage load

X. REPORTING REQUIREMENTS

A. General Monitoring and Reporting Requirements

The Discharger shall comply with all Standard Provisions (Attachment D) related to monitoring, reporting, and recordkeeping.

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 1st each year.

4. Monitoring periods for all required monitoring shall be completed according to the following schedule:

Table E-11. Monitoring Periods and Reporting Schedule

Sampling Frequency	Monitoring Period Begins On	Monitoring Period
Continuous	July 1, 2011	All
Daily	July 1, 2011	(Midnight through 11:59 PM) or any 8-hour period that reasonably represents a calendar day for purposes of sampling.
Weekly	July 1, 2011	Sunday through Saturday
Monthly	July 1, 2011	1st day of calendar month through last day of calendar month
2X / Year	October 1, 2011	1st month of surface water discharge and during the 2nd consecutive month thereafter
Quarterly	July 1, 2011	January 1 through March 31 April 1 through June 30 July 1 through September 30 October 1 through December 31
2x Annually	July 1, 2011	January 1 through June 30 July 1 through December 31
Semiannually	July 1, 2011	January 1 through March 31 July 1 through September 30

Table E-11. Monitoring Periods and Reporting Schedule

Sampling Frequency	Monitoring Period Begins On	Monitoring Period
Annually	January 1, 2011	January 1 through December 31
1x / 3 Years	November 1, 2013	October 1 through May 15

5. **Reporting Protocols. The Discharger shall report with each sample result the applicable Minimum Level (ML), the reporting level (RL) and the current Method Detection Limit (MDL), as determined by the procedure in 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.

5. **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)

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:

STANDARD MAIL	FEDEX/UPS/ OTHER PRIVATE CARRIERS
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, 15th 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. **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 1st of the following year. The report shall, at a minimum, include the following:

E. 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 40 CFR 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 SMR.

F. 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.

G. 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:

1. A description of any change in the local legal authorities enacted to implement the Sewer System Management Plan (SSMP);

2. 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 sanitary sewer overflow.

3. 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;

4. Documentation that all feasible steps to stop and mitigate impacts of sanitary sewer overflows have been taken.

H. 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 1st of each year.

1. A copy of the source control standards.

2. A description of the waste hauler permit system.

3. 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.

4. A summary of any waste survey results.

5. A summary of public participation activities to involve and inform the public.

I. **Storm Water Reporting.** The Discharger shall submit, as part of its annual report to the Regional Water Board, an evaluation of the effectiveness of the Discharger's Best Management Practices (BMPs) to control the storm water associated with the treatment facility site, as well as activities to maintain and upgrade these BMPs.

J. **Septage Monitoring and Reporting.** The results of septage monitoring shall be provided as follows:

1. A narrative description of all preparatory, monitoring, sampling, and analytical testing activities for the septage monitoring program. The narrative shall be sufficiently detailed to verify compliance with waste discharge requirements and this monitoring and reporting program.

2. A summary table of all discharges of septage to the WWTF. At a minimum, the table shall include; the name, County ID number, and District ID number of each hauler discharging into the WWTF system over the past calendar year.

3. A summary table of analytical results for all samples of septage collected in compliance with waste discharge requirements and this monitoring and reporting program. When directed by the Regional Water Board, the Discharger shall also append analytical reports, chains of custody, and other documentation necessary to confirm the validity of the monitoring samples.

4. Spills and Overflows Notification

5. All spills, unauthorized discharges, and sanitary sewer overflows (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:

6. 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.[14]

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

   a. Name and contact information of caller;
   b. Date, time and location of spill occurrence;
   c. Estimates of spill volume, rate of flow, and spill duration;
   d. Surface water bodies impacted, if any;
   e. Cause of spill;
   f. Cleanup actions taken or repairs made; and
   g. Responding agencies.

7. As soon as possible, but **not later than twenty-four (24) hours** after becoming aware of a discharge, the Discharger shall submit to the Regional Water Board a certification that Cal EMA and the local health officer or directors of environmental health with jurisdiction over affected water bodies or land areas have been notified of the discharge. For the purpose of this

[14] The contact number for spill reporting for the 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 Cal EMA will satisfy the 2 hour notification requirement for the Regional Water Board.

requirement, “certification” means a Cal EMA certification number and, for the local health department, name of local health staff, department name, phone number and date and time contacted.

8. **Within five (5) business days**, the Discharger shall submit a written report to the Regional Water Board office. The report must include all available details related to the cause of the spill and corrective action taken or planned to be taken, as well as copies of reports submitted to other agencies.

    a. Information provided in the verbal notification;
    b. Other agencies notified by telephone;
    c. Detailed description of cleanup actions and repairs taken; and
    d. Description of actions that will be taken to minimize or prevent future spills.

9. In the cover letter of the SMR, the Discharger shall include a brief written summary of the event and any additional details related to the cause or resolution of the event, including, but not limited to results of any water quality monitoring conducted.

10. All spills, unauthorized discharges, and sanitary sewer overflows (SSOs) less than 1,000 gallons that do not reach a drainage channel or a surface water:

    a. As soon as possible, but not later than twenty-four (24) hours after becoming aware of the discharge, the Discharger shall notify the Regional Water Board and provide the applicable information in requirement 1.a of this section.
    b. In the cover letter of the SMR, the Discharger shall include a written description of the spill event.

ATTACHMENT F – FACT SHEET – TABLE OF CONTENTS

ATTACHMENT F – FACT SHEET

This Fact Sheet includes the legal requirements and technical rationale that serve as the basis for the requirements of this Order.

I. ORDER INFORMATION

The following table summarizes administrative information related to the facility.

WDID	1B83009OMEN
Discharger	Covelo Community Services District
Name of Facility	Wastewater Treatment Plant
Facility Address	76001 Commercial Street
	Covelo, California 95428
	Mendocino County
Facility Contact, Title and Phone	Tim Dennis, District Manager, 707-983-6888
Authorized Person to Sign and Submit Reports	Tim Dennis, District Manager, 707-983-6888
Mailing Address	P.O. Box 65, Covelo, California 95428
Billing Address	Same as mailing address
Type of Facility	Wastewater collection and treatment facility
Major or Minor Facility	Minor
Threat to Water Quality	2
Complexity	B
Pretreatment Program	NA
Reclamation Requirements	NA
Facility Permitted Flow	77,000 gallons per day (gpd) Average Annual Flow
Facility Design Flow	57,000 gpd Average Dry Weather Flow (ADWF)
Watershed	Upper Eel River
Receiving Water	Grist Creek
Receiving Water Type	River / Stream / Groundwater

A. The Covelo Community Services District (the Discharger) is the owner and operator of a wastewater collection and treatment facility (WWTF) located in Covelo at 76001 Commercial Street, Mendocino County, California.

B. The facility is permitted to discharge treated wastewater to Grist Creek, waters of the United States, and is currently regulated by Order No. R1-2006-0007, which was adopted on March 8, 2006.

C. The Discharger filed a Report of Waste Discharge and submitted an application for renewal of its Waste Discharge Requirements (WDRs) and National Pollutant Discharge Elimination System (NPDES) Order on December 17, 2009 and an addendum dated November 23, 2010. A site visit was conducted on January 28, 2011, to observe operations and collect additional data to develop Order limitations and conditions.

II. FACILITY DESCRIPTION

A. Description of Wastewater and Biosolids Treatment or Controls

The Covelo Community Services District (CCSD) is located in northeastern Mendocino County approximately 35 miles northeast of Willits. The District is located in Round Valley and encompasses approximately 150 acres. Construction of the original WWTF was completed in 1961. It was designed to serve 650 residential customers, and commercial and institutional users equivalent to an additional 550 people.

The CCSD treatment plant underwent major construction upgrades in 1977 and was designed to discharge to Grist Creek during wet weather periods and to store treated wastewater during dry periods, when discharges to the Eel River and its tributaries are prohibited. The treatment facility was designed with a flow metering flume, bar screen and comminutor, two lined oxidation ponds that could be operated in series or parallel, two lined holding ponds, gravity sand filters, and chlorination/dechlorination capability.

Due to high rates of evaporation and percolation during treatment, the WWTF did not discharge directly to Grist Creek during the term of Order No. R1-2000-16 and discharged only twice during the term of Order No. R1-2006-0007. Percolation in treatment and holding ponds was attributed to cracks in pond linings, as well as damage to clay linings due to erosion and rodent attack. Percolation in the treatment and holding ponds resulted in unpermitted discharge of partially treated wastewater to groundwater.

Upgrades are well underway at the WWTF and include addition of a new headworks and septage receiving station, as well as synthetic lining of three of the original ponds and installation of an ozone disinfection system. The new headworks is designed with a parshall flume influent meter, a horizontal grit chamber and inclined screen. The septage receiving station is composed of a receiving station and mixing tank allowing septage to be metered in through the headworks at a controlled rate and time.

High Density Polyethylene (HDPE) liner systems have been installed in three of the four ponds. The first two lined ponds will be used as oxidation ponds to reduce biochemical oxygen demand (BOD) and total suspended solids (TSS). The third lined pond will be divided into two cells and planted with wetland vegetation, alternating submerged and emergent vegetation. The wetland treatment cells will further remove BOD and TSS as well as provide for biological reduction of nitrogen compounds. Planting of wetland vegetation will be conducted in summer 2011.

Ozone treatment consists of redundant ozone generators, an injector system, an ozone destruction unit, a multi-cell contact tank, and multiple feedback units, which measure ozone concentrations at various points within the system. Once online, all treated wastewater will be disinfected using the ozone system prior to surface water or land discharge. Tablet chlorination / dechlorination capability may be maintained as a back-up disinfection system for surface water discharges.

The current upgrades to the WWTF are designed to improve effluent water quality discharged to Grist Creek during the wet weather season (Discharge Point 001) and allow a land discharge location (Discharge Point 002) in former holding pond No. 3. Upgrades to the WWTF result in an average annual treatment design capacity of 0.077 mgd.

B. Discharge Points and Receiving Waters

The area of the Covelo Community Services District is located within the Upper Eel River Basin and is drained by Mill Creek, a tributary to the Middle Fork Eel River. Short, Town, Grist, and Turner Creeks drain into Mill Creek. The WWTF is located adjacent to Town Creek with a discharge pipe just downstream from the confluence of Grist and Town Creeks.

Prior to the ozone system start-up and during other times when the ozone system may not be operational, treated wastewater from the WWTF may be chlorinated / dechlorinated using sodium hypochlorite chemical tablets installed in the Wet Wells prior to discharge to Grist Creek and following filtration. A 16 inch pipe between Wet Wells Nos. 1 and 2 provides chlorine contact time, and sulfur dioxide is applied in solution for dechlorination at Wet Well No. 2. The outfall to Grist Creek is located just downstream of the dechlorination manhole below the creek bank. Grist Creek is a tributary to Mill Creek and ultimately to the Middle Fork Eel River.

Treated wastewater will typically be disinfected using the ozone system prior to discharge to either Grist Creek during the wet weather season (Discharge Point 001) or land discharge location (Discharge Point 002) in former holding pond No. 3. Hydrologic information assessed during the previous permit term indicates that discharges at Discharge Point 002 will percolate into the soil and flow with groundwater north and east, away from Town and Grist Creeks. Therefore, discharges at Discharge Point 002 are subject to only state requirements of Order No.

R1-2011-0001, because the discharge will occur only to land / state waters. Ongoing groundwater monitoring required in accordance with Attachment E will be used to confirm groundwater gradient and quality throughout the term of Order No. R1-2011-0001.

C. Summary of Existing Requirements and Self-Monitoring Report (SMR) Data

Effluent limitations contained in the existing Order No. R1-2006-0007 for discharges from Discharge Point 001 and representative monitoring data from the term of the previous Order are presented below.

Parameter/Units	Effluent Limitations			Monitoring Data (From April 2006[1] – June 2010)			
	Average Monthly	Average Weekly	Maximum Daily	Highest Average Monthly Result	Highest Average Weekly Result	Maximum Daily Result	No. of Violations
BOD (20°C, 5-day) mg/L	30	45	60	ND	ND	ND	0
Total Suspended Solids (TSS) mg/L	30	96	60	8.4	8.4	8.4	0
Settleable Solids mL/L	< 0.1	---	< 0.2	< 0.1	< 0.1	< 0.1	0
Total Coliform Organisms MPN/100mL	23[2]	---	230	ND	ND	ND	0
Chlorine Residual mg/L	---	---	< 0.1	< 0.1	< 0.1	< 0.1	0
Hydrogen Ion pH	---	---	6.5-8.5	---	---	7.1-7.7[3]	0

D. Compliance Summary

The Discharger has not needed to discharge from Discharge Point 001 during the term of Order No. R1-2006-0007. Discharges sampled on the two occasions cited above were conducted for the purpose of sampling and did not result in violations of effluent limitations. Previous unpermitted discharges to groundwater have been abated through the installation of HDPE liners in three of the four WWTF ponds.

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1 There were a total of two months of effluent discharge to Grist Creek during the duration of the Permit (April and May 2006).

2 Median

3 Range of pH values from the 04/2006 – 05/2006 samples.

Future discharges to groundwater at Discharge Point 002 will be permitted in accordance with requirements established in this Order.

E. Planned Changes

The Covelo WWTF has already undergone significant upgrades beginning in May 2010 as described in section A of this Fact Sheet. Additional work to be completed in conjunction with the current upgrades includes wetland planting and full operational start-up of the ozone disinfection system.

III. APPLICABLE PLANS, POLICIES, AND REGULATIONS

The requirements contained in the proposed Order are based on the requirements and authorities described in this section. This section provides supplemental information, where appropriate, for the plans, policies, and regulations relevant to the discharge.

A. Legal Authorities

This Order is issued pursuant to section 402 of the federal Clean Water Act (CWA) and implementing regulations adopted by the U.S. Environmental Protection Agency (USEPA) and chapter 5.5, division 7 of the California Water Code (commencing with section 13370). It shall serve as a NPDES permit for point source discharges from this facility to surface waters. This Order also serves as Waste Discharge Requirements (WDRs) pursuant to article 4, chapter 4, division 7 of the Water Code (commencing with section 13260).

B. California Environmental Quality Act (CEQA)

Under Water Code section 13389, this action to adopt an NPDES permit is exempt from the provisions of CEQA, Public Resources Code sections 21100 through 21177.

This action also involves the adoption of WDRs for percolation of treated effluent. For the portion of the permit that addresses WDRs for discharges to land, the Regional Water Board has prepared a notice of exemption that the project is categorically exempt from CEQA pursuant to title 14, section 15301 of the California Code of Regulations Because the Regional Water Board is issuing the WDRs for discharges from an existing facility for which no expansion of design flow is being permitted, this project meets the requirements of the categorical exemption, including the requirements set forth in section 15300.2 that the project not have any significant effects or result in cumulative impacts. For any expansion of the land disposal/reclamation areas, the Discharger will be the lead agency for CEQA.

As a responsible agency under CEQA, the Regional Water Board is required to consider the final certified CEQA document(s) and reach its own conclusions on whether and how to approve a permit for the Discharger's disposal plan. Prior to

approving this Order, the Regional Water Board considered the environmental effects of the discharge, as described in the Discharger's application. In considering alternatives and mitigation measures, the Regional Water Board only has the responsibility for mitigating or avoiding those direct or indirect environmental effects of those parts of the discharge plan that are within its jurisdiction to approve. (Public Resources Code, Section 21002.1(d); California Code of Regulations, title 14, section 15096(g) and (h)). The Regional Water Board has required, as conditions of this Order, mitigation measures for those potentially significant impacts over which the Regional Water Board has authority. The Regional Water Board finds that with mitigation, all potentially significant impacts of the percolation pond discharge plan will be reduced to levels of insignificance, as described below.

Previous site conditions resulted in raw or partially treated wastewater discharging to groundwater through leaks in the treatment ponds. The treatment ponds have been lined with HPDE to prevent discharges of inadequately treated waste. The new wetland treatment cells are projected to remove nitrogen from the wastewater by incorporating nitrogen into the biomass of the wetland vegetation. The projected effluent quality indicates that anticipated constituent concentrations would be low and the concentrations discharged to groundwater would not be expected to substantially impair receiving waters. This impact would be less than significant.

C. State and Federal Regulations, Policies, and Plans

1. **Water Quality Control Plans.** The Regional Water Board adopted a Basin Plan that designates beneficial uses, establishes water quality objectives, and contains implementation programs and policies to achieve those objectives for all waters addressed through the plan.

   The Basin Plan at page 2-1 states that the beneficial uses of any specifically identified water body generally apply to its tributary streams. The Basin Plan does not specifically identify beneficial uses for Grist Creek, but does identify present and potential uses for the Eel River, in the Round Valley Hydrologic Subarea, to which Grist Creek is tributary. In addition, the Basin Plan implements State Water Resources Control Board (State Water Board) Resolution No. 88-63, which established State policy that all waters, with certain exceptions, should be considered suitable or potentially suitable for municipal or domestic supply. Thus, the beneficial uses applicable to areal groundwater and Grist Creek are as follows:

Table F-3. Basin Plan Beneficial Uses

	Receiving Water Name Discharge Points	
Beneficial Use (s)	Grist Creek EFF-001	Groundwater EFF-002
Municipal and Domestic Water Supply (MUN)	E	E
Agricultural Supply (AGR)	E	E
Industrial Service Supply (IND)	E	E
Industrial Process Supply (PRO)	P	P
Groundwater Recharge (GWR)	E	---
Freshwater Replenishment (FRESH)	---	E
Navigation (NAV)	E	---
Hydropower Generation (POW)	P	---
Water Contact Recreation (REC-1)	E	---
Non-contact Water Recreation (REC-2)	E	---
Commercial and Sport Fishing (COMM)	E	---
Warm Freshwater Habitat (WARM)	E	---
Cold Freshwater Habitat (COLD)	E	---
Wildlife Habitat (WILD)	E	---
Preservation of Rare, Threatened or Endangered Species (RARE)	E	---
Migration of Aquatic Organisms (MIGR)	E	---
Spawning, Reproduction, and/or Early Development (SPWN)	E	---
Aquaculture (AQUA)	E	P
Native American Culture (CUL)	E	E

In addition to the beneficial uses set out in the Basin Plan, there are several implementation plans that include actions intended to meet water quality objectives and protect beneficial uses of the North Coast Basin. For the Eel River and its tributaries, no point source waste discharges are allowed during the period of May 15 through September 30 and for all other periods the receiving stream's flow must be at least 100 times greater than the waste flow unless an exception to the requirement is granted by the Regional Water Board.

The Basin Plan also contains a narrative water quality objective for toxicity that states:

All waters shall be maintained free of toxic substances in concentrations that are toxic to, or that produce detrimental physiological responses in human, plant, animal, or aquatic life. Compliance with this objective will be determined by use of indicator organisms, analyses of species diversity, population density, growth anomalies, bioassay of appropriate duration or other appropriate methods as specified by the Regional Water Board.

The survival of aquatic life in surface waters subjected to a waste discharge, or other controllable water quality factors, shall not be less than that for the same water body in areas unaffected by the waste discharge, or when necessary for other control water that is consistent with the requirements for 'experimental water' as described in Standard Methods for the Examination of Water and Wastewater 18th Edition (1992). At a minimum, compliance with this objective as stated in the previous sentence shall be evaluated with a 96-hour bioassay.

In addition, effluent limits based upon acute bioassays of effluent will be prescribed. Where appropriate, additional numerical receiving water objectives for specific toxicants will be established as sufficient data becomes available, and source control of toxic substances will be required.

Requirements of this Order implement the Basin Plan.

D. **Thermal Plan.** The State Water Board adopted a Water Quality Control Plan for Control of Temperature in the Coastal and Interstate Water and Enclosed Bays and Estuaries of California (Thermal Plan) on May 18, 1972, and amended this plan on September 18, 1975. This plan contains temperature objectives for coastal and interstate waters and enclosed bays and estuaries of the State. Requirements of this Order implement the Thermal Plan to the extent that it is applicable to receiving waters for this Discharger.

E. **National Toxics Rule (NTR) and California Toxics Rule (CTR).** USEPA adopted the NTR on December 22, 1992, and later amended it on May 4, 1995 and November 9, 1999. About forty criteria in the NTR applied in California. On May 18, 2000, USEPA adopted the CTR. The CTR promulgated new toxics criteria for California and, in addition, incorporated the previously adopted NTR criteria that were applicable in the state. The CTR was amended on February 13, 2001. These rules contain water quality criteria for priority pollutants.

F. **State Implementation Policy.** On March 2, 2000, the State Water Board adopted the *Policy for Implementation of Toxics Standards for Inland Surface Waters, Enclosed Bays, and Estuaries of California* (State Implementation Policy or SIP). The SIP became effective on April 28, 2000 with respect to the priority pollutant criteria promulgated for California by the USEPA through the NTR and to the priority pollutant objectives established by the Regional Water Board in the Basin Plan. The SIP became effective on May 18, 2000 with respect to the priority

pollutant criteria promulgated by the USEPA through the CTR. The State Water Board adopted amendments to the SIP on February 24, 2005 that became effective on July 13, 2005. The SIP establishes implementation provisions for priority pollutant criteria and objectives and provisions for chronic toxicity control. Requirements of this Order implement the SIP.

G. **Alaska Rule.** On March 30, 2000, USEPA revised its regulation that specifies when new and revised state and tribal water quality standards (WQS) become effective for CWA purposes (40 C.F.R. § 131.21, 65 Fed. Reg. 24641 (April 27, 2000)). Under the revised regulation (also known as the Alaska rule), new and revised standards submitted to USEPA after May 30, 2000, must be approved by USEPA before being used for CWA purposes. The final rule also provides that standards already in effect and submitted to USEPA by May 30, 2000, may be used for CWA purposes, whether or not approved by USEPA.

H. **Antidegradation Policy.** Section 131.12, title 40 of the Code of Federal Regulations (40 CFR 131.12) requires that the state water quality standards include an antidegradation policy consistent with the federal policy. The State Water Board established California's antidegradation policy in State Water Board Resolution No. 68-16. Resolution No. 68-16 incorporates the federal antidegradation policy where the federal policy applies under federal law. Resolution No. 68-16 requires that existing water quality be maintained unless degradation is justified based on specific findings. The Regional Water Board's Basin Plan implements, and incorporates by reference, both the State and federal antidegradation policies. The permitted discharge must be consistent with the antidegradation provision of 40 CFR 131.12 and State Water Board Resolution No. 68-16. Section IV.D.2 of this Fact Sheet discusses how the requirements of this Order satisfy the Antidegradation Policy.

I. **Anti-Backsliding Requirements.** Sections 402(o)(2) and 303(d)(4) of the CWA and federal regulations at 40 CFR 122.44(l) prohibit backsliding in NPDES permits. These anti-backsliding provisions require that effluent limitations in a reissued permit must be as stringent as those in the previous permit, with some exceptions in which limitations may be relaxed. Section IV.D.1 of this Fact Sheet provides a detailed discussion of how the requirements of this Order satisfy anti-backsliding requirements.

J. **Impaired Water Bodies on CWA 303 (d) List.** On June 5 and July 25, 2003, the U.S. EPA approved the list of impaired water bodies, prepared by the State Water Resources Control Board pursuant to Section 303 (d) of the CWA – water bodies which are not expected to meet applicable water quality standards after implementation of technology-based effluent limitations for point sources. The 303 (d) list does not include Grist Creek but includes the Middle Fork Eel River as impaired by sedimentation and temperature. In December 2003, U.S. EPA Region 9 finalized TMDLs (Total Maximum Daily Loads), which establish the

maximum levels of pollutants that a water body can receive without exceeding water quality standards, to address sediment and thermal loadings in the Middle Fork Eel River and its tributaries.

To develop the TMDL for temperature, U.S. EPA first determined that available solar radiation in the watershed, before reduction by topography and shade, is 385 langleys per day. To meet the applicable water quality standard for temperature – that there be no alterations to natural stream temperatures, U.S. EPA then determined that streams tributary to the Middle Fork Eel River could assimilate 109 langleys per day. This is the amount of heat reaching tributary streams that have unaltered, natural shade and represents a 72 percent reduction in available solar radiation due to shading. U.S. EPA estimated overall, average shade in the watershed to be 69 percent, meaning that streams tributary to the Middle Fork Eel River need only 3 percent more shade to meet the applicable water quality standard. Because only minimal shade, over that which exists under current conditions, is needed along tributary streams to attain the applicable water quality standard for temperature in accordance with the TMDL, Order No. R1-2006-0007 does not include a specific effluent limitation for temperature. The Regional Water Board has also considered the fact that this facility cannot discharge to Grist Creek between May 15 and September 30 of each year, and during the rest of each year, cannot account for more than one percent of the flow of Grist Creek.

For the Round Valley subwatershed of the Middle Fork Eel River, U.S. EPA established a TMDL for sediment at 105 percent of natural loading, or 393 tons per square mile per year. This TMDL represents a 32 percent decrease over current sediment loadings to streams in the Round Valley subwatershed. In developing this TMDL, U.S. EPA determined that the majority of sediment delivered to such streams is naturally caused with most attributed to landslides. U.S. EPA considers the rate of 393 tons/mile^2/year as a total figure that includes a load allocation for nonpoint sources and wasteload allocations for point sources. U.S. EPA concluded that, for purposes of the TMDL, individual point sources of sediment are either (1) Caltrans facilities that discharge pursuant to the Caltrans statewide NPDES Order issued by the State Water Board, or (2) construction sites that discharge pursuant to the State's general Order for storm water associated with construction activities. "There are no other wasteload allocations, as there are no other individual point sources of sediment in the basin." Final Middle Fork Eel River Total Maximum Daily Loads for Temperature and Sediment, U.S. EPA Region IX, page 45 (2003). Because the TMDL concluded that there are no significant point sources of sediment loading to streams tributary to the Middle Fork Eel River besides those facilities covered by the general Orders, the Regional Water Board is retaining effluent limitations of Order No. R1-2000-16 for suspended and settleable solids in Order No. R1-2006-0007, as these effluent limitations reflect accepted standards of performance for secondary treatment facilities.

K. Other Plans, Polices and Regulations

1. **Storm Water**. With a design flow of less than 1.0 mgd, storm water discharges from the wastewater treatment facility do not meet the definition of "storm water discharges associated with industrial activities", as defined at 40 CFR Section 122.26 (b)(14); and the Discharger, therefore, is not required to seek coverage under the State Water Resource Control Board's Water Quality Order 97-03-DWQ, NPDES General Permit No. CAS000001, Waste Discharge Requirements for Discharges of Storm Water Associated with Industrial Activities Excluding Construction Activities.

2. **Sanitary Sewer Systems.** On May 2, 2006, the State Water Board adopted State Water Board Order No. 2006-0003-DWQ, Statewide General WDRs for Sanitary Sewer Systems. The general permit is applicable to all "federal and state agencies, municipalities, counties, districts, and other public entities that own or operate sanitary sewer systems greater than one mile in length that collect and/or convey untreated or partially treated wastewater to a publicly owned treatment facility in the State of California." The purpose of the general permit is to promote the proper and efficient management, operation, and maintenance of sanitary sewer systems and to minimize the occurrences and impacts of sanitary sewer overflows. Section VI.C.5.a of the Order requires the Discharger to seek/maintain coverage under Order No. 2006-0003-DWQ, and restates some provisions of the general permit.

3. **Discharge of Biosolids to Land.** On July 22, 2004, the State Water Board adopted State Water Board Order No. 2004-0012-DWQ, General Waste Discharge Requirements for the Discharge of Biosolids to Land for Use as a Soil Amendment in Agricultural, Silvicultural, Horticultural, and Land Reclamation Activities. The general waste discharge requirements establish standards for agronomic applications and the use of biosolids as a soil amendment or fertilizer in agriculture, forestry, and surface mining reclamation, and include provisions to mitigate significant environmental impacts. The Order requires that the Discharger to obtain coverage under Order No. 2004-0012-DWQ or other appropriate WDRs for the discharge of biosolids from the wastewater treatment plant. Section VI.C.5.f of the Order requires the Discharger to seek coverage under Order No. 2004-0012-DWQ, if applicable, and restates some provisions of the general permit.

IV. RATIONALE FOR EFFLUENT LIMITATIONS AND DISCHARGE SPECIFICATIONS

The CWA requires point source discharges to control the amount of conventional, non-conventional, and toxic pollutants that are discharged into the waters of the United States. The control of pollutants discharged is established through effluent limitations and other requirements in NPDES Orders. NPDES regulations establish two principal bases for effluent limitations. At 40 CFR 122.44 (a) Orders are required

to include applicable technology-based limitations and standards; and at 40 CFR 122.44 (d) Orders are required to include water quality-based effluent limitations to attain and maintain applicable numeric and narrative water quality criteria to protect the beneficial uses of the receiving water. When numeric water quality objectives have not been established, but a discharge has the reasonable potential to cause or contribute to an excursion above a narrative criterion, WQBELs may be established using one or more of three methods described at 40 CFR 122.44 (d) - 1) WQBELs may be established using a calculated water quality criterion derived from a proposed State criterion or an explicit State policy or regulation interpreting its narrative criterion; 2) WQBELs may be established on a case-by-case basis using U.S. EPA criteria guidance published under CWA Section 304 (a); or 3) WQBELs may be established using an indicator parameter for the pollutant of concern.

A. Discharge Prohibitions

1. Prohibition III A. The discharge of any waste not disclosed by the Discharger or not within the reasonable contemplation of the Regional Water Board is prohibited.

   This prohibition is based on the Basin Plan, previous Order, and State Water Resources Control Board Order WQO 2002-0012 regarding the petition of Waste Discharge Requirements Order No. 01-072 for the East Bay Municipal Utility District and Bay Area Clean Water Agencies. In SWRCB Order WQO 2002-0012, the State Water Board found that this prohibition is acceptable in Orders, but should be interpreted to apply only to constituents that are either not disclosed by the discharger or are not reasonably anticipated to be present in the discharge, but have not been disclosed by the discharger. It specifically does not apply to constituents in the discharge that do not have "reasonable potential" to exceed water quality objectives.

   The State Water Board has stated that the only pollutants not covered by this prohibition are those which were "disclosed to the Ordering and . . . can be reasonably contemplated." (In re the Petition of East Bay Municipal Utilities District et al., (SWRCB 2002) Order No. WQ 2002-0012, p. 24.) The case cited in that order by the State Water Board reasoned that the Discharger is liable for discharges "not within the reasonable contemplation of the permitting authority . . . , whether spills or otherwise . . . ." (Piney Run Preservation Assn. v. County Commissioners of Carroll County, Maryland (4th Cir. 2001) 268 F.3d 255, 268.) Thus, State Water Board authority provides that, to be permissible, the constituent discharged (1) must have been disclosed by the Discharger and (2) can be reasonably contemplated by the Regional Water Board.

   The Regional Water Board has the authority to determine whether the discharge of a constituent is "reasonably contemplated." The Piney Run case makes clear that the Discharger is liable for discharges "not within the reasonable

contemplation of the Ordering authority . . . , whether spills or otherwise . . . .” (268 F.3d 255, 268 [italics added].) In other words, whether or not the Discharger reasonably contemplates the discharge of a constituent is not relevant. What matters is whether the Discharger disclosed the constituent to the Regional Water Board or whether the presence of the pollutant in the discharge can otherwise be reasonably contemplated by the Regional Water Board at the time of Order adoption.

2. Prohibition III. B. Creation of pollution, contamination, or nuisance, as defined by Water Code section 13050 is prohibited.

   This prohibition is based on Water Code section 13050. It has been retained from Order No. R1-2006-0007.

3. Prohibition III. C. The discharge of sludge or digester supernatant is prohibited, except as authorized under section IV. E (Solids Disposal and Handling Requirements).

   This prohibition is based on restrictions on the disposal of sewage sludge found in federal regulations [40 CFR Part 503 (Biosolids) Part 527 and Part 258] and Title 27 of the California Code of Regulations. It has been retained from Order No. 96-9.

4. Discharge Prohibition III.D. The discharge or reclamation use of untreated or partially treated waste (receiving a lower level of treatment than described in section II.B of the Order) from anywhere within the collection, treatment, or disposal systems is prohibited, except as provided for in Prohibition III. I. and in Attachment D, Standard Provisions (Bypass).

   This prohibition has been retained from the previous Order (Order No. R1-2006-0001) and is based on the need to protect beneficial uses of the receiving water from unpermitted discharges, and the intent of the Water Code sections 13260 through 13264 relating to the discharge of waste to waters of the State without filing for and being issued an Order. This prohibition applies to spills not related to sanitary sewer overflows (SSOs) and other unauthorized discharges of wastewater within the collection, treatment, and disposal facilities. The discharge of untreated or partially treated wastewater from the collection, treatment, or disposal facility represents an unauthorized bypass pursuant to section 122.41(m) or an unauthorized discharge which poses a threat to human health and/or aquatic life, and is therefore explicitly prohibited by the Order.

5. Prohibition III. E. The discharge of waste to land that is not owned by or subject to an agreement for use by the Discharger is prohibited.

This prohibition is retained from Order No. 96-9. Land used for the application of wastewater must be owned by the Discharger or be under the control of the Discharger by contract so that the Discharger maintains a means for ultimate disposal of treated wastewater.

6. Prohibition III. F. The discharge of waste at any point except Discharge Point 001 – the constructed outfall to Grist Creek, or Discharge Point 002 – the percolation pond as described on page 1 of this Order, or as authorized by another State Board or Regional Water Board Order, is prohibited.

   This prohibition is a general prohibition that allows the Discharger to discharge waste only in accordance with waste discharge requirements. It is based on sections 301 and 402 of the federal CWA and Water Code section 13263.

7. Prohibition III. G. The discharge of treated wastewater from the wastewater treatment facility to the Eel River or its tributaries, including Grist Creek, is prohibited during the period May 15 through September 30 of each year.

   This prohibition is required by the Basin Plan. The Basin Plan prohibits discharges to the Eel River and its tributaries during the period May 15 through September 30 (Chapter 4, North Coastal Basin Discharge Prohibition No. 3). The original intent of this prohibition was to prevent the contribution of wastewater to the baseline flow of the Eel River during the period of the year when the Eel River and its tributaries experience the heaviest water-contact recreation use.

8. Prohibition III. H. During the period of October 1 through May 14 of each year, discharges of wastewater shall not exceed one percent of the flow of Grist Creek. To comply with this flow prohibition, (1) the Discharger shall adjust the discharge rate of treated wastewater at least once daily to avoid exceeding, to the extent practicable, one percent of the most recent daily flow measurement of Grist Creek; and (2) the total volume of treated wastewater discharged in a calendar month shall not exceed, in any circumstances, exceed one percent of the total volume of Grist Creek flow, in the same calendar month.

   During periods of discharge shall be read at least once daily, and the discharge flow rate shall be set for no greater than one percent of the flow of the creek at the time of the daily reading. At the beginning of the discharge season, the first monthly flow comparisons shall be determined from the date when the discharge commenced to the end of the calendar month. At the end of the discharge season, the final monthly flow volume shall be determined from the first day of the calendar month to the date when the discharge ended for the season

This prohibition is required by the Basin Plan (Chapter 4 Implementation Plans, North Coastal Basin Discharge Prohibition No. 3). The Basin Plan prohibits discharges to the Eel River and its tributaries when the waste discharge flow is greater than one percent of the receiving water's flow.

9. Discharge Prohibition III.I**.** Any SSO that results in a discharge of untreated or partially treated wastewater to (a) waters of the State, (b) groundwater, or (c) land that creates pollution, contamination, or nuisance, as defined in Water Code section 13050(m) is prohibited.

   This prohibition is established by this Order. The prohibition applies to spills related to SSOs and is based on State standards, including section 13050 of the Water Code and the Basin Plan. This prohibition is consistent with the States' antidegradation policy as specified in State Water Board Resolution No. 68-16 (*Statement of Policy with Respect to Maintaining High Quality of Water in California*) in that the prohibition imposes conditions to prevent impacts to water quality, the degradation of water quality, negative effects on receiving water beneficial uses, and lessening of water quality beyond that prescribed in State Water Board or Regional Water Board plans and policies.

   This prohibition is stricter than the prohibitions stated in State Water Board Order 2006-003-DWQ, *Statewide General Waste Discharge Requirements for Sanitary Sewer Systems*. Order No. 2006-0003-DWQ prohibits SSOs that result in the discharge of untreated or partially treated wastewater to waters of the United States and SSOs that cause a nuisance, compared to Prohibition III.E. of this Order, which prohibits SSO discharges that create nuisance or pollution to waters of the State, groundwater, and land, and which will provide a more complete protection of human health. The rationale for this more strict prohibition is because of the prevalence of high groundwater in the North Coast Region, and this Region's reliance on groundwater as a drinking water source.

B. Technology-Based Effluent Limitations

1. Scope and Authority

Regulations promulgated in 40 CFR Section 125.3(a)(1) require technology-based effluent limitations for municipal Dischargers to be placed in NPDES Orders based on Secondary Treatment Standards or Equivalent to Secondary Treatment Standards.

The Federal Water Pollution Control Act Amendments of 1972 (PL 92-500) established the minimum performance requirements for POTWs [defined in Section 304(d)(1)]. Section 301(b)(1)(B) of that Act requires that such treatment works must, as a minimum, meet effluent limitations based on secondary treatment as defined by the USEPA Administrator.

Based on this statutory requirement, USEPA developed secondary treatment regulations, which are specified in 40 CFR 133. These technology-based regulations apply to all municipal wastewater treatment plants and identify the minimum level of effluent quality attainable by secondary treatment in terms of biochemical oxygen demand (BOD_5), total suspended solids (TSS), and pH, as follows:

a. BOD and Suspended Solids

   i. The 30-day average shall not exceed 30 mg/l.
   ii. The 7-day average shall not exceed 45 mg/l.
   iii. The 30-day average percent removal shall not be less than 85 percent.

b. pH

   i. The pH shall be maintained within the limits of 6.0 to 9.0. (The effluent limitation range for pH of 6.5 to 8.5 is required to meet the water quality objective for hydrogen ion concentration (pH) is contained in the Basin Plan Table 3-1.)

      In addition, section 122.45 (f) requires the establishment of mass-based effluent limitations for all pollutants limited in Orders, except, 1) for pH, temperature, radiation, or other pollutants which cannot appropriately be expressed by mass, or (2) when applicable standards and limitations are expressed in terms of other units of measure, or (3) where the permit limitation is established on a case-by-case basis under section 125.3, and the limitations expressed in terms of mass are infeasible because the mass of the pollutant discharged cannot be related to a measure of operation, and permit conditions ensure that dilution will not be used as a substitute for treatment. Pollutants limited in terms of mass additionally may be limited in terms of other units of measurement, and the permit shall require that permittee to comply with both limitations. Mass based limitations are based on the facility design flow.

      Technology-based effluent limitations may be set on a case-by-case basis under section 402(a)(1) of the CWA to the extent that EPA-promulgated effluent limitations are inapplicable based upon the available information and unique factors related to the applicant. A combination of EPA- promulgated effluent limitations and effluent limits developed under a case-by-case basis scenario may be applied to carry out provisions of the CWA.

2. Applicable Technology-Based Effluent Limitations

The following standards from 40 CFR Part 133 are applicable to the Covelo Community Services District and are included in this Order as effluent limitations.

F-3 Summary of Technology-Based Effluent Limitations - Discharge Point 001

Parameter	Units	Effluent Limitation		
		Average Monthly	Average Weekly	Percent Removal
BOD_5 [a]	mg/L	30	45	85
TSS [a]	mg/L	30	45	85
pH	stnd units	6.0 – 9.0		

[a] The 30-day average percent removal shall not be less than 85 percent.

Effluent limitations for settleable solids have been retained from the previous Order. These limitations are also a typical standard of performance for secondary treatment facilities and are included as a limitation for the Discharger's facility based on the best professional judgment of Regional Water Board staff. Likewise, the requirement of a minimum chlorine residual of 1.5 mg/L at the end of the disinfection process is retained from Order No. R1-2011-0001 and is based on Regional Water Board staff's best professional judgment for providing adequate disinfection. The flow limitation of 0.077 mgd (mean annual flow) is retained based upon the WWTF upgrade specifications provided by the Discharger in the permit application and is intended to ensure that wastewater flows do not exceed the facility's design capacity.

C. Water Quality-Based Effluent Limitations (WQBELs)

1. Scope and Authority

Section 301(b) of the CWA and NPDES regulations at 40 CFR 122.44(d) require that permits include limitations more stringent than applicable federal technology-based requirements where necessary to achieve applicable water quality standards, including numeric and narrative objectives within a standard.

40 CFR 122.44(d)(1)(i) mandates that permits include effluent limitations for all pollutants that are or may be discharged at levels that have the reasonable potential to cause or contribute to an exceedance of a water quality standard, including numeric and narrative objectives within a standard.

A reasonable potential analysis (RPA) demonstrated reasonable potential for discharges from the WWTF to cause or contribute to exceedances of applicable

water quality criteria for chlorine residual, dichlorobromomethane, ozone, pH, settleable solids, and total coliform organisms.

Where reasonable potential has been established for a pollutant, but there is no numeric criterion or objective for the pollutant, WQBELs must be established in accordance with the requirements of 40 CFR 122.44(d)(1)(vi), using: (1) USEPA criteria guidance under CWA section 304(a), supplemented where necessary by other relevant information; (2) an indicator parameter for the pollutant of concern; or (3) a calculated numeric water quality criterion, such as a proposed state criterion or policy interpreting the state's narrative criterion, supplemented with other relevant information.

The process for determining "reasonable potential" and calculating WQBELs when necessary is intended to protect the designated uses of the receiving water as specified in the Basin Plan, and achieve applicable water quality objectives and criteria that are contained in the Basin Plan and in other applicable State and federal rules, plans, and policies, including applicable water quality criteria from the CTR and the NTR.

2. **Applicable Beneficial Uses and Water Quality Criteria and Objectives**

   a. Beneficial Uses. Present and potential uses for waters within the Round Valley Hydrologic Subarea of the Eel River Hydrologic Unit – an area that includes Grist Creek are discussed in Finding II. H of Order No. R1-2006-0007.

   b. Basin Plan Water Quality Objectives. In addition to the specific water quality objectives indicated above, the Basin Plan contains the following narrative objectives that apply to inland surface waters, enclosed bays, and estuaries, including Grist Creek:

      Biostimulatory Substances: Waters shall not contain biostimulatory substances in concentrations that promote aquatic growths to the extent that such growths cause nuisance or adversely affect beneficial uses.

      pH: The pH shall not be depressed below 6.5 nor raised above 8.5

      Sediment: The suspended sediment load and suspended sediment discharge rate of surface waters shall not be altered in such a manner as to cause nuisance or adversely affect beneficial uses.

      Dissolved Oxygen: Dissolved oxygen concentrations shall conform to those limits listed in Table 1 (of the Basin Plan). For waters not listed in Table 1 and where dissolved oxygen objectives are not prescribed, the dissolved

oxygen concentrations shall not be reduced below the following minimum levels at any time.

Waters designated WARM, MAR, or SAL	5.0 mg/L
Waters designated COLD	6.0 mg/L
Waters designated SPAWN	7.0 mg/L
Waters designated SPAWN during critical spawning and egg incubation periods	9.0 mg/L

Bacteria: The bacteriological quality of waters of the North Coast Region shall not be degraded beyond natural background levels. In no case shall coliform concentrations in waters of the North Coast Region exceed the following:

In waters designated for contact recreation (REC-1), the median fecal coliform concentration based on a minimum of not less than five samples for any 30-day period shall not exceed 50/100 ml, nor shall more than ten percent of total samples during any 30-day period exceed 400/100 ml (California Department of Public Health).

Temperature: Temperature objectives for COLD interstate waters, WARM interstate waters, and enclosed bays and estuaries are as specified in the "Water Quality Control Plan for Control of Temperature in the Coastal and Interstate Waters and Enclosed Bays of California" including any revisions thereto. A copy of this plan is included verbatim in the Appendix Section of the Basin Plan.

In addition, the following temperature objectives apply to surface waters:

The natural receiving water temperature of intrastate waters shall not be altered unless it can be demonstrated to the satisfaction of the Regional Water Board that such alteration in temperature does not adversely affect beneficial uses.

Toxicity: All waters shall be maintained free of toxic substances in concentrations that are toxic to, or that produce detrimental physiological responses in human, plant, animal, or aquatic life. Compliance with this objective will be determined by use of indicator organisms, analyses of species diversity, population density, growth anomalies, bioassays of appropriate duration, or other appropriate methods as specified by the Regional Water Board.

The survival of aquatic life in surface waters subjected to a waste discharge, or other controllable water quality factors, shall not be less than that for the same water body in areas unaffected by the waste discharge, or when

necessary for other control water that is consistent with the requirements for "experimental water" as described in Standard Methods for the Examination of Water and Wastewater, 18th Edition (or a more recent edition). As a minimum, compliance with this objective as stated in the previous sentence shall be evaluated with a 96-hour bioassay.

In addition, effluent limits based upon acute bioassays of effluents will be prescribed. Where appropriate, additional numerical receiving water objectives for specific toxicants will be established as sufficient data become available, and source control of toxic substances will be encouraged.

c. State Implementation Policy (SIP), CTR and NTR.

Water quality criteria applicable to the discharge to Grist Creek are included in the NTR and the CTR, which contain numeric criteria for most of the 126 priority, toxic pollutants, and indicate that such criteria will be developed for the remaining criteria at a future date.

Aquatic life freshwater and saltwater criteria are further identified as criterion maximum concentrations (CMC) and criterion continuous concentrations (CCC). The CTR defines the CMC as the highest concentration of a pollutant to which aquatic life can be exposed for a short period of time without deleterious effects and the CCC as the highest concentration of a pollutant to which aquatic life can be exposed for an extended period of time (4 days) without deleterious effects. The CMC is used to calculate an acute or one-hour average numeric effluent limitation and the CCC is used to calculate a chronic or 4-day average numeric effluent limitation.

Human health criteria are further identified as “water and organisms” and “organisms only.” The criteria from the “water and organisms” column of CTR are used for the preliminary reasonable potential analysis because the Basin Plan identifies that the receiving water, Grist Creek is a source of municipal and domestic drinking water supply. The human health criteria are used to calculate human health effluent limitations.

The SIP, which is described in Finding II.J. of the Order and Section III.C.4 of the Fact Sheet, includes procedures for determining the need for and calculating WQBELs and requires dischargers to submit data sufficient to do so.

3. **Determining the Need for WQBELs**

A. **Non-Priority Pollutants**

i. pH. The Order retains an effluent limitation for pH of 6.5 to 8.5 from Order No. R1-2006-0007. This limitation is based on the water quality

objective for Grist Creek established by the Basin Plan Table 3-1 (Chapter 3).

ii. **Total Coliform Bacteria.** Coliform bacteria are a pollutant of concern in all wastewaters of domestic origin, and therefore, the Order retains effluent limitations for total coliform bacteria from Order No. R1-2006-0007. These effluent limitations will ensure that water quality objectives for bacteria, as established by Chapter 3 of the Basin Plan, will be maintained.

iii. **Settleable Solids.** Effluent limitations for settleable solids are retained from Order No. R1-2006-0007 and reflect levels of treatment attainable by secondary treatment facilities. This limitation is based on the water quality objective prohibiting bottom deposits for all surface waters of the North Coast Region established by the Basin Plan.

iv. **Chlorine Residual.** The Basin Plan establishes a narrative water quality objective for toxicity, stating that "[a]*ll waters shall be maintained free of toxic substances in concentrations that are toxic to, or that produce detrimental physiological responses in human, plant, animal, or aquatic life."* The Regional Water Board considers any chlorinated discharge as having the reasonable potential to cause or contribute to exceedances of this water quality objective for toxicity, and therefore, the Order establishes effluent limitations for chlorine. USEPA has established the following criteria for chlorine-produced oxidants for protection of freshwater aquatic life. [*Quality Criteria for Water 1986* (The Gold Book, 1986, EPA 440/5/-86-001)]

Chronic Criterion	Acute Criterion
0.011 mg/L	0.019 mg/L

Order No. R1-2006-0007 required that there be no detectable level of chlorine in the effluent at the point of discharge. This Order revises effluent limitations for chlorine residual to be consistent with the water quality criteria, which are below current analytical detection limits. The water quality criteria recommended by USEPA have been translated to average monthly and maximum daily effluent limitations for total chlorine residual. These effluent limitations will be in effect until chlorination is no longer used as a disinfection practice at the Facility.

v. **Nitrate** Untreated domestic wastewater contains ammonia nitrogen. Nitrification is a biological process that converts ammonia to nitrite and nitrate. Denitrification is a process that converts nitrate to nitrogen gas, which is then released to the atmosphere. Inadequate or incomplete nitrification may result in the discharge of ammonia to the receiving

stream and inadequate or incomplete denitrification may result in the discharge of nitrate to groundwater. The new WWTF will be designed to use nitrification to remove ammonia from the waste stream and denitrification to remove nitrate from the waste stream, culminating in an overall reduction in total nitrogen.

Nitrate is known to cause adverse health effects in humans. For waters designated as domestic or municipal supply, the Basin Plan (Chapter 3) adopts the MCLs, established by the CDPH for the protection of public water supplies at title 22 of the California Code of Regulations, section 64431 (Inorganic Chemicals) and 64444 (Organic Chemicals), as applicable water quality criteria. The MCL for nitrate (10 mg/L N) is therefore applicable as a water quality criterion.

B. **Priority Pollutants**

i. **Reasonable Potential Analysis (RPA).** SIP section 1.3 requires the Regional Water Board to use all available, valid, relevant, and representative receiving water and effluent data and information to conduct an RPA. For this RPA, the Regional Water Board has used effluent and receiving water monitoring data generated from a single monitoring event that occurred in May 2006.

Some freshwater water quality criteria are hardness-dependent; i.e., as hardness decreases, the toxicity of certain metals increases and the applicable water quality criteria become correspondingly more stringent. For this RPA, a hardness concentration of 62 mg/L as $CaCO_3$ was used, reflecting the lowest receiving water hardness reported by the Discharger during the term of Order No. R1-2006-0007.

To conduct the RPA, Regional Water Board staff identified the maximum effluent concentration (MEC) and maximum background concentration (B) for each priority pollutant from effluent and receiving water data provided by the Discharger, and compared this information to the most stringent applicable water quality criterion (C) for each pollutant with applicable water quality criteria from the NTR, CTR, and Basin Plan. Section 1.3 of the SIP establishes three triggers for a finding of reasonable potential.

ii. **Trigger 1.** If the MEC is greater than C, there is reasonable potential, and an effluent limitation is required.

iii. **Trigger 2.** If B is greater than C, and the pollutant is detected in the effluent (MEC > ND), there is reasonable potential, and an effluent limitation is required.

iv. **Trigger 3.** After a review of other available and relevant information, a permit writer may decide that a WQBEL is required. Such additional information may include, but is not limited to: the facility type, the discharge type, solids loading analyses, lack of dilution, history of compliance problems, potential toxic impact of the discharge, fish tissue residue data, water quality and beneficial uses of the receiving water, CWA 303(d) listing for the pollutant, and the presence of endangered or threatened species or their critical habitat.

v. **Priority Pollutant Reasonable Potential Determination.** The RPA demonstrated reasonable potential for discharges from the existing Facility for dichlorobromomethane. Reasonable potential could not be determined for all pollutants, as there are not applicable water quality criteria and/or available monitoring data for all pollutants. The RPA determined that there is either no reasonable potential or there was insufficient information to conclude affirmative reasonable potential for the remainder of the 126 priority pollutants

The following table summarizes the RPA for each priority pollutant that was reported in detectable concentrations in the effluent from the existing WWTF or background receiving water. The MECs, most stringent WQO/WQCs (C), and background concentrations (B) used in the RPA are presented in the following table, along with the RPA results (yes or no) for each priority pollutant analyzed.

Table F-4. Summary of RPA Results

CTR #	Priority Pollutant	MEC or Minimum DL[4,5]	C	B or Minimum DL	RPA Results[6]
2	Arsenic	1.4	50	< 2.0	No
6	Copper	5.1	9.33	< 9.0	No
9	Nickel	2.3	52.16	< 5.0	No

[4] The MEC or B is the actual detected concentration unless it is preceded by "<", in which case the value shown is the minimum detection level as the analytical result was reported as not detected (ND). Values reported as DNQ were "detected, but not quantified".

[5] The MEC or B is "Not Available" when there are no monitoring data for the constituent.

[6] RPA Results:

= Yes, if MEC > WQO/WQC, or B > WQO/WQC and MEC is detected;

= No, if MEC and B are < WQO/WQC or all effluent data are undetected;

= Undetermined (Ud), if no criteria have been promulgated;

= Cannot Determine, if there are insufficient data.

CTR #	Priority Pollutant	MEC or Minimum DL[4,5]	C	B or Minimum DL	RPA Results[6]
		(DNQ)			
13	Zinc	4.7	119.82	< 3.0	No
26	Chloroform	84	none	< 0.5	Cannot Determine
27	Dichlorobromomethane	4.0	0.56	< 0.5	Yes
80	Dimethyl Phthalate	0.72	313000	0.71	No

4. **WQBEL Calculations**

The final WQBEL for dichlorobromomethane has been determined using the methods described in section 1.4 of the SIP.

Step 1: To calculate the effluent limitations, an effluent concentration allowance (ECA) is calculated for each pollutant found to have reasonable potential using the following equation, which takes into account dilution and background concentrations:

ECA = C + D (C – B), where

C = the applicable water quality objective or criterion (adjusted for receiving water hardness and expressed as the total recoverable metal, if necessary)

D = dilution credit (here D = 0, as the discharge to Grist Creek does not qualify for a dilution credit)

B = background concentration

Here, because no credit for dilution is allowed, the ECA is equal to the applicable criterion (ECA = C).

Step 2: For each ECA based on an aquatic life criterion/objective the long term average discharge condition (LTA) is determined by multiplying the ECA by a factor (multiplier), which adjusts the ECA to account for effluent variability. The multiplier depends on the coefficient of variation (CV) of the data set and whether it is an acute or chronic criterion/objective. Table 1 of the SIP provides pre-calculated values for the multipliers based on the values of the CV. When the data set contains less than 10 sample results (as for the Facility), or when 80 percent or more of the data set is reported as non-detect (ND), the CV is set equal to 0.6. Derivation of the multipliers is presented in section 1.4 of the SIP. No ECA for an aquatic life criterion/objective was necessary based upon the RPA.

Step 3: WQBELs, including an average monthly effluent limitation (AMEL) and a maximum daily effluent limitation (MDEL) are calculated using the most limiting (lowest) LTA. The LTA is multiplied by a factor that accounts for averaging periods and exceedance frequencies of the effluent limitations, and for the AMEL, the effluent monitoring frequency. Here, the CV is set equal to 0.6, and the sampling frequency is set equal to 4 (n = 4). The 99th percentile occurrence probability was used to determine the MDEL multiplier and a 95th percentile occurrence probability was used to determine the AMEL multiplier. No AMEL or MDEL multiplier an aquatic life criterion/objective was necessary based upon the RPA

Step 4: When the most stringent water quality criterion/objective is a human health criterion/objective (as in these circumstances for dichlorobromomethane), the AMEL is set equal to the ECA. From Table 2 of the SIP, when CV = 0.6 and n = 4, the MDEL multiplier at the 99th percentile occurrence probability equals 3.11, and the AMEL multiplier at the 95th percentile occurrence probability equals 1.55. The MDEL for protection of human health is calculated by multiplying the ECA by the ratio of the MDEL multiplier to the AMEL multiplier. Final WQBELs for dichlorobromomethane are determined as follows.

Table F-5. Final WQBELs for Priority Pollutants Based on Human Health Criteria

Pollutant	ECA (µg/L)	MDEL Multiplier/AMEL Multiplier	MDEL (µg/L)	AMEL (µg/L)
Dichlorobromomethane	0.56	2.01 (3.11/1.55)	1.1	0.56

Because dichlorobromomethane is a chlorine disinfection byproduct and the Discharger will use ozonation as the primary disinfection process. The effluent limitations for dichlorobromomethane will only be in effect when chlorination is used for disinfection.

5. Whole Effluent Toxicity (WET)

Effluent limits for whole effluent toxicity (WET), acute or chronic, protect the receiving water quality from the aggregate toxic effect of a mixture of pollutants in the effluent. There are two types of WET tests - acute and chronic. An acute toxicity test is conducted over a short time period and measures mortality. A chronic toxicity test is conducted over a longer period of time and may measure mortality, reproduction, and/or growth.

The Basin Plan specifies a narrative objective for toxicity, requiring that all waters be maintained free of toxic substances in concentrations that are lethal to or produce other detrimental responses in aquatic organisms. Detrimental response includes but is not limited to decreased growth rate, decreased reproductive success of resident or indicator species, and/or significant

alterations in population, community ecology, or receiving water biota. The existing Order contains acute toxicity limitations in accordance with the Basin Plan, which requires that average survival in undiluted effluent for any three consecutive 96-hour static or continuous flow bioassay tests be at least 90 percent, with no single test having less than 70 percent survival.

In addition to the Basin Plan requirements, Section 4 of the SIP states that chronic toxicity effluent limitations are required in Orders for all discharges that will cause, have the reasonable potential to cause, or contribute to chronic toxicity in receiving waters. Discharges from Discharge Point 001 may contribute to long-term toxic effects within the receiving water; however, no chronic toxicity data are available for this discharge. In accordance with the SIP, therefore, the Discharger will be required to conduct chronic toxicity testing in order to determine reasonable potential and establish WQBELs as necessary.

D. Final Effluent Limitations

1. Satisfaction of Anti-Backsliding Requirements

Except as provided in title 40, section 122.44(l)(2), federal backsliding regulations require effluent limitations, standards, and conditions contained in reissued permits to be as least as stringent as the effluent limitations, standards, and conditions contained in the previous permit. All effluent limitations contained in this Order are as stringent as those contained in the previous Order, and therefore anti-backsliding requirements are satisfied.

New effluent limitations are established for chlorine residual. In the previous permit, the effluent limitation was expressed as no detectable levels of chlorine residual in the discharge, using a method detection limit of 0.1 mg/L. The new limitations are expressed as an average monthly limitation of 0.01 mg/L and a maximum daily limitation of 0.02 mg/L. The new limitations established in the Order are numerically lower than the minimum detection limit for the final effluent limitation of the previous permit that required no detectable level of chlorine in the effluent at the point of discharge. Although no longer expressed as “non-detect”, the newly established effluent limitations are effectively more stringent limitations because the discharge is required to achieve an effluent concentration of chlorine residual that is numerically lower than was required by the previous permit.

2. Satisfaction of Antidegradation Policy

This Order is consistent with applicable federal and State antidegradation policies, as it does not authorize the discharge of

increased concentrations of pollutants or increased volumes of treated wastewater. The previous Order permitted a flow of 80,000 gallons per day (gpd) (0.08 million gallons per day). Under previous conditions, the integrity of the two treatment and two storage ponds had been compromised, allowing inadequately treated wastewater to leach directly to groundwater. Internal upgrades to the treatment system include lining of three of the original ponds with HDPE liners which will mitigate the previous conditions. In addition, the third pond in the flow series will be developed as a treatment wetland, providing enhanced nutrient and filtration efficiencies. This Order will permit a reduced flow of 0.077 gpd. Discharges of disinfected secondary treated wastewater to the percolation pond result in a reduction of pollutant discharge over that which occurred under the previous conditions. Effluent limitations for nitrate have been set equal to criteria for the protection of groundwater beneficial uses. Additional attenuation of nitrate may be achieved as the effluent moves through the soil profile before contact with groundwater. Groundwater measurements collected over the previous permit cycle from the three existing monitoring wells indicate that discharges into the percolation pond at Discharge Point 002 will flow away from Town and Grist Creeks. Three additional monitoring wells will be installed during the final phase of WWTF upgrade to provide additional groundwater monitoring points for evaluation of potential impacts associated with Discharge Point 002.

3. **Stringency of Requirements for Individual Pollutants**

This Order contains both technology-based and water quality-based effluent limitations for individual pollutants. The technology-based effluent limitations consist of restrictions on BOD and TSS. Restrictions on these pollutants are discussed in sections IV.B.2 and IV.D of the Fact Sheet. This Order's technology-based pollutant restrictions implement the minimum, applicable federal technology-based requirements. In addition, this Order contains effluent limitations for pH that are more stringent than the minimum, federal technology-based requirements but are necessary to meet water quality standards. These requirements are discussed in section IV.C.3 of the Fact Sheet.

Most beneficial uses and water quality objectives contained in the Basin Plan were approved under State law and submitted to and approved by USEPA prior to May 30, 2000. Any water quality objectives and beneficial uses submitted to USEPA prior to May 30, 2000, but not approved by USEPA before that date, are nonetheless "applicable water quality standards for purposes of the CWA" pursuant to section 131.21(c)(1). The remaining water quality objectives and

beneficial uses implemented by this Order (specifically the addition of the beneficial use of Native American Culture (CUL) and the General Objective regarding antidegradation) were approved by USEPA on March 4, 2005, and are applicable water quality standards pursuant to section 131.21(c)(2). Collectively, this Order's restrictions on individual pollutants are no more stringent than required to implement the requirements of the CWA.

In addition, the Regional Water Board has considered the factors in Water Code section 13263, including the provisions of Water Code section 13241, in establishing these requirements.

4. **Summary of Final Effluent Limitations Discharge Point 001**

a. The discharge of treated wastewater shall maintain compliance with the following effluent limitations for secondary treatment at Discharge Point 001, with compliance measured at Monitoring Location M-001, as described in the attached Monitoring and Reporting Program (Attachment E).

Table F-6. Summary of Final Effluent Limitations Discharge Point 001

Parameter	Units	Effluent Limitations				
		Average Monthly	Average Weekly	Maximum Daily	Instantaneous Minimum	Instantaneous Maximum
Biochemical Oxygen Demand (5-day @ 20°C)	mg/L	30	45	60	--	--
	lbs/day[7,8]	19	29	39	--	--
Total Suspended Solids	mg/L	30	45	60	--	--
	lbs/day[7,8]	19	29	39	--	--
pH	std units	--	--	--	6.5	8.5
Settleable Solids	ml/L	0.1	--	0.2	--	--

[7] The mass discharge (lbs/day) is obtained from the following calculation for any calendar day, week or month:

$$\frac{8.34}{N}\sum^{N} Q_i C_i$$

in which N is the number of samples analyzed, Q_i and C_i are the flow rate (mgd) and the constituent concentration (mg/L) respectively, which are associated with each of the N grab samples, which may be taken in the sampling period. If a composite sample is taken, C_i is the concentration measured in the composite sample and Q_i is the average flow rate occurring during the period over which samples are composited.

[8] Mass-based effluent limitations are based on the average annual flow of 0.077 mgd.

Table F-6. Summary of Final Effluent Limitations Discharge Point 001

Parameter	Units	Effluent Limitations				
		Average Monthly	Average Weekly	Maximum Daily	Instantaneous Minimum	Instantaneous Maximum
Total Coliform Organisms	MPN/100 mL	23[9]	--	240	--	--
Chlorine, Total Residual	mg/L	0.01	--	0.02	--	--
Dichlorobromomethane	ug/L	0.56	--	1.12	--	--

b. Percent Removal: The average monthly percent removal of BOD_5 and TSS shall not be less than 85 percent. Percent removal shall be determined from the 30-day average value of influent wastewater concentration in comparison to the 30-day average value of effluent concentration for the same constituent over the same time period as measured at Monitoring Locations INF-001 and M-001, respectively.

c. Flow: The mean daily dry weather flow shall not exceed 0.057 mgd averaged over a period of a calendar month. The mean annual flow shall not exceed 0.077 mgd averaged over a period of a calendar year.

d. Acute Toxicity: There shall be no acute toxicity in the effluent when discharging to Grist Creek, as measured at Monitoring Location M-001. The Discharger will be considered in compliance with this limitation when the survival of aquatic organisms in a 96-hour bioassay using undiluted effluent complies with the following.

i. Minimum for any one bioassay: 70 percent survival.

ii. Median for any three or more consecutive bioassays: at least 90 percent survival.

Compliance with this effluent limitation shall be determined in accordance with Section V of the Monitoring and Reporting Plan, Attachment E of this Order.

E. Interim Effluent Limitations and Compliance Schedules

This Order does not include interim effluent limitations or compliance schedules.

[9] The median of all samples collected in a 30-day period. Compliance with the 30-day median shall be calculated upon a continuous basis.

F. Land Discharge Specifications

1. Scope and Authority

Section 13263 of the Water Code requires the Regional Water Board to prescribe requirements for proposed discharges, existing discharges, or material change in an existing discharge based upon the conditions of the disposal area or receiving waters upon or into which the discharge is made or proposed. The prescribed requirements shall implement any relevant water quality control plans that have been adopted, and shall take into consideration the beneficial uses to be protected, the water quality objectives reasonably required for that purpose, other waste discharges, the need to prevent nuisance, and the provisions of Water Code section 13241. In prescribing requirements, the Regional Water Board is not obligated to authorize the full waste assimilation capacities of the receiving water.

Water Code section 13241 requires the Regional Board to establish water quality objectives in water quality control plans as in its judgment will ensure the reasonable protection of beneficial uses and prevention of nuisance, recognizing that it may be possible for the quality of water to be changed to some degree without unreasonably affecting beneficial uses. The Basin Plan establishes water quality objectives specific to the North Coast Region for the protection of past, present, and probable future beneficial uses of water. Factors required for consideration during development of applicable water quality objectives, such as the characteristics of the hydrographic unit under consideration, economic considerations, and other factors required in accordance with section 13241 were considered during the Basin Planning and adoption process.

2. Applicable Beneficial Uses and Water Quality Criteria and Objectives

a. Beneficial Uses. Beneficial use designations for receiving waters for discharges from the facility are discussed in Finding II. H of the Order and section III. C. 1 of this Fact Sheet.

b. Basin Plan Water Quality Objectives. The Basin Plan contains narrative objectives for tastes and odors, bacteria, radioactivity, and chemical constituents (including those chemicals that adversely affect agricultural water supply) that apply to groundwater.

3. Determining the Need for WQBELs

a. Biochemical Oxygen Demand (BOD). The Order establishes effluent limitations for BOD based upon the design criteria for upgrades to the WWTF presented in the application. Consequences of BOD overloading may result in pollution or nuisance as defined by Water Code section 13050 including

production of objectionable odors, increased risk of mosquito and fly breeding, plugging of the soil surface, and lowering of the oxidation/reduction potential in the underlying soil resulting in potential mobilization of naturally present contaminants in soil such as iron and manganese.

b. Total Suspended Solids (TSS). Suspended solids are those which are visible and in suspension in the water. They are the solids which can be removed from the wastewater by physical or mechanical means, such as sedimentation or filtration. More precisely, they are the solids which are retained on the filter mat or glass fiber pad in a Gooch Crucible. Suspended solids include the larger floating particles and consist of sand, grit, clay, fecal solids, paper, pieces of wood, algal cells, particles of food and garbage, and similar materials. Suspended solids are approximately 70 percent organic solids and 30 percent inorganic solids, the latter being principally sand and grit. The Order establishes effluent limitations for TSS based upon the design criteria for upgrades to the WWTF presented in the application.

c. Nitrate. The Order establishes effluent limitations for nitrate at 10 mg/l. This limitation is based on the State primary MCL for protection of health in drinking water.

d. Total Coliform Organisms. These effluent limitations will ensure that water quality objectives for bacteria, as established by Chapter 3 of the Basin Plan, will be maintained.

4. Summary of Final Effluent Limitations Discharge Point 002

a. The discharge of treated wastewater shall maintain compliance with the following effluent limitations for secondary treatment at Discharge Point 002, with compliance measured at Monitoring Location M-002, as described in the attached Monitoring and Reporting Program (Attachment E).

Table F-7. Summary of Final Effluent Limitations Discharge Point 002

Parameter	Units	Effluent Limitations				
		Average Monthly	Average Weekly	Maximum Daily	Instantaneous Minimum	Instantaneous Maximum
Biochemical Oxygen Demand (5-day @ 20°C)	mg/L	30	45	60	--	--
	lbs/day[10,11]	19	29	39	--	--
Total Suspended Solids	mg/L	30	45	60	--	--
	lbs/day[1,2]	19	29	39	--	--
pH	std units	--	--	--	6.0	9.0
Total Coliform Organisms	MPN/100 mL	23[12]	--	240	--	--
Nitrate as Nitrogen[13]	mg/L	10	--	--	--	--

b. Flow: The mean daily dry weather flow shall not exceed 0.057 mgd averaged over a period of a calendar month. The mean annual flow shall not exceed 0.077 mgd averaged over a period of a calendar year. The Order establishes effluent limitations for flow based upon the design criteria for upgrades to the WWTF presented in the application.

G. Reclamation Specifications

This section of the standardized Order form is not applicable to the Covelo Community Services District.

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[10] The mass discharge (lbs/day) is obtained from the following calculation for any calendar day, week or month:

$$\frac{8.34}{N}\sum^{N} Q_i C_i$$

in which N is the number of samples analyzed, Q_i and C_i are the flow rate (mgd) and the constituent concentration (mg/L) respectively, which are associated with each of the N grab samples, which may be taken in the sampling period. If a composite sample is taken, C_i is the concentration measured in the composite sample and Q_i is the average flow rate occurring during the period over which samples are composited.

[11] Mass-based effluent limitations are based on the average annual flow of 0.077 mgd.

[12] The median of all samples collected in a 30-day period. Compliance with the 30-day median shall be calculated upon a continuous basis.

[13] The nitrate limitation shall go into effect on November 1, 2013, allowing two full growing seasons to establish the wetland treatment marsh.

V. RATIONALE FOR RECEIVING WATER LIMITATIONS

A. Surface Water

CWA section 303(a-c) requires states to adopt water quality standards, including criteria where they are necessary to protect beneficial uses. The Regional Water Board adopted water quality criteria as water quality objectives in the Basin Plan. The Basin Plan states that "[t]*he numerical and narrative water quality objectives define the least stringent standards that the Regional* [Water] *Board will apply to regional waters in order to protect the beneficial uses.*" The Basin Plan includes numeric and narrative water quality objectives for various beneficial uses and water bodies. This Order contains receiving water limitations based on the Basin Plan numerical and narrative water quality objectives for biostimulatory substances, bacteria, chemical constituents, color, dissolved oxygen, floating material, oil and grease, pH, pesticides, radioactivity, sediment, settleable material, suspended material, tastes and odors, temperature, toxicity, and turbidity.

B. Groundwater

The beneficial uses of the underlying ground water are municipal and domestic supply, industrial service supply, industrial process supply, agricultural supply, and aquaculture, and Native American cultural uses. Groundwater limitations are required to protect the beneficial uses of the underlying groundwater.

State Water Board Resolution No. 68-16, requires, in part, that whenever the existing quality of water is better than the quality established in policies as of the date on which such policies become effective, such existing high quality water will be maintained until it is demonstrated to the state that any changes will be consistent with maximum benefit to the people of the state, will not unreasonably affect beneficial uses of such water, and will not result in water quality less than prescribed in the policies.

VI. RATIONALE FOR MONITORING AND REPORTING REQUIREMENTS

40 CFR 122.48 requires all NPDES Orders to specify recording and reporting of monitoring results. Water Code Sections 13267 and 13383 authorize the Water Boards to require technical and monitoring reports. The Monitoring and Reporting Program, Attachment E of this Order, establishes monitoring and reporting requirements to implement federal and state requirements. The following provides the rationale for the monitoring and reporting requirements contained in the Monitoring and Reporting Program for this facility.

A. Influent Monitoring

Order No. R1-2011-0001 requires the following influent monitoring at Monitoring Location INF-001

Parameter	Units	Sample Type	Minimum Sampling Frequency
Flow (Mean Daily)	mgd	Meter	Continuous
Biochemical Oxygen Demand (5-day @ 20°C)	mg/L	8-hr Composite	Monthly
Total Suspended Solids	mg/L	8-hr Composite	Monthly

NPDES regulations at 40 CFR 133 define secondary treatment to include 85 percent removal of BOD_5 and TSS during treatment. Monitoring of influent for these pollutant parameters, in addition to effluent, is required to monitor compliance with this standard of performance.

Influent flow monitoring is required to monitor the water balance during treatment.

B. Effluent Monitoring

Order No. R1-2011-0001 requires the following effluent monitoring at Monitoring Location EFF-001.

Parameter	Units	Sample Type	Minimum Sampling Frequency
Flow (Mean Daily)	mgd	Meter	Continuous
Ozone Residual	mg/L	Grab	Daily
Chlorine, Total Residual[9]	mg/L	Grab	Daily
Settleable Solids	mL/L-hr	8-hr Composite	Weekly
pH	std units	Grab	Weekly
Total Coliform Organisms	MPN/100 mL	Grab	Weekly
Biochemical Oxygen Demand (5-day @ 20°C)	mg/L	8-hr Composite	Monthly
Total Suspended Solids	mg/L	8-hr Composite	Monthly
Dichlorobromomethane[14]	µg/L	Grab	Monthly

[14] Monitoring for the chlorine disinfection by-product Dichlorobromomethane required only when implementing chlorine disinfection processes.

Parameter	Units	Sample Type	Minimum Sampling Frequency
Ammonia Nitrogen,(as N) [15]	mg/L	Grab	2x / Year
Nitrate Nitrogen	mg/L	Grab	2x / Year
Nitrite Nitrogen	mg/L	Grab	2x / Year
Organic Nitrogen	mg/L	Grab	2x / Year
Nitrogen, Total (as N)	mg/L	Calculation	2x / Year
Phosphorus, Total (as P)	mg/L	Grab	2x / Year
Acute Toxicity	% Survival	8-hr Composite	2x / Year
Chronic Toxicity	TUc	8-hr Composite	1x / Year
Priority Pollutants	µg/L	Grab	1x / 3 Years

Monitoring for these pollutant parameters in effluent is required to determine compliance with effluent limitations established by Order No. R1-2011-0001. Chronic toxicity monitoring is required to determine compliance with the Basin Plan's narrative water quality objective for toxicity; and priority pollutant monitoring is required during the Order term to determine compliance with water quality objectives for toxics established by the NTR, CTR, and the Basin Plan.

C. Whole Effluent Toxicity Testing Requirements

Whole effluent toxicity (WET) protects the receiving water quality from the aggregate toxic effect of a mixture of pollutants in the effluent. Acute toxicity testing measures mortality in 100 percent effluent over a short test period, and chronic toxicity testing is conducted over a longer period of time and may measure mortality, reproduction, and/or growth. This Order includes effluent limitations and monitoring requirements for acute toxicity; as well as monitoring requirements for chronic toxicity to determine compliance with the Basin Plan's narrative water quality objective for toxicity.

D. Land Discharge Monitoring Requirements

Order No. R1-2011-0001 requires the following land discharge monitoring at Monitoring Location EFF-002 when discharging to the percolation pond.

Parameter	Units	Sample Type	Minimum Sampling Frequency
Flow (Mean Daily)	mgd	Meter	Continuous
pH	std units	Grab	Weekly

[15] Receiving water pH and temperature monitoring conducted at RSW-001 must coincide with monitoring for ammonia.

Parameter	Units	Sample Type	Minimum Sampling Frequency
Total Coliform Organisms	MPN/100 mL	Grab	Weekly
Biochemical Oxygen Demand (5-day @ 20°C)	mg/L	8-hr Composite	Monthly
Total Suspended Solids	mg/L	8-hr Composite	Monthly
Nitrate Nitrogen	mg/L	8-hr Composite	Monthly
Nitrogen, Total (as N)	mg/L	8-hr Composite	Monthly
Phosphorus, Total (as P)	mg/L	Grab	2x / year
Title 22 Pollutants	µg/L	Grab	1x / 3 Years

Monitoring for these pollutant parameters in effluent is required to determine compliance with effluent limitations established by Order No. R1-2011-0001. Total nitrogen and nitrate nitrogen monitoring have been established to evaluate compliance with the MCL for nitrate in drinking water. Additional title 22 pollutant monitoring is required during the Order term to determine compliance with water quality objectives for drinking water established in the California Code of Regulations, and the Basin Plan.

E. Receiving Water Monitoring

1. **Surface Water**. Order No. R1-2011-0001 requires the following surface water monitoring at Monitoring Location RSW-001 and RSW-002 when discharging to Grist Creek.

Upstream Surface Water Monitoring – Monitoring Location RSW-001			
Parameter	**Units**	**Sample Type**	**Minimum Sampling Frequency**
Flow	**mgd**	**Gauge or Meter**	**Daily**
Visual Observations	**--**	**Visual**	**Weekly**
pH	**std units**	**Grab**	**Monthly**
Dissolved Oxygen	**mg/L**	**Grab**	**Monthly**
Electrical Conductivity @ 25°C	**µmhos/cm**	**Grab**	**Monthly**
Hardness, Total (as $CaCO_3$)	**mg/L**	**Grab**	**Monthly**
Temperature	**°C**	**Grab**	**Monthly**
Turbidity	**NTU**	**Grab**	**Monthly**
CTR Pollutants	**µg/L**	**Grab**	**1x/ 3 Years**

Downstream Surface Water Monitoring – Monitoring Location RSW-002			
Parameter	**Units**	**Sample Type**	**Minimum Sampling Frequency**
Visual Observations	**--**	**Visual**	**Weekly**
pH	**std units**	**Grab**	**Monthly**
Dissolved Oxygen	**mg/L**	**Grab**	**Monthly**
Electrical Conductivity @ 25°C	**µmhos/cm**	**Grab**	**Monthly**
Temperature	**°C**	**Grab**	**Monthly**
Turbidity	**NTU**	**Grab**	**Monthly**

Surface water monitoring is required to assess compliance with water quality objectives for toxics from the NTR, CTR, and the Basin Plan. Receiving water must be analyzed one time in the Order term, during a dry weather period, for the priority, toxic pollutants. Receiving water hardness and pH must be monitored during dry and wet weather periods so that water quality objectives, which are sensitive to hardness or pH, can be properly adjusted.

2. **Groundwater.** Order No. R1-2011-0001 requires the following groundwater monitoring at Monitoring Locations MW-001 through MW-006:

Parameter	Units	Sample Type	Minimum Sampling Frequency
Depth to Groundwater	0.01 feet	Grab	Semiannually
Nitrate Nitrogen	mg/L	Grab	Semiannually
Total Coliform Organisms	MPN/100 mL	Grab	Semiannually

Routine ground water monitoring is monitoring requirements have been established to assess compliance with receiving water limitations associated with discharges from land disposal operations. Monitoring requirements for depth to groundwater measurements are required to verify groundwater gradient.

F. Other Monitoring Requirements

1. **Disinfection Process Monitoring**. Order No. R1-2011-0001 requires the following disinfection process monitoring at Monitoring Location CCC-001 or OCC-001 as applicable when either disinfection system is in use.

Parameter	Units	Sample Type	Minimum Sampling Frequency
Chlorine, Total Residual	mg/L	Grab	Daily
Ozone Residual	mg/L	Grab	Daily

This Order requires internal monitoring in the chlorine contact chamber and the ozone contact chamber for residual to ensure that the effluent is adequately disinfected prior to discharge.

2. **Septage Station Monitoring**. Order No. R1-2011-0001 requires the following septage monitoring at Monitoring Location SEP-001.

   a. For each septage load delivered to the treatment facility, the Discharger shall require the hauler to collect and report a pH value representative of the load.

   b. The Discharger will collect a random representative septage sample and have the samples analyzed in accordance with the following table.

Parameter	Units	Sample Type	Minimum Sampling Frequency
pH	std units	Grab	Weekly
Chemical Oxygen Demand	mg/L	Grab	Quarterly
Oil and Grease	mg/L	Grab	Quarterly
Metals and Trace Elements	µg/L	Grab	Quarterly
Purgeable Organic Compounds	µg/L	Grab	Semiannually
Semivolatile Organic Compounds	µg/L	Grab	Semiannually

The Discharger currently accepts and treats septage at the WWTF. This Order establishes monitoring requirements to characterize discharges of septage into the treatment system and to ensure that pollutants associated with domestic septage do not pass through or interfere with the operation or performance of the WWTF.

VII. RATIONALE FOR PROVISIONS

A. Standard Provisions

Standard Provisions, which apply to all NPDES permits in accordance with 40 CFR 122.41, and additional conditions applicable to specified categories of permits in accordance with 40 CFR 122.42, are provided in Attachment D. The Discharger must comply with all standard provisions and with those additional conditions that are applicable under 40 CFR 122.42.

40 CFR 122.41(a)(1) and (b) through (n) establish conditions that apply to all State-issued NPDES permits. These conditions must be incorporated into the permits either expressly or by reference. If incorporated by reference, a specific citation to the regulations must be included in the Order. 40 CFR 123.25(a)(12) allows the state to omit or modify conditions to impose more stringent requirements. In accordance with 40 CFR 123.25, this Order omits federal conditions that address enforcement authority specified in 40 CFR 122.41(j)(5) and (k)(2) because the enforcement authority under the Water Code is more stringent. In lieu of these conditions, this Order incorporates by reference Water Code section 13387(e).

B. Regional Water Board Standard Provisions

In addition to the Federal Standard Provisions (Attachment D), the Discharger must comply with the Regional Water Board Standard Provisions provided in Standard Provisions VI.A.2.

1. Order Provision VI.A.2.a identifies the State's enforcement authority under the Water Code, which is more stringent than the enforcement authority specified in the federal regulations (e.g., 40 CFR 122.41(j)(5) and (k)(2)).

2. Order Provision VI.A.2.b requires the Discharger to notify Regional Water Board staff, orally and in writing, in the event that the Discharger does not comply or will be unable to comply with any Order requirement. The Provision requires the Discharger to make direct contact with a Regional Water Board staff person.

3. Order Provision VI.A.2.c requires the Discharger to petition with, and receive approval from, the State Water Board Division of Water Rights prior to making any change in the point of discharge, place of use, or purpose of use of treated wastewater that results in a decrease of flow in any portion of a watercourse. This requirement is mandated by Water Code section 1211.

4. Order Provision VI.A.2.c requires the Discharger to submit design proposals for new wastewater storage ponds to the Regional Water Board Executive Officer for review prior to construction. Construction plans must demonstrate that the pond design will ensure protection of groundwater beneficial uses and complies with the Water Code and title 27 of the California Code of Regulations.

C. Special Provisions

1. Reopener Provisions

a. **Standards Revisions (Special Provisions VI.C.1.a).** Conditions that necessitate a major modification of a permit are described in 40 CFR 122.62, which include the following:

i. When standards or regulations on which the permit was based have been changed by promulgation of amended standards or regulations or by judicial decision. Therefore, if revisions of applicable water quality standards are promulgated or approved pursuant to section 303 of the CWA or amendments thereto, the Regional Water Board will revise and modify this Order in accordance with such revised standards.

ii. When new information, that was not available at the time of permit issuance, would have justified different permit conditions at the time of issuance.

b. **Reasonable Potential (Special Provisions VI.C.1.b).** This provision allows the Regional Water Board to modify, or revoke and reissue, this Order if present or future investigations demonstrate that the Discharger governed by this Permit is causing or contributing to excursions above any applicable priority pollutant criterion or objective or adversely impacting water quality and/or the beneficial uses of receiving waters.

c. **Whole Effluent Toxicity (Special Provisions VI.C.1.c).** This Order requires the Discharger to investigate the causes of, and identify corrective actions to reduce or eliminate effluent toxicity through a TRE. This Order may be reopened to include a numeric chronic toxicity limitation, a new acute toxicity limitation, and/or a limitation for a specific toxicant identified in the TRE. Additionally, if a numeric chronic toxicity water quality objective is adopted by the State Water Board, this Order may be reopened to include a numeric chronic toxicity limitation based on that objective.

d. **303(d)-Listed Pollutants (Special Provisions VI.C.1.d).** This provision allows the Regional Water Board to reopen this Order to modify existing effluent limitations or add effluent limitations for pollutant(s) that are the subject of any future TMDL action.

e. **Biostimulatory Substances (Special Provisions VI.C.1.e).** This reopener allows the Regional Water Board to reopen and modify the Order to include new or modified effluent limitations for nutrients if monitoring data indicates the need for more stringent effluent limitations for ammonia, nitrate, and total nitrogen or new effluent limitations for other nutrient parameters.

2. Special Studies and Additional Monitoring Requirements

a. **Toxicity Reduction Evaluations (Special Provision VI.C.2.a).** The SIP requires the use of short-term chronic toxicity tests to determine compliance with the narrative toxicity objectives for aquatic life in the Basin Plan. Attachment E of this Order requires chronic toxicity monitoring for demonstration of compliance with the narrative toxicity objective.

In addition to WET monitoring, Special Provisions VI.C.2.a.ii requires the Discharger to submit to the Regional Water Board a TRE Work Plan for approval by the Executive Officer, to ensure the Discharger has a plan to immediately move forward with the initial tiers of a TRE, in the event effluent toxicity is encountered in the future. The TRE is initiated by evidence of a pattern of toxicity demonstrated through the additional effluent monitoring provided as a result of an accelerated monitoring program.

b. **TRE Guidance.** The Discharger is required to prepare a TRE Work Plan in accordance with USEPA guidance. Numerous guidance documents are available, as identified below:

i. *Toxicity Reduction Evaluation Guidance for Municipal Wastewater Treatment Plants (EPA/833B-99/002), August 1999.*

ii. *Generalized Methodology for Conducting Industrial TREs (EPA/600/2-88/070), April 1989.*

iii. *Methods for Aquatic Toxicity Identification evaluations: Phase I Toxicity Characterization Procedures. Second Edition, EPA 600/6-91/005F, February 1991.*

iv. *Toxicity Identification evaluation: Characterization of Chronically Toxic Effluents, Phase I, EPA 600/6-91/005F, May 1992.*

v. *Methods for Aquatic Toxicity Identification Evaluations: Phase II Toxicity Identification Procedures for Samples Exhibiting Acute and Chronic Toxicity, Second Edition, EPA 600/R-92/080, September 1993.*

vi. *Methods for Aquatic Toxicity Identification Evaluations: Phase III Toxicity Confirmation Procedures for Samples Exhibiting Acute and Chronic Toxicity, Second Edition, EPA 600/R-92/081, September 1993.*

vii. *Methods for Measuring the Acute Toxicity of Effluents and Receiving Waters to Freshwater and Marine Organisms, Fifth Edition, EPA-821-R-02-012, October 2002.*

viii. *Short-term Methods for Estimating the Chronic Toxicity of Effluents and Receiving Waters to Freshwater Organisms, Fourth Edition, EPA-821-R-02-013, October 2002.*

ix. *Technical Support Document for Water Quality-based Toxics Control, EPA/505/2-90-001, March 1991.*

3. Pollution Minimization Plan (Special Provision VI.C.2.c.

Provision VI.C.2.c is included in this Order as required by section 2.4.5 of the SIP. The Regional Water Board included standard provisions in all NPDES permits requiring development of a Pollutant Minimization Program when there is evidence that a toxic pollutant is present in effluent at a concentration greater than an applicable effluent limitation.

4. Construction, Operation, and Maintenance Specifications

a. **Operation and Maintenance (Special Provisions VI.C.2.d).**
40 CFR 122.41(e) requires proper operation and maintenance of permitted wastewater systems and related facilities to achieve compliance with permit conditions. An up-to-date operation and maintenance manual, as required by Provision VI.C.2.d of the Order, is an integral part of a well-operated and maintained facility.

b. **Septage Handling Requirements (Special Provisions VI.C.2.e).** The Discharger currently accepts and treats septage at the WWTF. Domestic septage is defined as the liquid or solid material removed from a septic tank, cesspool, portable toilet, type III marine sanitation device, recreational vehicle's sanitation tank, or similar storage or treatment works that receives only domestic septage. Septage is characterized by high organic strength, high solids content, high odor potential, high vector attraction potential, and high potential to pollute groundwater. Septage may be 6 to 80 times more concentrated than typical municipal wastewater and may also contain heavy metals and illicitly dumped hazardous materials. Septage has the potential to upset plant treatment operations or process performance or both if the plant is not designed to handle septage. Some of the impacts of septage addition to WWTFs include: potential toxic shock to biological processes; increased odor emissions; increased volume of grit, scum, screenings, and sludge; increased organic loading to biological processes; and increased housekeeping requirements. This Order requires the Discharger to manage septage accepted at the WWTF in a manner that ensures that pollutants associated with domestic septage do not pass through or interfere with the operation or performance of the WWTF.

D. Special Provisions for Municipal Facilities (POTWs Only)

The Regional Water Board includes special provisions in all NPDES Orders for municipal wastewater treatment facilities regarding wastewater collection systems, sanitary sewer overflows, source control, sludge handling and disposal, operator certification, and adequate capacity. These provisions assure efficient and satisfactory operation of municipal wastewater collection and treatment systems.

a. Wastewater Collection System (Special Provision VI.C.5.a)

i. Statewide General WDRs for Sanitary Sewer Systems. The State Water Board issued General Waste Discharge Requirements for Sanitary Sewer Systems, Water Quality Order No. 2006-0003-DWQ (General Order) on May 2, 2006. The General Order requires public agencies that own or operate sanitary sewer systems with greater than one mile of pipes or sewer lines to enroll for coverage under the General Order. The General Order requires agencies to develop sanitary sewer management plans (SSMPs) and report all SSOs, among other requirements and prohibitions.

Furthermore, the General Order contains requirements for operation and maintenance of collection systems and for reporting and mitigating sanitary sewer overflows. Inasmuch that the Discharger's collection system is part of the system that is subject to this Order, certain standard provisions are applicable as specified in Provisions, section VI.C.5. For instance, the 8-hour reporting requirements in this Order are not included in the General Order. The Discharger must comply with both the General Order and this Order. The Discharger and public agencies that are discharging wastewater into the facility were required to obtain enrollment for regulation under the General Order by December 1, 2006.

All NPDES permits for POTWs currently include federally required standard conditions to mitigate discharges (40 CFR 122.41(d)), to report non-compliance (40 CFR 122.41(1)(6) and (7)), and to properly operate and maintain facilities (40 CFR 122.41(e)). This provision is consistent with these federal requirements.

ii. Sanitary Sewer Overflows. (Special Provision VI.C.2.f.i). The Order also includes reporting provisions (Provision VI.C.5.(a)(2) and Attachment D subsections I.C., I.D., V.E., and V,H.) to ensure adequate and timely notifications are made to the Regional Water Board and appropriate local, state, and federal authorities. In addition, as an Enrollee under General Order No. 2006-0003-DWQ, the Discharger is required to report SSOs to an online SSO database administered through the California Integrated Water Quality System (CIWQS) and via telefax when the online SSO database is not available. Detailed notification and reporting

requirements for SSOs and sewage spills are specified in section E of the MRP. The goal of these provisions is to ensure appropriate and timely response by the Discharger to SSOs to protect public health and water quality.

The MRP that is part of the Order establishes oral reporting limits for SSOs. The Discharger is required to orally report all spills, SSOs, and unauthorized discharges. If the spill volume is greater than 1,000 gallons or the spill reaches a drainage channel or surface waters, it must be reported within 2 hours of the Discharger becoming aware of the spill. All other spills must be reported within 24 hours. All SSOs, regardless of volume, must be electronically reported pursuant to State Water Board Order No. 2006-0003-DWQ, Statewide General Waste Discharge Requirements for Sanitary Sewer Systems.

iii. **Source Control Provisions (Special Provision VI.C.2.f.ii).** Because the permitted flow of the Facility is less than 5.0 mgd, the Order does not require the Discharger to develop a pretreatment program that conforms to federal regulations. However, due to the identification of the reasonable potential for the priority pollutants cyanide and dichlorobromomethane in the discharge, this Order includes requirements for the Discharger to implement a source identification and reduction program. The Discharger's source identification and reduction program will need to address only those pollutants that continue to be detected by levels that trigger reasonable potential.

In addition, the Regional Water Board recognizes that some form of source control is prudent to ensure the efficient operation of the WWTF, the safety of the Discharger's staff, and to ensure that pollutants do not pass through the treatment facility to impair beneficial uses of the receiving water. The Order includes prohibitions for the discharge of pollutants that may interfere, pass through, or be incompatible with treatment operations, interfere with the use of disposal of sludge, or pose a health hazard to personnel.

iv. **Sludge Disposal and Handling (Special Provision VI.C.2.f.iii).** The disposal or reuse of wastewater treatment screenings, sludges, or other solids removed from the liquid waste stream is regulated by 40 CFR Parts 257, 258, 501, and 503, the State Water Board promulgated provisions of title 27, Cal. Code of Regs., Division 2, and with the Water Quality Control Plan for Ocean Waters of California (California Ocean Plan). The Discharger will be required to obtain coverage under State Water Board Water Quality Order No. 2004-0012-DWQ (General Waste Discharge Requirements for the Discharge of Biosolids to Land as a Soil Amendment in Agricultural, Silvicultural, Horticultural, and Land

Reclamation Activities) or other applicable WDRs issued by the Regional Water Board.

v. **Operator Certification (Special Provision VI.C.2.f.iv).** This provision requires the WWTF to be operated by supervisors and operators who are certified as required by title 23, Cal. Code of Regs., section 3680.

vi. **Adequate Capacity (Special Provision VI.C.2.f.v).** The goal of this provision is to ensure appropriate and timely planning by the Discharger to ensure adequate capacity for the protection of public health and water quality.

vii. **Statewide General WDRs for Discharge of Biosolids to Land (Special Provision VI.C.2.f.vi).** This provision requires the Discharger to comply with the State's regulations relating to the discharge of biosolids to the land. The discharge of biosolids through land application is not regulated under this Order.

E. Other Special Provisions

a. **Storm Water (Special Provision VI.C.2.g.i).** This provision requires the Discharger, if applicable, to comply with the State's regulations relating to industrial storm water activities. Currently, the Discharge is exempted from these requirements because storm water is captured, treated, and disposed of within the Facility's NPDES permitted process wastewater.

b. **Compliance Schedules (Special Provision VI.C.2.g.i).** The Order does not contain a compliance schedule. This section is not applicable to the Facility.

VIII. PUBLIC PARTICIPATION

The California Regional Water Quality Control Board, North Coast Region (Regional Water Board) is considering the issuance of waste discharge requirements (WDRs) that will serve as a National Pollutant Discharge Elimination System (NPDES) permit for the Covelo Wastewater Treatment Facility. As a step in the WDR adoption process, the Regional Water Board staff has developed tentative WDRs. The Regional Water Board encourages public participation in the WDR adoption process.

A. Notification of Interested Parties

The Regional Water Board has notified the Discharger and interested agencies and persons of its intent to prescribe waste discharge requirements for the discharge and has provided them with an opportunity to submit their written comments and recommendations. Notification was provided through the publication in the Willits News on February 25, 2011 and through posting on the Regional Water Board's Internet site at

http://www.waterboards.ca.gov/northcoast/agenda/pending.html beginning on February 25, 2011.

B. Written Comments

The staff determinations are tentative. Interested persons are invited to submit written comments concerning these tentative WDRs. Comments should be submitted either in person or by mail to the Executive Office at the Regional Water Board at the address above on the cover page of this Order.

To be fully responded to by staff and considered by the Regional Water Board, written comments should be received at the Regional Water Board offices by 5:00 p.m. on March 26, 2011.

C. Public Hearing

The Regional Water Board will hold a public hearing on the tentative WDRs during its regular Board meeting on the following date and time and at the following location.

Date: May 5, 2011

Time: 9:00 a.m.,
or as soon as possible thereafter as noticed in the final agenda

Location: Wharfinger Building
1 Marina Way
Eureka, California

Interested persons are invited to attend. At the public hearing, the Regional Water Board will hear testimony, if any, pertinent to the discharge, WDRs, and Order. Oral testimony will be heard; however, for accuracy of the record, important testimony should be in writing.

Please be aware that dates and venues may change. Our web address is **http://www.waterboards.ca.gov/northcoast** where you can access the current agenda for changes in dates and locations.

D. Waste Discharge Requirements Petitions

Any aggrieved person may petition the State Water Resources Control Board to review the decision of the Regional Water Board regarding the final WDRs. The petition must be submitted within 30 days of the Regional Water Board's action to the following address:

State Water Resources Control Board
Office of Chief Counsel
P.O. Box 100, 1001 I Street
Sacramento, CA 95812-0100

E. Information and Copying

The Report of Waste Discharge (RWD), related documents, tentative effluent limitations and special provisions, comments received, and other information are on file and may be inspected at the address above at any time between 8:30 a.m. and 4:45 p.m., Monday through Friday. Copying of documents may be arranged through the Regional Water Board by calling 707-576-2220.

F. Register of Interested Persons

Any person interested in being placed on the mailing list for information regarding the WDRs and NPDES Order should contact the Regional Water Board, reference this facility, and provide a name, address, and phone number.

G. Additional Information

Requests for additional information or questions regarding this order should be directed to Lisa Bernard at 707-576-2677 or lbernard@waterboards.ca.gov.