

North Coast Regional Water Quality Control Board

**ORDER No. R1-2012-0050**  
**WDID No. 1B811290HUM**

**WASTE DISCHARGE REQUIREMENTS  
FOR THE CITY OF BLUE LAKE  
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>	The City of Blue Lake
<b>Name of Facility</b>	The City of Blue Lake Wastewater Treatment Facility
<b>Facility Address</b>	Chartin Road and Rancheria Road
	Blue Lake, CA 95525

The discharge by the City of Blue Lake 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° 53' 13" N	124° 0' 13" W	Percolation Ponds

IT IS HEREBY ORDERED, that Order No. 94-28 is rescinded upon the effective date of this Order except for enforcement purposes, and, in order to meet the provisions contained in division 7 of the Water Code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, Matthias St. John, 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 June 7, 2012.

Matthias St. John, Executive Officer

### Table of Contents

I.	Facility Information .....	3
II.	Findings.....	3
III.	Discharge Prohibitions .....	4
IV.	Effluent Limitations.....	5
V.	Discharge Specifications.....	5
VI.	Solids Discharge Specifications .....	6
VII.	Receiving Water Limitations.....	7
VIII.	General Provisions.....	8
IX.	Compliance Determination .....	13

### List of Tables

Table 1.	Discharger Information.....	1
Table 2.	Discharge Location .....	1
Table 3.	Facility Information .....	3
Table 4.	Final Effluent Limitations – Discharge Point 001 .....	5

### List of Attachments

Attachment A – Facility Map.....	A-1
Attachment B – Flow Schematic .....	B-1
Attachment C – Monitoring and Reporting Program.....	C-1
Attachment D – Fact Sheet .....	D-1

## 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>	The City of Blue Lake
<b>Name of Facility</b>	The City of Blue Lake Wastewater Treatment Facility
<b>Facility Address</b>	Chartin Road and Rancheria Road
	Blue Lake, CA 95525
	Humboldt County
<b>Facility Contact, Title, and Phone</b>	John Berchtold, City Manager, (707) 668-5655
<b>Mailing Address</b>	P.O. Box 458, Blue Lake, CA 95525
<b>Type of Facility</b>	Publicly Owned Treatment Works (POTW)
<b>Facility Design Flow</b>	0.18 million gallons per day (mgd) Average Dry Weather Flow (ADWF)

## II. FINDINGS

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

- A. Basis and Rationale for Requirements.** The Regional Water Board developed the requirements in this Order based on information submitted as part of the Discharger's application for permit renewal, monitoring data submitted during the term of the Discharger's previous Order, and other available information. The Fact Sheet (Attachment D) contains facility information, legal authorities, and rationale for Order requirements. The Fact Sheet is hereby incorporated into this Order and constitutes part of the Findings for this Order. Attachments A through C are also incorporated into this Order.
- B. Background and Facility Description.** The City of Blue Lake (hereinafter Discharger) is currently discharging pursuant to Waste Discharge Requirements Order No. 94-28. The Discharger submitted a Report of Waste Discharge (ROWD), dated September 29, 2009, and applied for renewal of waste discharge requirements to discharge up to 0.18 mgd of treated wastewater from the City of Blue Lake Wastewater Treatment Facility (WWTF), hereinafter Facility. Additional background information, including a description of the existing and proposed Facility, is included in the Fact Sheet.

- C. California Environmental Quality Act (CEQA).** Waste discharges to land covered under this permit are subject to CEQA requirements. The discharges covered under this permit are exempt as an existing facility.
- D. 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.
- E. 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 Attachment D, I.C) 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 Table 2 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 Mad River and its tributaries is prohibited.
- H.** The average daily dry weather flow of waste through the treatment plant shall not exceed 0.18 mgd. Compliance with this prohibition shall be measured continuously at Monitoring Location EFF-001, calculated daily and averaged over a calendar month.

- I. Discharges of waste that violate any narrative or numerical water quality objective that are not authorized by waste discharge requirements or other order or action by the Regional or State Water Board are prohibited.

#### IV. EFFLUENT LIMITATIONS

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

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	50	--	80	--	--
Total Suspended Solids	mg/L	50	--	80	--	--
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>	--	230	--	--

#### 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.

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<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

**D. Pond Freeboard.** Pond 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. SOLIDS DISCHARGE SPECIFICATIONS**

### **A. Sludge Storage, Disposal, and Handling Requirements**

1. Sludge, as used in this Order, 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.
2. 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.
3. Sludge or biosolids that are disposed of in a municipal solid waste landfill or used as daily landfill cover shall meet the applicable requirements of 40 CFR 258. In the annual self-monitoring report, the Discharger shall report the amount of sludge placed in a landfill and the landfill(s) which received the sludge or biosolids.
4. The Discharger shall take all reasonable steps to prevent and minimize any sludge use or disposal in violation of this Order that may adversely affect human health or the environment.
5. Solids and sludge treatment, storage, and disposal or reuse shall not create a nuisance, such as objectionable odors or flies, and shall not result in groundwater contamination.
6. 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.
7. The discharge of sewage sludge and 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 waters of the state.

8. Any proposed change in biosolids use or disposal practice from a previously approved practice shall be reported to the Regional Water Board Executive Officer and USEPA Regional Administrator at least 90 days in advance of the change.
9. Facilities for the storage of Class B biosolids shall be located, designed and maintained to restrict public access to the biosolids.
10. Biosolids storage facilities shall be designed and maintained to prevent washout or inundation from a storm or flood with a return frequency of 100 years.
11. Biosolids storage facilities shall be designed, maintained, and operated to minimize the generation of leachate.

## **VII. RECEIVING WATER LIMITATIONS**

### **A. Groundwater Limitations**

1. The collection, treatment, storage, and disposal of wastewater shall not cause or contribute to a statistically significant degradation of groundwater quality unless a technical evaluation is performed that demonstrates that any degradation that could reasonably be expected to occur, after implementation of all regulatory requirements and reasonable best management practices, will not violate groundwater quality objectives or cause impacts to beneficial uses of groundwater.
2. The collection, treatment, storage and disposal of the treated wastewater shall not cause or contribute to levels of chemical constituents in groundwater that exceed the levels specified in title 22, Division 4, Chapter 15, Article 4, section 64435 of the California Code of Regulations or listed in Table 3-2 of the Basin Plan.
3. The collection, treatment, storage and disposal of the treated wastewater shall not cause or contribute to levels of radionuclides in groundwater in excess of the limits specified in title 22, Division 4, Chapter 15, Article 5, section 64443 of the California Code of Regulations.
4. The collection, treatment, storage, and disposal of wastewater or recycled water shall not cause groundwater to contain taste- or odor-producing substances in concentrations that cause nuisance or adversely affect beneficial uses.
5. In groundwater used for domestic and municipal supply (MUN), the collection, treatment, storage and disposal of the treated wastewater shall

not cause the median concentration of coliform organisms over any 7-day period to exceed 1.1 MPN per 100 milliliters or 1 colony per 100 milliliters.

## VIII. 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 Discharger's 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 and Reporting.** 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 in Attachment C of this Order and any future revisions thereto.
- 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).

**Q. Special Studies, Technical Reports, and Additional Monitoring**

**Requirements.** A Hydrogeologic Study is required to determine the fate and transport of pollutants in discharges of treated wastewater associated with the discharge location. Regional Water Board staff require additional information and testing for the proposed treated effluent disposal location and methodology. Further information is necessary to ensure that disposal methods would not result in detectable wastewater constituents in the Mad River and would not result in violation of groundwater quality standards, and to determine the ability of the disposal area to accommodate projected wastewater flows.

We are requiring submittal of a workplan for a hydrogeologic investigation. The workplan proposal shall be designed to investigate:

1. Current and projected depths of the disposal area;
2. Site specific lithologic profile;
3. Depth to groundwater, including seasonal variations;
4. Seasonal groundwater gradients;
5. Calculated capacity of areal soils to accommodate current and projected wastewater flows; and
6. Concentration gradients of targeted wastewater constituents measured at various points extending away from the disposal area, towards the Mad River.

Information developed in accordance with implementation of an approved investigation workplan shall be summarized in a subsequent report, which models the fate and transport of wastewater pollutant disposal. The workplan shall be submitted within 12 months of permit adoption. The subsequent summary report of work shall be submitted within 24 months of workplan approval.

**IX. COMPLIANCE DETERMINATION**

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

**A. Average Monthly Effluent Limitation (AMEL)**

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.

If the average 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.

**B. 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.

**C. 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.

**D. Instantaneous Minimum Effluent Limitations**

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).

#### **E. Instantaneous Maximum Effluent Limitations**

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).

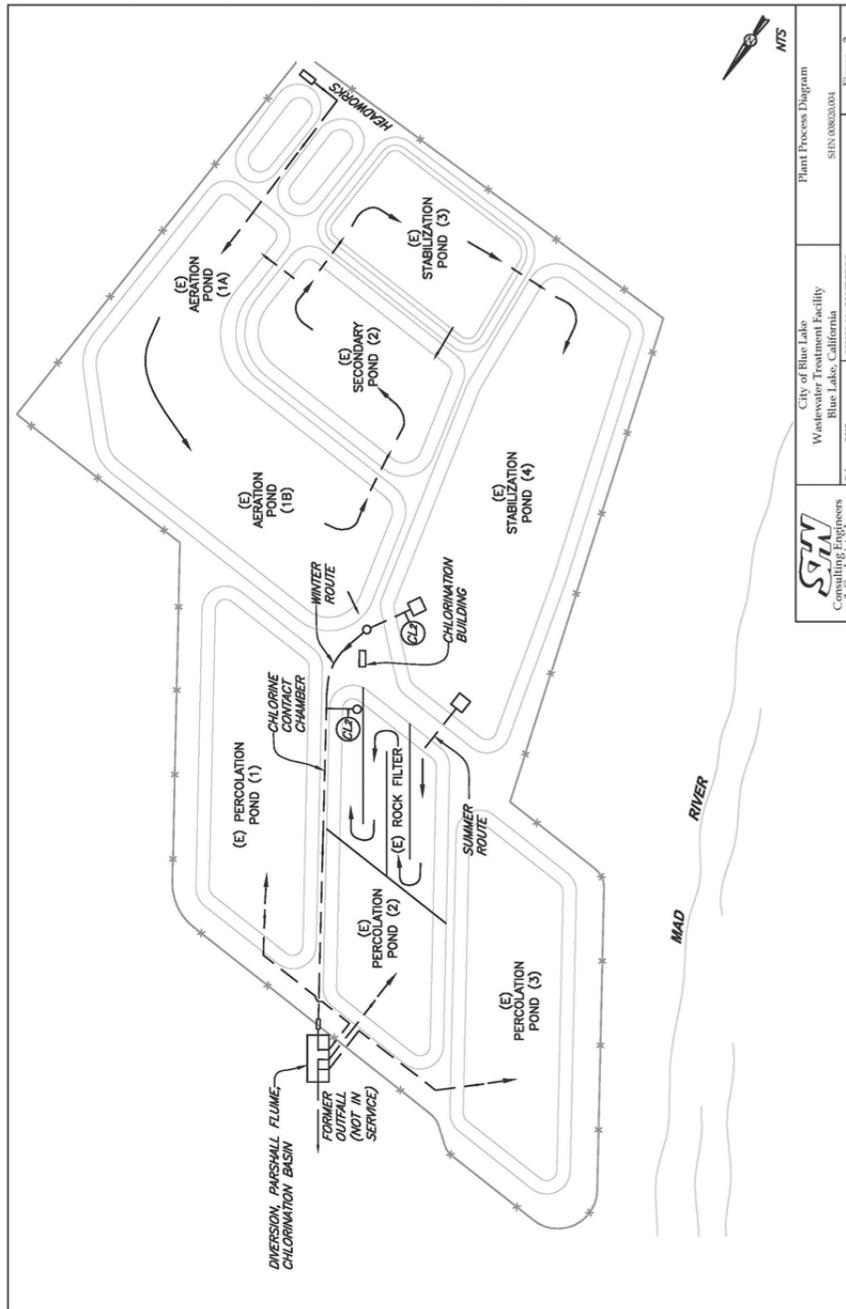
#### **F. Bacteriological Limitations**

1. 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 data 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 middle values, unless one or both points are ND or DNQ, in which case the median value shall be the lower of the two middle data points. DNQ is lower than a detected value, and ND is lower than DNQ.
2. Compliance with the 7-day median will be determined as a rolling median during periods when sampling occurs more frequently than weekly. During periods when sampling is weekly, this requirement shall apply to each weekly sample.

### ATTACHMENT A – FACILITY MAP



**ATTACHMENT B – FLOW SCHEMATIC**



## **ATTACHMENT C – MONITORING AND REPORTING PROGRAM**

### **Table of Contents**

I. General Monitoring Provisions.....	C-2
II. Monitoring Locations .....	C-2
III. Effluent Monitoring Requirements .....	C-3
IV. Receiving Water Monitoring Requirements .....	C-3
V. Other Monitoring Requirements.....	C-4
VI. Reporting Requirements.....	C-4

### **List of Tables**

Table C-1. Monitoring Station Locations .....	C-2
Table C-2. Effluent Monitoring – Monitoring Location EFF-001 .....	C-3
Table C-3. Groundwater Monitoring – Monitoring Wells .....	C-4
Table C-4. Internal Monitoring Requirements – Monitoring Location INT-001 .....	C-4
Table C-5. Monitoring Periods and Reporting Schedule .....	C-5

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

### II. MONITORING LOCATIONS

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

**Table 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.
001	EFF-001	Treated effluent from the WWTF downstream of completed disinfection prior to discharge to percolation ponds.

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

<b>Discharge Point Name</b>	<b>Monitoring Location Name</b>	<b>Monitoring Location Description</b>
--	MW-1 to MW-10	Monitoring wells located at perimeter of treatment ponds and percolation ponds.

### III. EFFLUENT MONITORING REQUIREMENTS

#### A. Monitoring Location EFF-001

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

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

<b>Parameter</b>	<b>Units</b>	<b>Sample Type</b>	<b>Minimum Sampling Frequency</b>
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>3</sup>	µg/L	Grab	1x / 3 Years

### IV. RECEIVING WATER MONITORING REQUIREMENTS

#### A. Groundwater Monitoring

1. The Discharger shall monitor groundwater at Monitoring Well Locations MW-1 through MW-10 as follows:

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<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

**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

**V. OTHER MONITORING REQUIREMENTS**

**A. Monitoring Location INT-001**

1. The Discharger shall monitor the discharge from the chlorine contact chamber prior to discharge to the percolation ponds 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)**

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 to the Regional Water 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

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

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 C-5. Monitoring Periods and Reporting Schedule**

<b>Sampling Frequency</b>	<b>Monitoring Period Begins On</b>	<b>Monitoring Period</b>
Continuous	June 7, 2012	All
Daily	June 7, 2012	(Midnight through 11:59 PM) or any 24-hour period that reasonably represents a calendar day for purposes of sampling.
Monthly	June 7, 2012	1 <sup>st</sup> day of calendar month through last day of calendar month
2X / Year	June 7, 2012	June and December
Annually	June 7, 2012	January 1 through December 31
1x / 3 Years	June 7, 2012	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 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

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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 Cal EMA will satisfy the 2 hour notification requirement for the Regional Water Board.

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. 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.

## **ATTACHMENT D – FACT SHEET**

### **I. FACILITY INFORMATION**

#### **A. Background.**

The City of Blue Lake (hereinafter Discharger) is currently discharging pursuant to Waste Discharge Requirements Order No. 94-28. The Discharger submitted a Report of Waste Discharge (ROWD), on September 29, 2009, and applied for renewal of waste discharge requirements to discharge up to 0.18 mgd of treated wastewater from the City of Blue Lake Wastewater Treatment Facility (WWTF) (hereinafter Facility) to land owned by the Discharger.

#### **B. General Facility Information**

The Discharger owns and operates a wastewater collection, treatment, and disposal facility that provides sewerage service to the City, the Blue Lake Industrial Park, the Blue Lake Rancheria Tribe casino and hotel, Blue Lake Power, and a few residents located outside city limits. The wastewater system has 660 connections, of which 23 are industrial connections. Four of these industrial connections - the Mad River Brewery, the Blue Lake Rancheria, Calgon Carbon Corporation and Blue Lake Power - are considered significant users.

#### **C. Existing Wastewater Treatment and Reclamation Facility**

The Discharger owns and operates a waste water system comprised of a collection system, treatment facility, and subsurface disposal. The treatment facility consists of four oxidation ponds, chlorine disinfection, a rock filter and three percolation ponds for effluent disposal.

The wastewater system serves the City, the Blue Lake Industrial Park, the Blue Lake Rancheria Tribe casino and hotel, Blue Lake Power and a few residents located outside City limits. The wastewater system has 660 connections, of which 23 are industrial connections. Four of these industrial connections, the Mad River Brewery, the Blue Lake Rancheria, Calgon Carbon Corporation and Blue Lake Power are considered significant users.

The collection system consists of a conventional gravity collection system with two lift stations, which pump wastewater to a headworks facility. At the headworks, wastewater is processed through the comminuter, and an inclined screening unit that grinds, washes, dewateres, and removes inert solids.

Wastewater is then pumped to a 7.5 acre four cell pond system for secondary treatment. The treatment ponds are designated Pond Nos. 1 through 4. Pond No. 1 is 2.7 acres and has an estimated 1-acre portion that is 11 feet deep. This pond

contains three surface aerators. Pond Nos. 2 - 4 are stabilization ponds that vary from 5 to 6 feet deep and provide treatment including sedimentation, solids stabilization, and storage.

Treated effluent discharged from Pond No. 4 is disinfected with chlorine prior to passing through the rock filter or discharging into the percolation ponds. The chlorine contact chamber is a 400 foot long, 18-inch diameter pipe, that at full flow has an average contact time of 30 minutes and at peak day flow has a contact time of 5 minutes. The rock filter consists of 2.5 feet of pea gravel and was designed to treat 0.15 MGD of treated effluent. The filter is utilized during the summer months to remove algae.

Effluent from the treatment facility is discharged to three rapid infiltration basins. The three basins are designated Percolation Pond Nos. 1 through 3, located near the bank of the Mad River. Pond Nos. 1 and 3 have floor areas of approximately 1 acre. Pond No. 2 has a floor area of approximately 0.5 acres. Only one basin is used at a time.

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

## II. FINDINGS

- A. 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). This Order also serves as Reclamation (Recycled Water) Requirements pursuant to section 13523 of the Water Code.
- B. Basin Plan.** 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 (both numeric and narrative) 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 Blue Lake Hydrologic Subarea of the Mad River Hydrologic Area to be protected are as follows:

1. Municipal and Domestic Supply (MUN)
2. Agricultural Water Supply (AGR)
3. Industrial Service Supply (IND)
4. Industrial Process Supply (PRO)

## 5. Freshwater Replenishment to Surface Waters (FRSH)

**C. California Water Code.** The California Water Code (Water Code) establishes the authority for the Regional Water Board to establish water quality objectives, impose discharge prohibitions, and prescribe waste discharge and reclamation requirements. Water Code section 13241 requires each regional board to “establish such water quality objectives in water quality control plans as in its judgment will ensure the reasonable protection of beneficial uses and the prevention of nuisance [...]” The control of pollutants discharged is established through effluent limitations and other requirements in WDR permits. Water Code section 13243 provides that “A regional board, in a water quality control plan or in waste discharge requirements, may specify certain conditions or areas where the discharge of waste, or certain types of waste, will not be permitted. Water Code section 13260 et seq establishes regulations associated with the prescription of waste discharge requirements and Water Code Chapter 7 (section 13500 et seq) establishes regulations associated with the prescription of reclamation requirements.

It is the Regional Water Board’s intent that this Order shall ensure attainment of water quality standards, applicable water quality objectives, and protection of beneficial uses of receiving waters. This Order therefore requires the Discharger to comply with all prohibitions, effluent limitations, discharge specifications, reclamation specifications, reclamation provisions and requirements, receiving water limitations, standard provisions, and monitoring and reporting requirements. The Order further prohibits discharges from causing violations of water quality objectives or causing conditions to occur that create a condition of nuisance or water quality impairment in receiving waters as a result of the discharge.

**D. California Code of Regulations (CCR).** The discharge authorized herein and the treatment and storage facilities associated with the discharge are exempt from the requirements of title 27, CCR, 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. 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. This project consists of the operation or minor alteration of an existing facility which involves minimum change in use beyond that previously existing.

The City is in the process of developing a pretreatment and self monitoring program. This program will require each commercial establishment to maintain and provide the City with records of interceptor monitoring, maintenance and cleaning activities.

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

This Order is consistent with the maximum benefit to people of the State because: (i) it allows continued operation of an existing wastewater treatment system; and (ii) it requires monitoring of groundwater impacts from disposal of treated wastewater.

- F. 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.
- G. 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.

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