



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



**Matt Rodriguez**  
Secretary for  
Environmental Protection

www.waterboards.ca.gov/northcoast  
5550 Skylane Boulevard, Suite A, Santa Rosa, California 95403  
Phone: (877) 721-9203 (toll free) • Office: (707) 576-2220 • FAX: (707) 523-0135

**Edmund G. Brown Jr.**  
Governor

**ORDER No. R1-2011-0096  
WDID No. 1B83120OHUM**

**WASTE DISCHARGE REQUIREMENTS  
FOR GARBERVILLE SANITARY DISTRICT  
WASTEWATER TREATMENT FACILITY**

**HUMBOLDT COUNTY**

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

**Table 1. Discharger Information**

<b>Discharger</b>	Garberville Sanitary District
<b>Name of Facility</b>	Garberville Sanitary District Wastewater Treatment Facility
<b>Facility Address</b>	410 Bear Canyon Road
	Garberville, CA 95542

The discharge by the Garberville Sanitary District from the discharge point identified below is subject to waste discharge requirements as set forth in this Order:

**Table 2. Discharge Location**

<b>Discharge Point</b>	<b>Effluent Description</b>	<b>Discharge Point Latitude</b>	<b>Discharge Point Longitude</b>	<b>Receiving Water</b>
001	Treated Municipal Wastewater	40° 6' 17" N	123° 48' 1" W	Upland Percolation Ponds

IT IS HEREBY ORDERED, that Order No. R1-2000-0058 is rescinded upon the effective date of this Order except for enforcement purposes, and, in order to meet the provisions contained in division 7 of the Water Code (commencing with section 13000) and regulations adopted thereunder, the Discharger shall comply with the requirements in this Order.

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, on November, 3, 2011.

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Catherine Kuhlman, Executive Officer

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## I. FACILITY INFORMATION

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

**Table 3. Facility Information**

<b>Discharger</b>	Garberville Sanitary District
<b>Name of Facility</b>	Garberville Sanitary District Wastewater Treatment Facility
<b>Facility Address</b>	410 Bear Canyon Road
	Garberville, CA
	Humboldt County
<b>Facility Contact, Title, and Phone</b>	Mark Bryant, General Manager, (707) 923-9566
<b>Mailing Address</b>	P.O. Box 211, Garberville, CA 95542
<b>Type of Facility</b>	Publicly Owned Treatment Works (POTW)
<b>Facility Design Flow</b>	0.162 million gallons per day (mgd) Average Dry Weather Flow (ADWF) 0.235 mgd Average Wet Weather Flow Treatment Capacity (AWWF)

## II. FINDINGS

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

**A. Background.** The Garberville Sanitary District (hereinafter Discharger) is currently discharging pursuant to Waste Discharge Requirements Order No. R1-2000-0058. The Discharger submitted a Report of Waste Discharge (ROWD), dated April 14, 2010, and applied for renewal of waste discharge requirements to discharge up to 0.162 mgd ADWF of treated wastewater from the Garberville Sanitary District Wastewater Treatment Facility (WWTF), hereinafter Facility. The Discharger submitted additional information to complete the ROWD in August 9, 2010.

**B. Facility Description.** The Recent upgrades to the WWTF provide additional treatment capacity at the facility. The upgrades include the addition of a new primary pond (pond one), modifications to flow through existing waste stabilization ponds two and three, and conversion of additional existing ponds into a series of four wetland treatment cells. Improvements to the disinfection system include a hypochlorite generation and injection system.

Wastewater treatment is achieved through settling, absorption, aerobic and anaerobic bacterial actions, and other biogeochemical processes. Emergent vegetation planted in the wetland treatment cells provide increased removal efficiency for total suspended solids (TSS), biochemical oxygen demand (BOD),

and total nitrogen (TN), among other pollutants. The WWTF is designed to treat an average dry weather flow up to 165,000 gallons per day (gpd), and wet weather peak flows up to 600,000 gpd. The hydraulic residence time (HRT) of the three ponds under average dry weather flow is 42 days, and the HRT under average wet weather flow is 29 days.

Ponds one (P1) and three (P3) will operate at a depth of 6 to 7 feet with the exception of a deeper inlet sedimentation/anaerobic stabilization Zone in P1. Pond 2 (existing pond one) is deeper and will operate at a depth of 8.5 feet. Physical treatment occurs in the inlet zone of P1, where influent settleable solids and suspended solids with associated BOD are removed by settling processes. Raw sewage will enter P1 at the bottom of the sedimentation zone, which is approximately 15 feet deep.

The outlet weirs for the primary, secondary, and tertiary ponds are designed to capture the flow equally normal to the direction of the flow at the effluent end of the ponds. The inlet pipes for the secondary and tertiary pond will be a manifold to insure equal distribution of influent volume entering the width of the cells. The system is designed so that any one pond can be taken out of service for maintenance without interrupting the treatment process. The ponds have approximately 5.1 acre-feet of storage above the normal operating depth, providing 10 days of storage at average dry weather flow rates and 7 days of storage under wet weather flow rates.

The constructed wetlands consist of four wetland cells (W1, W2, W3, and W4). Similar to the stabilizations ponds, the treatment wetlands are operated in a series with the capability of bypassing any cell for operational and management purposes. A series of weir control structures allow independent operation of each wetland cell, and control the flow between cells. The constructed wetlands provide treatment through settling, absorption, aerobic and anaerobic bacterial action, and other biogeochemical processes. The wetland cells have an operating depth of 2 feet in the emergent zones and provide for 9 days of emergency storage in average dry weather conditions, and 7 days at average wet weather conditions. The wetlands are planted with emergent vegetations (*Scirpus* spp.). Any open water sections of the wetlands will be dominated by duckweed (*Lemna* spp.). Emergent vegetation will allow for the final removal of Total Suspended Solids (TSS), Biochemical Oxygen Demand (BOD), and Total Nitrogen (TN).

After exiting the wetland treatment cells, treated effluent enters a concrete vault for disinfection. Here water passes through a V notch and is dosed with Sodium Hypochlorite from a Clor Tec On-site System. The WWTF also has a bulk hypochlorite dilution panel for emergency services. Contact time occurs as the water passes through two 140 linear feet of 24-inch pipes and then enters the

percolation ponds. The hypochlorite dose is injected automatically based on the flow into the vault.

Disinfected effluent is discharged at Discharge Point 001 year round to percolation ponds, which have a combined area of 0.74 acres. The percolation ponds are built on top of a gravel deposit located 500 feet west of the open low-water channel of the South Fork Eel River. Hydrogeologic Study of the WWTF disposal concluded that the percolation ponds are located on an uplifted fluvial terrace sequence and the lower terrace is in hydraulic connection with the South Fork Eel River. The terrace deposits consist of moderately permeable sand and gravel fluvial deposits with groundwater flow velocities ranging from 4 feet per day to over 60 feet per day. The hydrogeologic study suggests that once the wetland treatment cells mature, effluent concentrations will attenuate to background prior to reaching the river.

Attachment A provides a map of the area around the WWTF. Attachment B provides a flow schematic of the WWTF.

**C. Legal Authorities.** This Order serves as Waste Discharge Requirements (WDRs) for discharges to land issued pursuant to section 13263 of the California Water Code (Water Code). As required by Water Code section 13263(a), these WDRs are crafted to implement the Water Quality Control Plan for the North Coast Region (Basin Plan), and in so doing, the Regional Water Board has taken into consideration the beneficial uses to be protected, the water quality objectives reasonably required for that purpose, other (including previous) waste discharges, the need to prevent nuisance, and the provisions of Water Code section 13241. The Basin Plan contains implementation plans and policies for protecting waters of the basin. 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, beneficial uses applicable to area groundwater within the Benbow Hydrologic Subarea of the South Fork Eel River Hydrologic Area to be protected are as follows:

1. Municipal and Domestic Supply (MUN)
2. Industrial Water Supply (IND)
3. Industrial Process Water Supply (PRO)
4. Agricultural Water Supply (AGR)
5. Freshwater Replenishment to Surface Waters (FRSH)

**D. California Code of Regulations.** The discharge authorized herein and the treatment and storage facilities associated with the discharge are exempt from the requirements of title 27, California Code of Regulations, section 20005 et

seq. The exemption, pursuant to section 20090(b) of title 27, allows for the exemption of discharges of wastewater if;

1. The applicable Regional Board has issued WDRs,
2. The discharge is in compliance with the applicable water quality control plan (Basin Plan) and
3. The wastewater does not need to be managed as a hazardous waste.

**E. California Environmental Quality Act (CEQA).** Waste discharges to land covered under this permit are subject to CEQA requirements. On October 6, 2006, the Regional Water Board received a copy of a mitigated negative declaration prepared and certified by the Garberville Sanitary District on September 12, 2005, to satisfy the requirements of the California Environmental Quality Act (Pub. Resources Code section 21000 et. seq.) (SCH No. 2005062051). The negative declaration evaluated the impacts of the discharge of treated wastewater to groundwater quality. No mitigation measures related to the wastewater treatment and disposal system were required for this project. Acting as a responsible agency, the Regional Water Board has considered the negative declaration as required under title 14, California Code of Regulations, section 15096.

The Regional Water Board will file a notice of determination in accordance with title 14, California Code of Regulations, section 15096(i) within five days from the issuance of this Order.

**F. Antidegradation Policy.** The State Water Board established California's antidegradation policy in State Water Board Resolution No. 68-16. 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, the State antidegradation policy. The permitted discharge is consistent with the provisions of State Water Board Resolution No. 68-16, Statement of Policy with Respect to Maintaining High Quality of Waters in California.

The treatment capacity of the existing WWTF has been increased by providing additional treatment area in the form of a new primary pond and incorporation of enhanced treatment through the addition of wetland cells. In combination, the addition of these new treatment features is anticipated to reduce BOD loading from a monthly average 25 lbs/day to 20 lbs/day; resulting in an overall benefit to water quality from the existing condition. Total suspended solids concentrations at or below 200 mg/l are well below the applicable water quality objective of 450 mg/l. Neither total nitrogen nor other forms of nitrogen exceed an applicable water quality objective. Similar to BOD, total nitrogen entering groundwater is expected to reduce over time as the wetland treatment cells mature. Final effluent limitations for total nitrogen will take effect after a three

year maturation period to ensure protection of groundwater and compliance with the Basin Plan.

Bis(2-ethylhexyl)phthalate (CAS Number 117-81-7) is one of several common names for 1,2-Benzenedicarboxylic acid, bis(2-ethylhexyl) ester, Di (2-ethylhexyl)phthalate and DEHP. The DEHP water quality objective for the protection of drinking water is 4 ug/L. DEHP has been reported up to 14 ug/L in the Garberville WWTF effluent.

DEHP is common in the environment because of its use in plastics like PVC. Sampling and laboratory equipment, piping, and monitoring wells, may contain or be constructed of plastics. In addition to its use in plastics, DEHP is also used in inks, adhesives, coatings, pesticides, cosmetics, vacuum pump oil and as a dielectric fluid in ballast capacitors and other electrical equipment (e.g., transformers). Because of its wide use, sampling procedures or field conditions are sometimes identified as contamination sources, resulting in a false positive result for this pollutant. At this time, due to a limited data set, it is unclear if the detection of DEHP in the Garberville effluent is an artifact of the sampling and analysis procedures (a false exceedance). However, given the prevalence of DEHP in the environment and the high potential for contaminating samples, the source of DEHP in effluent sampling from the Garberville WWTF cannot be dismissed automatically as sampling or laboratory error.

DEHP evaporates slowly into the air. In the environment, DEHP will attach strongly to soil particles or humic material and may biodegrade under aerobic conditions (e.g. in percolation ponds). Natural evaporation and sorption processes occurring in the percolation ponds may result in additional removal of DEHP, thereby protecting groundwater resources beneath the point of discharge.

Attachment C of this Order requires ongoing groundwater monitoring for DEHP and nitrogen to further ensure that concentrations of these pollutants will not adversely impact beneficial uses.

The permitted discharge is consistent with the provisions of State Water Resources Control Board Resolution No. 68-16, Statement of Policy with Respect to Maintaining High Quality of Waters in California. This Order provides for an increased discharge from an ADWF of 60,000 gpd to 162,000 containing a volume and mass of pollutants (BOD, total suspended solids, Bis(2-ethylhexyl)phthalate, and total nitrogen) that may ultimately enter groundwater underlying the site. Compliance with this Order will therefore allow some degradation of groundwater quality, but will ensure that the discharge will not cause a violation of water quality objectives.

This Order is consistent with the maximum benefit to people of the State because: (i) allows expansion of an undersized, underperforming wastewater treatment system; (ii) monitors groundwater impacts from disposal of treated wastewater; and (iii) accommodates planned housing and economic expansion in the Garberville area. Compliance with these requirements mandates the use of enhanced treatment technology for BOD, TSS, and nitrogen, which constitute best practicable treatment or control of the discharge.

- G. 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). The Discharger is responsible for meeting all requirements of the applicable Endangered Species Act.
- H. Monitoring and Reporting.** Water Code sections 13267 and 13383 authorize 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 C. The Executive Officer of the Regional Water Board is delegated the authority to modify the Monitoring and Reporting Program, as determined appropriate to protect water quality.
- I. 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.
- J. Consideration of Public Comment.** The Regional Water Board, in a public meeting, heard and considered all comments pertaining to the discharge.

### 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 section 13050 of the Water Code is prohibited.
- C.** The discharge of untreated or partially treated waste (receiving a lower level of treatment than described in Finding II.B) from anywhere within the collection, treatment, or disposal system is prohibited.

- D.** Any sanitary sewer overflow (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.
- E.** The discharge of waste to land that is not owned by or under agreement to use by the Discharger is prohibited, except for use for fire suppression as provided in title 22, sections 60307 (a) and (b) of the California Code of Regulations.
- F.** The discharge of waste at any point not described in Finding II.B or authorized by a permit issued by the State Water Board or another Regional Water Board is prohibited.
- G.** The discharge of waste to the South Fork Eel River and its tributaries is prohibited.
- H.** The mean daily dry weather flow of waste through the treatment plant shall not exceed 0.162 mgd. The average wet weather flow of waste through the treatment plant shall not exceed 0.235 mgd. Compliance with this prohibition shall be measured continuously at Monitoring Location EFF-001, calculated daily and averaged over a calendar month.

#### **IV. EFFLUENT LIMITATIONS**

##### **A. Final Effluent Limitations – Discharge Point 001**

Final effluent limitations will become effective approximately three years from the adoption of this Order to allow for maturation of the treatment wetlands. As of November 1, 2014, the Discharger shall maintain compliance with the following effluent limitations at Discharge Point 001, with compliance measured at Monitoring Location EFF-001 as described in the Monitoring and Reporting Program.

**Table 4. Final Effluent Limitations – Discharge Point 001**

Parameter	Units	Effluent Limitations				
		Average Monthly <sup>1</sup>	Average Weekly	Maximum Daily	Instantaneous Minimum	Instantaneous Maximum
Biochemical Oxygen Demand (5-day @ 20°C)	mg/L	15	--	30	--	--
Total Suspended Solids	mg/L	15	--	30	--	--
pH	std units	--	--	--	6.0	9.0
Settleable Solids	ml/L	0.1	--	0.2	--	--
Total Coliform Organisms	MPN/100 mL	23 <sup>2</sup>	--	240	--	--
Total Nitrogen <sup>3</sup>	mg/L	44	--	--	--	--

**B. Interim Effluent Limitations – Discharge Point 001**

Interim effluent limitations shall be effective until October 31, 2014. Based on the current performance of the WWTF<sup>4</sup>, representative samples of treated wastewater collected at Monitoring Location M-001 shall not contain constituents in excess of the following limits:

**Table 5. Interim Effluent Limitations – Discharge Point 001**

Parameter	Units	Effluent Limitations				
		Average Monthly <sup>1</sup>	Average Weekly	Maximum Daily	Instantaneous Minimum	Instantaneous Maximum
Biochemical Oxygen Demand (5-day @ 20°C)	mg/L	48	--	78	--	--
Total Suspended Solids	mg/L	41	--	67	--	--
pH	std units	--	--	--	6.0	9.0
Settleable Solids	ml/L	0.1	--	0.2	--	--

<sup>1</sup> The arithmetic mean of all samples collected in a calendar month, calculated as the sum of all samples in a calendar month divided by the number of samples. If only one sample is collected in a calendar month, that sample result will constitute the monthly average and daily maximum results for the purpose of determining compliance with effluent limitations.

<sup>2</sup> Median

<sup>3</sup> Total Nitrogen is the sum of ammonia-nitrogen, nitrate-nitrogen, nitrite-nitrogen, and organic nitrogen.

<sup>4</sup> Current performance was determined based upon the 95<sup>th</sup> percentile of analytical results reported since one month after WWTF upgrades went online (February 2010 through July 2011).

**Table 5. Interim Effluent Limitations – Discharge Point 001**

Parameter	Units	Effluent Limitations				
		Average Monthly <sup>1</sup>	Average Weekly	Maximum Daily	Instantaneous Minimum	Instantaneous Maximum
Total Coliform Organisms	MPN/100 mL	23 <sup>2</sup>	--	240	--	--

**V. DISCHARGE SPECIFICATIONS**

- A. Disinfection Process** Requirements for Chlorination System. A minimum chlorine residual of 1.5 mg/L shall be maintained at the end of the disinfection process.
- B. Objectionable Odor.** Objectionable odor originating at the facility shall not be perceivable beyond the limits of the wastewater treatment and disposal areas.
- C. Public Contact.** Public contact with wastewater shall be precluded or controlled through such means as fences and signs, or other acceptable alternatives.
- D. Freeboard.** Freeboard in the wastewater treatment or storage ponds shall never be less than two feet as measured vertically from the water surface to the lowest point of overflow.
- E. Vector Control.** The WWTF and effluent disposal areas shall be managed to prevent the breeding of mosquitoes.

**VI. RECEIVING WATER LIMITATIONS**

**A. Groundwater Limitations**

1. The collection, storage, and use of wastewater or recycled water shall not cause or contribute to a statistically significant degradation of groundwater quality.
2. The collection, storage, and use of wastewater or recycled water shall not cause alterations in groundwater that result in contaminant concentrations that cause nuisance or adversely affect beneficial uses.
3. The collection, treatment, storage, and/or use of wastewater or recycled water shall not cause alterations of groundwater that result in chemical concentrations in excess of limits specified in Cal. Code of Regs, title 22 section 64435 Tables 2 and 3, limits specified in title 22 section 64444.5, or the Basin Plan. Wastewater collection, treatment, storage, or use shall not

result in taste- or odor-producing substances in concentrations that cause nuisance or adversely affect beneficial uses.

## VII. GENERAL PROVISIONS

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. The Discharger shall comply with the following provisions:

- A. Availability.** A copy of this Order and the associated Monitoring and Reporting Program shall be maintained at the WWTF and be available at all times to operating personnel.
- B. Enforcement.** The Discharger shall implement the project as described in this Order. Violation of any requirements contained in this Order subject the Discharger to enforcement action, including civil liability, under the Water Code.
- C. Severability.** Provisions of these waste discharge requirements are severable. If any provision of these requirements is found invalid, the remainder of these requirements shall not be affected.
- D. Sanitary Sewer Overflows.** 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. In addition to compliance with Statewide General WDRs for Sanitary Sewer Systems, the Discharger shall comply with the following:
  - 1. 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.

2. 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.

**E. Operation and Maintenance.** 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 control 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.

The Discharger shall maintain an updated Operation and Maintenance Manual (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 WWTF. The O&M Manual shall be readily available to operating personnel on-site. The O&M Manual shall include the following:

1. A Description of the WWTF 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.
2. A Detailed description of safe and effective operation and maintenance of treatment processes, process control instrumentation, and equipment.
3. A Description of laboratory and quality assurance procedures.
4. All Process and equipment inspection and maintenance schedules.
5. 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.
6. A 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.

- F. Change in Discharge.** The Discharger shall promptly report to the Regional Water Board any material change in the character, location, or volume of the discharge. New ponds associated with the treatment and or storage of wastewater or treated effluent 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.
- G. Change in Ownership.** In the event of any change in control or ownership of land or waste discharge facilities presently owned or controlled by the Discharger, the Discharger shall notify the succeeding owner or operator of existence of this Order, and the status of the Dischargers' annual fee account; a copy of which shall be forwarded to the Regional Water Board.
- H. Vested Rights.** This Order does not convey any property rights of any sort or any exclusive privileges. The requirements prescribed herein do not authorize the commission of any act causing injury to persons or property, nor protect the Discharger from liability under federal, state, or local laws, nor create a vested right for the Discharger to continue the waste discharge.
- I. Monitoring.** The Discharger shall comply with the Monitoring and Reporting Program and any modifications to these documents as specified by the Regional Water Board Executive Officer. Chemical, bacteriological, and bioassay analyses shall be conducted at a laboratory certified for such analyses by the State Department of Public Health shall conform to State Department of Public Health guidelines. The Discharger shall comply with the MRP and future revisions thereto, in Attachment C of this Order.
- J. Records Retention.** The Discharger shall maintain records of all monitoring information, including calibration and maintenance records and all strip charts 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
- K. Signatory Requirements.** All Report of Waste Discharge applications submitted to the Regional Water Board shall be signed by a principal Executive Officer, ranking elected official, or responsible corporate officer.
1. For purposes of this provision, a responsible corporate officer means:

- a. A president, secretary, treasurer, or vice president of the corporation in charge of a principal business function, or any other person who performs similar policy or decision making functions for the corporation; or
  - b. The manager of one or more manufacturing, production, or operating facilities employing more than 250 persons or having gross annual sales or expenditures exceeding \$25 million (in second quarter 1980 dollars), if authority to sign documents has been assigned or delegated to the manager in accordance with corporate procedures.
2. Reports required by this Order and other information requested by the Regional Water Board may be signed by a duly authorized representative provided:
  - a. The authorization is made in writing by a person described in paragraph (a) of this provision;
  - 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 entity; and
  - c. The written authorization is submitted to the Regional Water Board prior to or together with any reports, information, or applications signed by the authorized representative.
3. Any person signing a document under paragraph (a) or (b) of this provision 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."*

- L. Inspections.** Discharger shall permit authorized staff of the Regional Water Board the following:

1. Entrance to the premises in which treatment, collection or management of waste occurs, where an effluent source is located or in which any records required by this Order are kept;
2. Access to inspect and copy any monitoring equipment or records required for compliance with terms and conditions of this Order; and
3. Access to sample any discharge or monitoring location associated with the WWTF.

**M. Noncompliance.** In the event the Discharger is unable to comply with any of the conditions of this Order due to breakdown of waste treatment equipment, accidents caused by human error or negligence, or other causes such as acts of nature, the Discharger shall notify the Regional Water Board Executive Officer by telephone as soon as it or its agents have knowledge of the incident and confirm this notification in writing within five (5) business days of the telephone notification. The written notification shall include pertinent information explaining reasons for the noncompliance and shall indicate the steps taken to correct the problem and the dates thereof, and the steps being taken to prevent the problem from recurring.

**N. Revision of Requirements.** The Regional Water Board will review this Order periodically and may revise requirements when necessary.

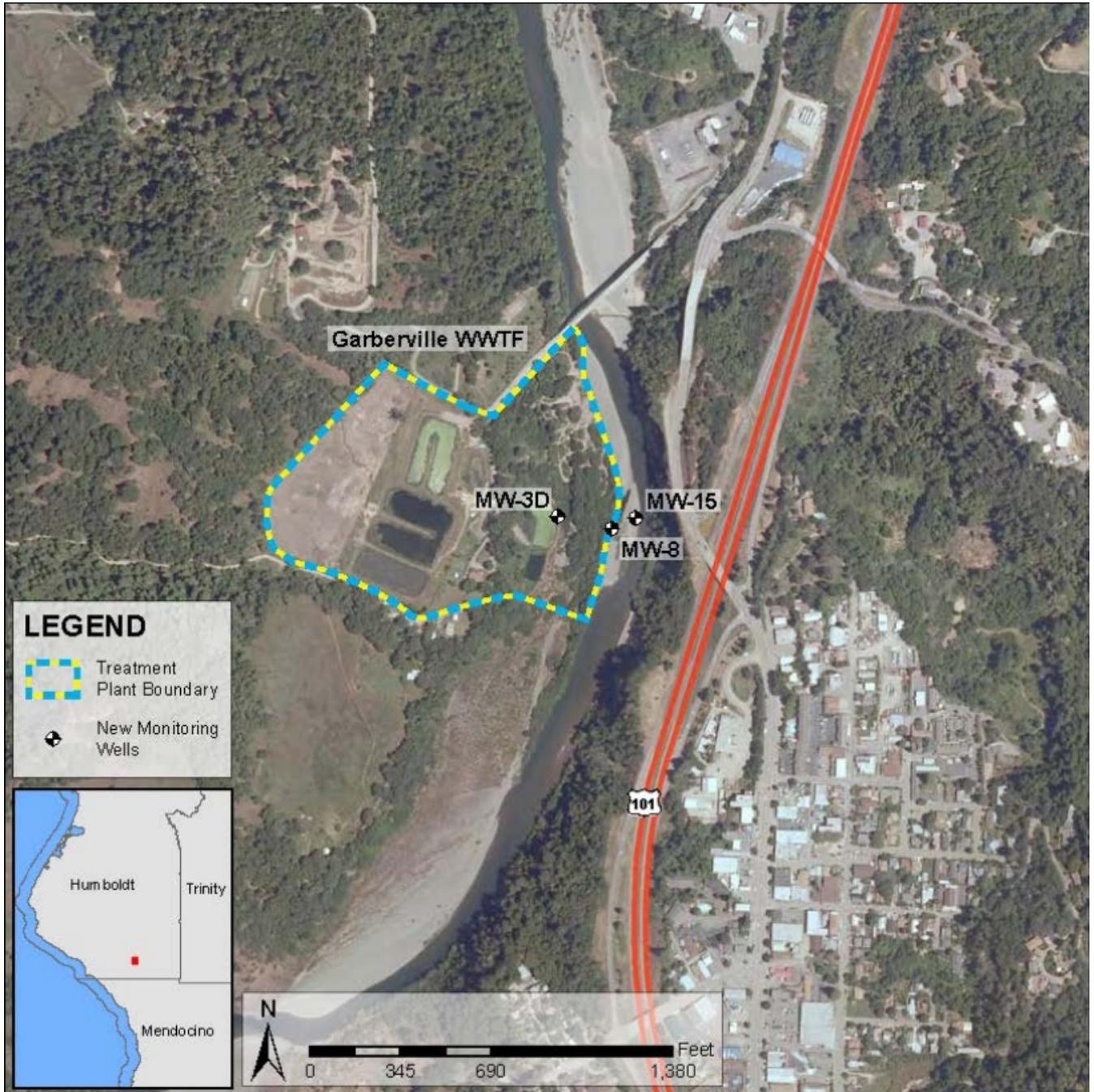
**O. Operator Certification.** Supervisors and operators of wastewater treatment plants shall possess a certificate of appropriate grade in accordance with title 23, California Code of Regulations, section 3680. The State Water Board may accept experience in lieu of qualification training. In lieu of a properly certified wastewater treatment plant operator, the State Water Board may approve use of a water treatment plant operator of appropriate grade certified by the State Department of Health Services where water reclamation is involved.

**P. 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 WWTF will reach capacity within 4 years. The time for filing the required

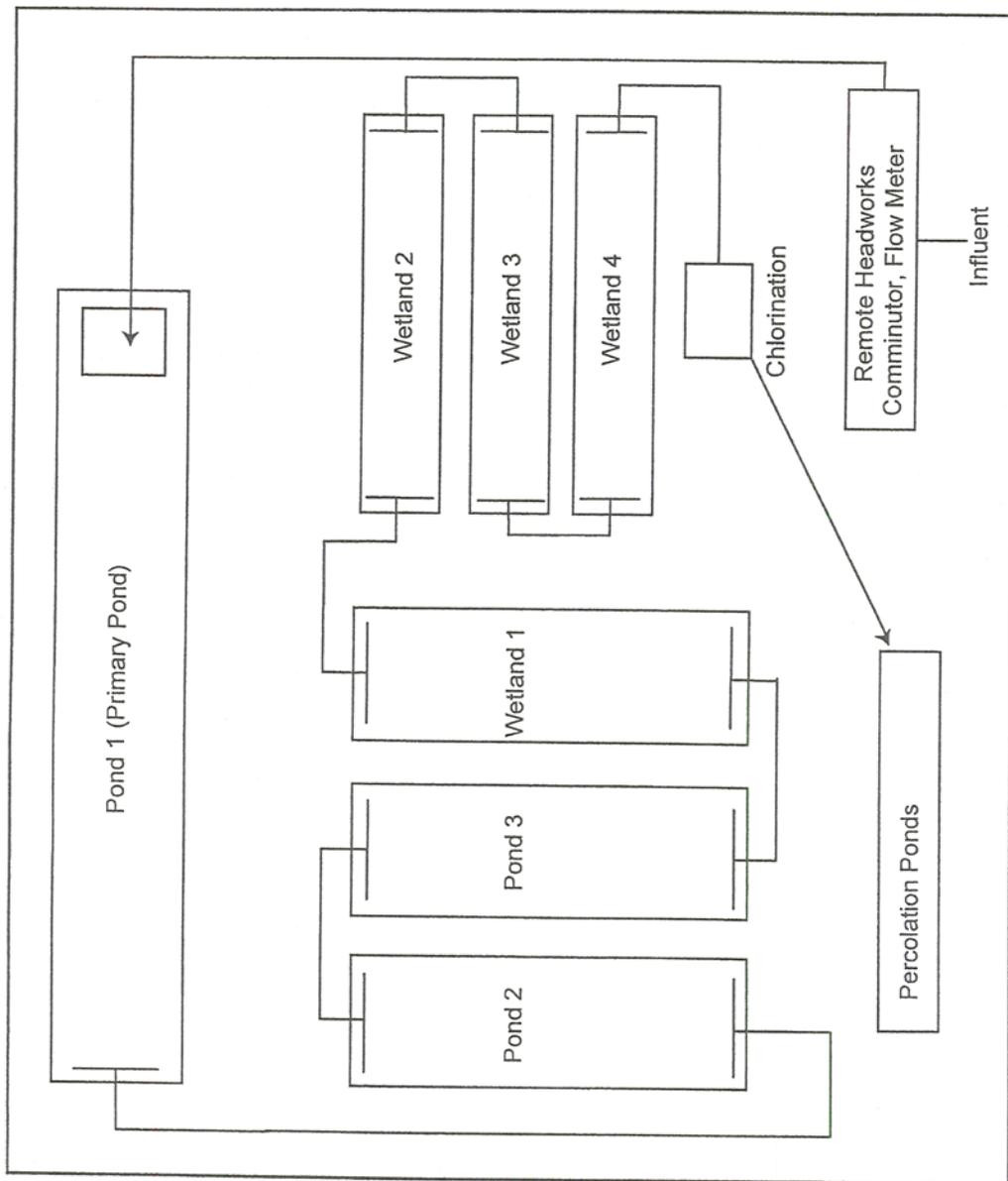
technical report may be extended by the Regional Water Board. An extension of 30 days may be granted by the Executive Officer, and longer extensions may be granted by the Regional Water Board itself (title 23, Cal. Code of Regs., section 2232).

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**ATTACHMENT A – MAP**



**ATTACHMENT B – FLOW SCHEMATIC**



## ATTACHMENT C – MONITORING AND REPORTING PROGRAM

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## ATTACHMENT C – MONITORING AND REPORTING PROGRAM (MRP)

California Water Code sections 13267 and 13383 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 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 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 self monitoring reports.
- C. Laboratories analyzing monitoring samples shall be certified by the California Department of Public Health (DPH; formerly the Department of Health Services), in accordance with the provision of Water Code section 13176, and must include quality assurance/quality control data with their reports.

Compliance and reasonable potential monitoring analyses shall be conducted using commercially available and reasonably achievable detection limits that are lower than the applicable effluent limitation. If no minimum level (ML) value is below the effluent limitation, the lowest ML shall be selected as the reporting level (RL).

### II. MONITORING LOCATIONS

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

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

Discharge Point Name	Monitoring Location Name	Monitoring Location Description
--	INT-001	Internal monitoring location for purposes of monitoring chlorine residual in treated wastewater within the contact chamber.

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

Discharge Point Name	Monitoring Location Name	Monitoring Location Description
001	EFF-001	Treated effluent from the WWTF downstream of completed disinfection.
--	MW-3D <sup>1</sup>	Monitoring well, located within east berm of the northern percolation pond.
--	MW-8 <sup>1</sup>	Monitoring well, located east of percolation ponds.
--	MW-15 <sup>1</sup>	Monitoring well, located east of percolation ponds.

### III. EFFLUENT MONITORING REQUIREMENTS

#### A. Monitoring Location EFF-001

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

**Table C-2. Effluent Monitoring – Monitoring Location EFF-001**

Parameter	Units	Sample Type	Minimum Sampling Frequency
Flow (Mean Daily)	mgd	Meter	Continuous
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
Nitrogen, Total (as N)	mg/L	Grab	Monthly
Title 22 Pollutants <sup>2</sup>	µg/L	Grab	1x / 3 Years

<sup>1</sup> If a replacement MW is needed, it must be installed in a manner mimicking the MW with the same identification designation as that reported in the August 2009 Hydrogeologic Study.

<sup>2</sup> 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

#### IV. RECEIVING WATER MONITORING REQUIREMENTS

##### A. Groundwater Monitoring

The Discharger shall monitor groundwater at Monitoring Well Locations MW-3D, MW-8, and MW-15 as follows:

**Table C-3. Groundwater Monitoring – Monitoring Wells**

Parameter	Units	Sample Type	Minimum Sampling Frequency
Depth to Groundwater	0.01 feet	Grab	2x / Year
Nitrogen, Total (as N)	mg/L	Grab	2x / Year
Title 22 Pollutants <sup>3</sup>	µg/L	Grab	1x / 3 Years

#### V. OTHER MONITORING REQUIREMENTS

##### A. Monitoring Location INT-001

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

**Table C-4. Internal Monitoring Requirements – Monitoring Location INT-001**

Parameter	Units	Sample Type	Minimum Sampling Frequency
Chlorine, Total Residual <sup>4</sup>	mg/L	Grab	Daily

#### VI. REPORTING REQUIREMENTS

##### A. Self Monitoring Reports (SMRs)

- 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 to the Regional Water

<sup>3</sup> 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

<sup>4</sup> Analysis shall be performed with a properly calibrated meter.

Board. The CIWQS Web site will provide additional directions for SMR submittal in the event of a service interruption for electronic submittal.

2. The Discharger shall submit monthly SMRs including the results for all monitoring specified in this MRP. If the Discharger monitors any pollutant more frequently than required by this Order, the results of this monitoring shall be included in the calculations and reporting of the data submitted in the SMR.
3. All monitoring results shall include complete laboratory data sheets for each analysis and be submitted in conjunction with the monthly SMR on the first day of the second month following sample collection. Annual summary reports shall be submitted by March 1<sup>st</sup> each year.
4. Monitoring periods for all required monitoring shall be completed according to the following schedule:

**Table C-5. Monitoring Periods and Reporting Schedule**

Sampling Frequency	Monitoring Period Begins On	Monitoring Period
Continuous	November 1, 2011	All
Daily	November 1, 2011	(Midnight through 11:59 PM) or any 24-hour period that reasonably represents a calendar day for purposes of sampling.
Monthly	November 1, 2011	1 <sup>st</sup> day of calendar month through last day of calendar month
2X / Year	November 1, 2011	June and November
Annually	November 1, 2011	January 1 through December 31
1x / 3 Years	November 1, 2011	January 1 through December 31

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

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

- a. Sample results greater than or equal to the reported ML shall be reported as measured by the laboratory (i.e., the measured chemical concentration in the sample).
- b. Sample results less than the RL, but greater than or equal to the laboratory's MDL, shall be reported as "Detected, but Not Quantified," or

DNQ. The estimated chemical concentration of the sample shall also be reported.

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

- c. Sample results less than the laboratory's MDL shall be reported as "Not Detected," or ND.
  - d. Dischargers are to instruct laboratories to establish calibration standards so that the ML value (or its equivalent if there is differential treatment of samples relative to calibration standards) is the lowest calibration standard. At no time is the Discharger to use analytical data derived from extrapolation beyond the lowest point of the calibration curve.
- 6. Self Monitoring Reports.** The Discharger shall submit self monitoring reports (SMRs) in accordance with the following requirements:
- a. The Discharger shall arrange all reported data in a tabular format. The data shall be summarized to clearly illustrate whether the facility is operating in compliance with interim and/or final effluent limitations. The Discharger is not required to duplicate the submittal of data that is entered in a tabular format within CIWQS. When electronic submittal of data is required and CIWQS does not provide for entry into a tabular format within the system, the Discharger shall electronically submit the data in a tabular format as an attachment.
  - b. The Discharger shall attach a cover letter to the SMR. The information contained in the cover letter shall clearly identify:
    - i. Facility name and address;
    - ii. WDID number;
    - iii. Applicable period of monitoring and reporting;
    - iv. Violations of the WDRs (identified violations must include a description of the requirement that was violated and a description of the violation);
    - v. Corrective actions taken or planned; and

- vi. The proposed time schedule for corrective actions.
- c. SMRs must be submitted to the Regional Water Board, signed and certified as required by the General Provisions, to the address listed below:

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

## **B. 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 1<sup>st</sup> of the following year. The report shall, at a minimum, include the following:
  - a. **Monitoring Data Summaries.** Both tabular and, where appropriate, graphical summaries of the monitoring data and disposal records from the previous year. If the Discharger monitors any pollutant more frequently than required by this Order, using test procedures approved under section Part 136 or as specified in this Order, the results of this monitoring shall be included in the calculation and report of the data submitted in the SMR.
  - b. **Compliance Reporting.** A comprehensive discussion of the Facility's compliance (or lack thereof) with all effluent limitations and other WDRs, and the corrective actions taken or planned, which may be needed to bring the discharge into full compliance with the Order.
  - c. **Sanitary Sewer System Reporting.** The Discharger shall submit, as part of its annual report to the Regional Water Board, a description of the Discharger's activities within the sanitary sewer system over the previous calendar year. The report shall contain:
    - i. A description of any change in the local legal authorities enacted to implement the Sewer System Management Plan (SSMP).
    - ii. A summary of the SSOs that occurred in the past year. The summary shall include the date, location of overflow point, affected receiving water (if any), estimated volume, and cause of the SSO, and the names and addresses of the responsible parties as well as the names and addresses of the property owner(s) affected by the SSO.

- iii. A summary of compliance and enforcement activities during the past year. The summary shall include fines, other penalties, or corrective actions taken as a result of the SSO. The summary shall also include a description of public participation activities to involve and inform the public.
- iv. Documentation that all feasible steps to stop and mitigate impacts of SSOs have been taken.

### C. Spills and Overflows Notification

- 1. All spills, unauthorized discharges, and SSOs equal to or in excess of 1,000 gallons or any size spill or SSO that results in a discharge to a drainage channel or a surface water:
  - a. As soon as possible, **but not later than two (2) hours** after becoming aware of the discharge, the Discharger shall notify the California Emergency Management Agency (Cal EMA), the local health officer or directors of environmental health with jurisdiction over affected water bodies or land areas, and the Regional Water Board.<sup>5</sup>

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

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

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<sup>5</sup> The contact number for spill reporting for Cal EMA is (800) 852-7550. The contact number of the Regional Water Board during normal business hours is (707) 576-2220. After normal business hours, spill reporting to OES will satisfy the 2 hour notification requirement for the Regional Water Board.

number and, for the local health department, name of local health staff, department name, phone number and date and time contacted.

- c. 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.

  - i.** Information provided in the verbal notification;
  - ii.** Other agencies notified by telephone;
  - iii.** Detailed description of cleanup actions and repairs taken; and
  - iv.** Description of actions that will be taken to minimize or prevent future spills.
- d.** 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.
- 2.** 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.

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