

North Coast Regional Water Quality Control Board

**ORDER No. R1-2012-0029**  
**WDID No. 1A790100SIS**

**WASTE DISCHARGE REQUIREMENTS**

**FOR**

**LAKE SHASTINA COMMUNITY SERVICES DISTRICT  
WASTEWATER TREATMENT FACILITY**

**SISKIYOU COUNTY**

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

**Table 1. Discharger Information**

<b>Discharger</b>	Lake Shastina Community Services District
<b>Name of Facility</b>	Lake Shastina Community Services District Wastewater Treatment Facility
<b>Facility Address</b>	Assessor's Parcel Number 202-040-140 Section 24, T43N, Range 5W Latitude: 41° 33' 21.5994" Longitude: 122° 22' 35.3994" Nearest Cross Street: Big Springs Road

The discharge by the Lake Shastina Community Services District from the discharge point(s) 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>
EFF-001A	Municipal Wastewater After Primary Treatment	41° 33' 20.8794"	-122° 22' 33.9594"	Groundwater
EFF-001B	Treated Municipal Wastewater	41° 33' 21.5994"	-122° 22' 35.3994"	Groundwater

<b>Discharge Point</b>	<b>Effluent Description</b>	<b>Discharge Point Latitude</b>	<b>Discharge Point Longitude</b>	<b>Receiving Water</b>
EFF-002	Treated Municipal Wastewater	41° 33' 24.8394"	-122° 22' 35.3994"	Groundwater
EFF-003	Treated Municipal Wastewater	41° 33' 27.7194"	-122° 22' 35.7594"	Groundwater
EFF-004	Treated Municipal Wastewater	41° 33' 23.0394"	-122° 22' 39.72"	Groundwater

IT IS HEREBY ORDERED, that Order No. 97-91 is rescinded upon the effective date of this Order except for enforcement purposes, and, in order to meet the provisions contained in division 7 of the Water Code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.

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Matthias St. John, 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>	Lake Shastina Community Services District
<b>Name of Facility</b>	Lake Shastina Community Services District Wastewater Treatment Facility
<b>Facility Address</b>	Assessor's Parcel Number 202-040-140 Section 24, T43N, Range 5W Latitude: 41° 33' 21.5994" Longitude: 122° 22' 35.3994" Nearest Cross Street: Big Springs Road
	Weed, CA
	Siskiyou County
<b>Facility Contact, Title, and Phone</b>	John McCarthy, General Manager, (530) 938-3281
<b>Mailing Address</b>	16320 Everhart Dr., Weed, CA 90694
<b>Type of Facility</b>	Publicly Owned Treatment Works (POTW)
<b>Facility Design Flow</b>	0.132 million gallons per day (mgd) Annual Average Daily Flow (AADF)

**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.

The Lake Shastina Community Services District (hereinafter Discharger) is currently discharging pursuant to Waste Discharge Requirements Order No. 97-91. The Discharger submitted a Report of Waste Discharge (ROWD), dated December 24, 2008, and applied for renewal of waste discharge requirements to discharge an AADF up to 0.132 mgd of treated wastewater from the Lake Shastina Community Services District Wastewater Treatment Facility (hereinafter Facility and WWTF). The Discharger submitted additional information to complete the ROWD on March 28, 2011, and the ROWD was deemed complete by Regional Water Board staff on October 7, 2011.

**III. DISCHARGE PROHIBITIONS**

- A. The discharge of waste to the Shasta River or its tributaries is prohibited.
- B. The discharge of any waste not disclosed by the Discharger or not within the reasonable contemplation of the Regional Water Board is prohibited.
- C. Creation of pollution, contamination, or nuisance as defined by section 13050 of the Water Code is prohibited.
- D. The discharge of sludge is prohibited.
- E. The discharge of untreated or partially treated waste (receiving a lower level of treatment than described in Attachment D.I.A from anywhere within the collection, treatment, or disposal system is prohibited.
- F. The discharge of waste at any point not described in Attachment D.I.A or authorized by a permit issued by the State Water Board or another Regional Water Board is prohibited.
- G. 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.
- H. 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. Discharge from solids containment basin to Pond No. 1
  - i. The Discharger shall maintain compliance with the following limitation at Discharge Point EFF-001A :

**Table 4. Effluent Limitations for Solids Containment Basin – Discharge Point EFF-001A**

Effluent Limitation		
Parameter	Units	Instantaneous Maximum
Settleable Solids	mL/L/hr	0.1

## **V. Discharge Specifications**

### **A. Disinfection Process**

Not applicable.

### **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. Pond Freeboard**

Freeboard in the wastewater treatment or storage ponds shall never be less than 1.0 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.

### **F. Dissolved Oxygen**

Waste ponded within the oxidation percolation ponds shall not have a dissolved oxygen content of less than 1.0 mg/L.

### **G. Flow**

The annual average daily flow of waste through the treatment plant shall not exceed 0.132 mgd. Compliance with this prohibition shall be measured continuously at Monitoring Location INF-001, calculated daily and averaged over a calendar year.

## **VI. Solids Disposal**

Collected screenings, sludges, and other solids removed from liquid wastes shall be disposed of at a legal point of disposal, and in accordance with the provisions of Title 27, of the California Code of Regulations or as waived pursuant to Section 13269 of the California Water Code.

## **VII. Receiving Water Limitations**

### **A. Groundwater Limitations**

1. The collection, storage, and use of wastewater shall not cause alterations in groundwater that result in contaminant concentrations that do any of the following:
  - a. Cause nuisance,
  - b. Adversely affect beneficial uses,
  - c. Result in taste- or odor-producing substances in concentrations that cause nuisance or adversely affect beneficial uses, or
  - d. Exceed constituent concentration limits specified in Cal. Code of Regulations, title 22 section Nos. 64431 and 64444, or any future revisions to the Basin Plan groundwater quality objectives.

## **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. 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 and shall conform to State Department of Public

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

## **IX. Special Provisions**

### **A. Special Projects, Technical Reports and Additional Monitoring Requirements**

#### **1. Sludge Disposal Project**

- a. Work Plan – The Discharger shall submit a work plan, for concurrence by the Regional Water Board Executive Officer, within **180 days of the effective date of this Order** to excavate biosolids from the unpermitted onsite disposal location and dispose of them in accordance with Finding VI of this Order.
- b. Implementation – The Discharger shall commence implementation of the approved sludge disposal work plan within 60 days of concurrence with the work plan by the Executive Officer, or at a time otherwise agreed upon by the Executive Officer and Discharger in writing.
- c. Report of Completion – The Discharger shall submit a report of investigative findings documenting the completion of the work plan in compliance with this Order within 60 days of completing the work set out in the plan.

#### **2. Increased Treatment and Containment Plan**

- a. Work Plan – The Discharger shall submit a work plan, for concurrence by the Regional Water Board Executive Officer, within **180 days of the effective date of this Order** to increase containment of partially treated wastes and to increase treatment prior to discharge.
- b. Implementation – The Discharger shall implement the approved work plan in accordance with the time schedule contained in the work plan and agreed to by the Regional Water Board Executive Officer.
- c. Report of Completion – The Discharger shall submit a report of investigative findings documenting the completion of the work plan in compliance with this Order within 60 days of completing the work set out in the plan.

If, at any time, groundwater quality data indicates that the percolation discharges from the ponds are causing a violation of Receiving Water Limitation VII.A.1 of this Order, the Discharger shall, upon notification of the Regional Water Board Executive Officer, prepare and submit to the Regional Water Board Executive Officer for concurrence, a study to determine the best practicable treatment or control (BPTC) necessary to prevent any further degradation of groundwater quality. The BPTC study shall identify and

describe any modifications, maintenance, or improvements required to achieve BPTC for the discharge.

### 3. Groundwater Monitoring Assessment

As of the date of this Order, there is an insufficient monitoring well network in place and insufficient groundwater data collected to determine local groundwater gradients and the potential groundwater quality impacts from the wastewater pond percolation discharges. Consistent with the findings of this Order, to determine local groundwater gradient, to determine the appropriate locations to monitor discharges from the ponds and to determine compliance with limitations and other enforceable requirements of this Order, a Groundwater Monitoring Assessment Work Plan is required as follows:

- a. Work Plan – The Discharger shall submit a work plan, for concurrence by the Regional Water Board Executive Officer, to determine the impacts on groundwater from the wastewater pond percolation discharges including groundwater gradient direction within **90 days of the effective date of this Order**, or at a time otherwise agreed upon by the Executive Officer and Discharger in writing. The work plan shall describe the steps the Discharger intends to follow to site, construct, develop, and sample monitoring wells for compliance with Attachment C, and should include, at a minimum the following items:
  - i. Proposed location of an up-gradient groundwater monitoring well that is unaffected by the discharge from the WWTF, and which is in the same formation as the other down-gradient wells.
  - ii. Proposed locations for groundwater monitoring wells down-gradient of the ponds.
  - iii. Proposed well construction or rehabilitation techniques, including characterization of screened intervals.
  - iv. Surveyed elevations and locations of existing and proposed wells to the nearest 0.01 foot and 0.1 foot, respectively.
- b. Implementation – The Discharger shall commence implementation of the groundwater monitoring work plan within 60 days of concurrence with the work plan by the Executive Officer, or at a time otherwise agreed upon by the Executive Officer and Discharger in writing.
- c. Report of Investigation – The Discharger shall submit a report of investigative findings within 60 days of completing the work set out in the plan. The report of investigative findings shall include monitoring well boring logs including records of lithology and stratigraphy; well

construction diagrams; well casing and water level elevations; water level contour maps including gradients; sampling and analysis data; and recommendations for any further investigative activities. The report shall also include a plan for disposal of wastes generated during implementation of the groundwater monitoring assessment work plan (e.g. during construction and development of monitoring wells). Pursuant to California Water Code 13260 and California Code of Regulations Title 27, which regulate land disposal activities, the Regional Water Board requires evidence that placing nonhazardous investigation-derived waste or inert materials (which may include discarded product or recycled materials) will not result in degradation of water quality, human health, or the environment.

## **B. 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.

## **C. 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 organizational structure 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.

#### **D. 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. Pond design and operation plan must include features and best management practices (BMPs)

to protect groundwater and prevent exceedances of groundwater quality objectives.

#### **E. 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.

#### **F. 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.

#### **G. 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

#### **H. 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."*

#### **I. Inspections**

The 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.

#### **J. 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.

#### **K. Revisions of Requirements**

The Regional Water Board will review this Order periodically and may revise requirements when necessary.

#### **L. 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.

#### **M. Adequate Capacity**

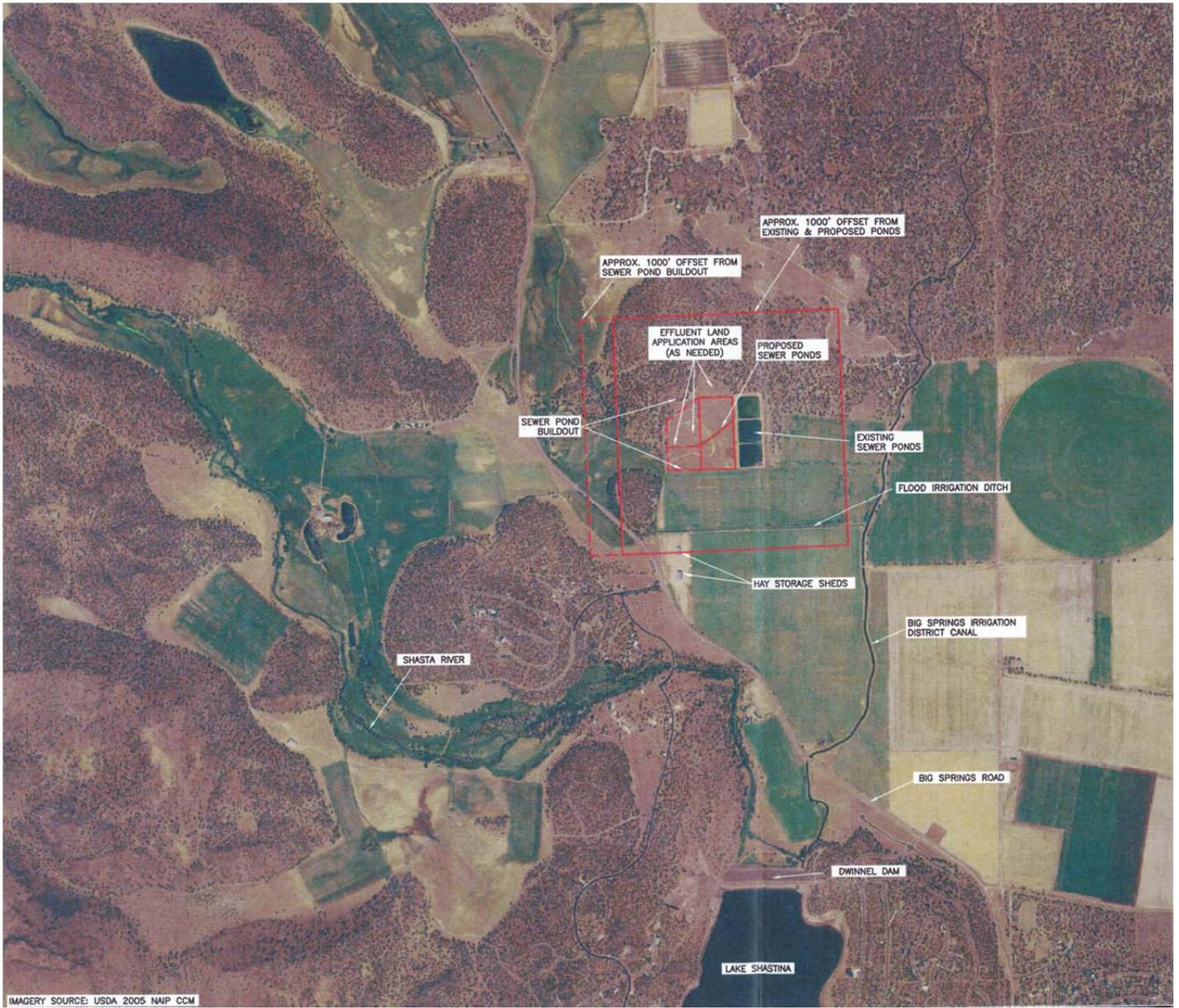
If the Discharger's wastewater treatment plant will reach capacity within 4 years, the Discharger shall notify the Regional Water Board. A copy of such notification shall be sent to appropriate local elected officials, local permitting agencies, and the press. Factors to be evaluated in assessing reserve capacity shall include, at a minimum: (1) comparison of the wet weather design flow with the highest daily flow, (2) comparison of the average dry weather design flow with the lowest 30-day flow, and (3) comparison of the annual average daily flow with the permitted 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).

**N. 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.

### ATTACHMENT A – FACILITY LOCATION MAP





## **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
--	INF-001	Influent monitoring location prior to solids removal.
EFF-001	INT-001A	Internal monitoring location of the discharge from the solids containment basin prior to discharge into Pond No. 1.
EFF-001	INT-001B	Internal monitoring location within Pond No. 1 to analyze potential groundwater impacts from Pond No. 1.
EFF-002	INT-002	Internal monitoring location within Pond No. 2 to analyze potential groundwater impacts from Pond No. 2.

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

Discharge Point Name	Monitoring Location Name	Monitoring Location Description
EFF-003	INT-003	Internal monitoring location within Pond No. 3 to analyze potential groundwater impacts from Pond No. 3.
EFF-004	INT-004	Internal monitoring location within Pond No. 4 to analyze potential groundwater impacts from Pond No. 4.
--	MW-0	Existing historic monitoring well, located northwest of Pond No. 3 and within the northern berm of Pond No. 5.
--	MW-1	Monitoring well constructed in July, 2010, that is located west of the entrance road directly west of Pond No. 4.
--	MW-2	Monitoring well constructed in July, 2010, that is located just east of the solids containment structure on the southeastern corner of the Facility property.

### III. INFLUENT MONITORING REQUIREMENTS

#### A. Monitoring Location INF-001

When there is wastewater flow in INF-001, the Discharger shall monitor the wastewater influent at INF-001 as follows:

**Table C-2. Influent Monitoring – Monitoring Locations INF-001**

Parameter	Units	Sample Type	Minimum Sampling Frequency
Flow	mgd	Meter	Continuously
Biochemical Oxygen Demand (5-day @ 20°C)	mg/L	Grab	Quarterly
Total Suspended Solids	mg/L	Grab	Quarterly

### IV. EFFLUENT MONITORING REQUIREMENTS

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

The Discharger shall monitor wastewater at Monitoring Locations INT-001A, as follows:

**Table C-3. Internal Monitoring – Monitoring Location INT-001A**

Parameter	Units	Sample Type	Minimum Sampling Frequency
Settleable Solids	mL/L/hr	Grab	Quarterly

**B. Monitoring Locations INT-001B, INT-002, INT-003, INT-004**

The Discharger shall monitor wastewater at Monitoring Locations INT-001B, INT-002, INT-003, and INT-004 as follows:

**Table C-4. Internal Monitoring – Monitoring Locations INT-001B, 002, 003, 004**

Parameter	Units	Sample Type	Minimum Sampling Frequency
pH	std units	Grab	Semi annually
Total Coliform Organisms	MPN/100 mL	Grab	Semi annually
Biochemical Oxygen Demand (5-day @ 20°C)	mg/L	Grab	Semi annually
Total Suspended Solids	mg/L	Grab	Semi annually
Nitrogen, Total (as N)	mg/L	Grab	Semi annually
Nitrate (as N)	mg/L	Grab	Semi annually
Specific Conductivity	mg/L	Grab	Semi annually
Boron	mg/L	Grab	Semi annually
Hardness	mg/L	Grab	Semi annually
Title 22 Pollutants <sup>1</sup>	µg/L	Composite from Pond Nos. 1,2,3 and 4	Once Every 3 Years

**V. RECEIVING WATER MONITORING REQUIREMENTS**

**A. Groundwater Monitoring**

The Discharger shall monitor groundwater at all Monitoring Well locations as follows:

**Table C-5. Groundwater Monitoring – All Monitoring Wells**

Parameter	Units	Sample Type	Minimum Sampling Frequency
Depth to Groundwater	0.01 feet	Grab	Quarterly

<sup>1</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-5. Groundwater Monitoring – All Monitoring Wells**

<b>Parameter</b>	<b>Units</b>	<b>Sample Type</b>	<b>Minimum Sampling Frequency</b>
pH	std units	Grab	Quarterly
Total Coliform Organisms	MPN/100 mL	Grab	Quarterly
Nitrogen, Total (as N)	mg/L	Grab	Quarterly
Nitrate (as N)	mg/L	Grab	Quarterly
Specific Conductivity	mg/L	Grab	Quarterly
Boron	mg/L	Grab	Quarterly
Hardness	mg/L	Grab	Quarterly
Title 22 Pollutants <sup>2</sup>	µg/L	Grab	Once Every 3 Years

**VI. OTHER MONITORING REQUIREMENTS**

Not Applicable.

**VII. REPORTING REQUIREMENTS**

**A. Self-Monitoring Reports (SMRs)**

1. **Electronic SMRs.** At any time during the term of this permit, the State or Regional Water Board may notify the Discharger to electronically submit 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. **Additional Monitoring.** 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.

<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

3. **Laboratory Data Sheets.** 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.
4. **Monitoring Periods and Reporting Schedule.** Annual summary reports shall be submitted by March 1<sup>st</sup> each year. Monitoring periods for all required monitoring shall be completed according to the following schedule:

**Table C-6. Monitoring Periods and Reporting Schedule**

Sampling Frequency	Monitoring Period Begins On	Monitoring Period
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 November
Quarterly	June 7, 2012	1 <sup>st</sup> Quarter: January 1 through March 31 2 <sup>nd</sup> Quarter: April 1 through June 30 3 <sup>rd</sup> Quarter: July 1 through September 30 4 <sup>th</sup> Quarter: October 1 through December 31
Annually	June 7, 2012	January 1 through December 31
Once Every 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.
- c. 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.

- d. Sample results less than the laboratory's MDL shall be reported as "Not Detected," or ND.
- e. 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>3</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 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

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<sup>3</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.

- 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 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**

Recent upgrades to the WWTF were completed in 2011 to regain disposal capacity that had been lost through sludge accumulation in the ponds. The upgrades include the addition of a new percolation and evaporation pond (Pond No. 4), which is lined with a 60-millimeter thick High Density Polyethylene (HDPE) liner, the construction of an unlined primary pond (Pond No. 5), which is not a permitted discharge location under this permit, and the addition of electrical supply to the ponds to power the APEX evaporator and any future electricity needs. Wastewater treatment is achieved through settling, aerobic and anaerobic bacterial actions, and other biogeochemical processes. The WWTF is designed to treat and dispose of an AADF up to 0.132 mgd.

The wastewater collection, treatment, and disposal facilities consist of a combined gravity and low pressure sewer that connects to grinder pumps in the headworks lift station whereupon it is pumped through an inline flow meter to the solids containment structure. The wastewater then overflows successively via weirs to Pond Nos. 1, 2, 3, and 4. Pond Nos. 1, 2, and 3 were originally designed with approximate depths of eight feet, but in November 2007, the berms and weirs were rehabilitated and built-up to allow for approximate pond depths of nine feet, although portions of each pond are shallower due to sludge buildup. Sludge deposition in Pond Nos. 1, 2, and 3 that occurred prior to construction of the solids containment structure and carryover from the solids containment structure have caused the accumulation of up to three feet of sludge in Pond No. 1, up to fourteen inches of sludge in Pond No. 2, and up to six inches of sludge in Pond No. 3. Pond No. 4 is designed for a maximum water depth of six feet.

The four ponds have approximately 17.3 million gallons (53.1 acre-feet) of storage and the design estimates that the addition of Pond No. 4 will provide enough capacity to evaporate 0.170 mgd and percolate approximately 0.0125 mgd of wastewater. Therefore, the design estimates that the four ponds will have enough disposal capacity to accommodate flows up to 0.1825 mgd. Nonetheless, this permit does not authorize discharge in excess of the previously permitted rate of 0.132 mgd because the California Environmental Quality Act (CEQA) document for the development of the new ponds included this flow limitation. Any future increases in flow above the permitted rate of 0.132 mgd will require a subsequent CEQA analysis to analyze potential environmental impacts of increased flows.

Currently, there are three groundwater monitoring wells on site. The oldest well was constructed prior to 1986, and is identified as MW-0 in this Order. There is no available information on the construction of MW-0, such as boring logs or screening intervals, and it is currently capped on the surface preventing any measurement of depth to groundwater. Accordingly, MW-0 is in need of rehabilitation and/or reconstruction prior to being considered viable. MW-1 and MW-2 were constructed and developed in July, 2010. Because it requires at least three water level measurement points to calculate gradient direction, the two operational wells do not provide sufficient data to establish the local groundwater gradient. A groundwater monitoring assessment plan is required by this Order to establish a monitoring network that establishes the local groundwater gradient and that determines the appropriate locations to monitor discharges from the ponds.

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 Shasta Valley Hydrologic Area to be protected are as follows:

- a. Municipal and Domestic Supply (MUN)
- b. Industrial Water Supply (IND)
- c. Industrial Process Water Supply (PRO)
- d. Agricultural Water Supply (AGR)

- e. Aquaculture (AQUA)
- f. Native American Culture (CUL)

**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.

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, receiving water limitations, standard provisions, special 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.

An Increased Treatment and Containment Plan, a Groundwater Monitoring Plan, and increased effluent and groundwater monitoring is required by this Order to ensure that this wastewater discharge complies with the Water Code, the Antidegradation Policy, and the Basin Plan.

**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(a) of title 27, allows for the exemption of treatment or storage facilities associated with municipal wastewater treatment plants, provided that residual sludges or solid waste from wastewater treatment facilities shall be discharged only in accordance with the applicable State Water Board promulgated provisions of title 27, CCR.

**E. California Environmental Quality Act (CEQA)**

On April 18, 2009, the Discharger adopted a negative declaration (SCH No. 2005062051) for the project in order to comply with CEQA. The Regional Water Board has reviewed and considered the environmental document and any proposed changes incorporated into the project or required as a condition of approval to avoid significant effects to the environment. The Regional Water Board will file a Notice of Determination 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, which 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 permitted flow of the existing WWTF limits the discharge to 0.132 mgd, which has not been increased by this permit. In 2008, although the WWTF was only receiving an AADF of 0.106 mgd, below the permitted flow rate, it was determined that the WWTF was at capacity in the existing system and in emergency need to dispose of wastewater stored in the ponds. From 2008 through 2011, the Discharger temporarily resolved the capacity issue by receiving an Emergency Waiver of WDRs for land application adjacent to the ponds. Construction of Pond No. 4 provides a permanent solution to this capacity situation and construction of Pond No. 5 could provide for future expansion. The construction of Pond No. 4 with an HDPE liner reduces the hydrologic connectivity between the wastewater and groundwater resulting in an overall benefit to water quality and a reduction of pollutant discharge from the existing condition.

This Order permits a discharge to a new location that may ultimately enter groundwater underlying the WWTF. Therefore, compliance with this Order will therefore, allow some degradation of groundwater quality in the vicinity of the WWTF. Additional monitoring wells are required to be constructed by this Order and Attachment C of this Order requires ongoing groundwater monitoring to further ensure that concentrations of these pollutants will not adversely impact beneficial uses.

This Order requires increased containment and monitoring of the discharge to ensure that compliance with this Order will result in the best practicable treatment or control of the discharge necessary to assure that (a) a pollution or nuisance will not occur and (b) the highest water quality consistent with maximum benefit to the people of the State will be maintained.

This Order is consistent with the maximum benefit to the people of the state because the discharge: 1) provides treatment of wastewater from an existing source prior to the disposal of the wastewater; and 2) provides increased containment with a 60-mil HDPE liner in Pond No. 4; and 3) ameliorates an emergency capacity issue experienced by the Discharger since October, 2008 by eliminating the potential for uncontrolled pond overflow.

**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

These discharge prohibitions are necessary to ensure that the discharges are consistent with the Report of Waste Discharge submitted as an application for this Order and to ensure compliance with the Basin Plan.

### IV. EFFLUENT LIMITATIONS

#### A. Discharge from solids containment basin to Pond No. 1

The effluent limitation at EFF-001 monitored at INT-001A is necessary to ensure proper solids separation prior to discharge into Pond No. 1 and effective operation and maintenance of the solids containment structure. Historic solids carryover into Pond No. 1 has reduced the available volume in Pond No. 1, and has in part contributed to the District's recent need to construct Pond No. 4.

## **V. DISCHARGE SPECIFICATIONS**

These discharge specifications are necessary to ensure compliance with the Basin Plan, and protect human health and the environment. Specifications D, F, and G have been carried over from the previous permit and Specifications A, B, C, and E are standard requirements for municipal wastewater treatment plants.

## **VI. SOLIDS DISPOSAL**

Order requirement VI for solids disposal requires that solids disposal comply with Title 27 and the Water Code. This requirement was in the previous permit.

## **VII. RECEIVING WATER LIMITATIONS**

Receiving Water Limitation VII.A.1 for groundwater implements the general water quality objectives for groundwaters from the Basin Plan or any future revisions thereto.

## **VIII. GENERAL PROVISIONS**

All General Provisions, except Special Provision VIII.D, are standard Order requirements for all municipal treatment plants. Special Provision VIII.D requires a Sludge Disposal Project, an Increased Treatment and Containment Plan, and a Groundwater Monitoring Assessment.

The Sludge Disposal Project is required because historic practices of onsite solids disposal have not complied with previous order requirements and the residual wastes need to be disposed of in accordance with the solids disposal requirements contained in finding VI of this Order.

The Increased Treatment and Containment Plan is required in this Order pursuant to Water Code section 13263 to comply with Resolution No. 68-16 by ensuring that the District achieves the best practicable treatment or control of the discharge necessary to assure that pollution or nuisance will not occur and that the highest water quality consistent with maximum benefit to the people of the State will be maintained. Constituents in municipal wastewater have a well-established potential to exceed groundwater quality objectives, which has been corroborated by the results of a site-specific model using site-specific data performed on behalf of the District. Furthermore, the requirement for an increased treatment and containment plan has been included in this Order based on the District's own proposal in its application for a new permit. As described in the District's ROWD received by the Regional Water Board on March 28, 2011,

"It is also proposed in the future that the existing ponds are taken off line sequentially, drained, cleaned, repaired and lined with the same liner material as the new ponds to ensure every pond at the WWTF would then be considered completely evaporative."

The treatment and containment work plan requirement is intended to give the District flexibility in how to address treatment and containment issues. The scope of this work plan includes enough detail to guide the District in improving treatment and containment, while still allowing the District to choose the method and manner of compliance. Nonetheless, it is important that the wastewater be sufficiently contained and treated prior to discharge to protect groundwater quality.

A report by the District's consultant dated March 16, 2011, modeled the expected nutrient concentrations in groundwater from the pond discharges suggesting that the discharge would exceed the drinking water MCLs for nitrates. The District later suggested that its empirical data shows no impact on groundwater. These existing data are limited and groundwater wells may not be appropriately sited to detect the impacts from the ponds in the heterogeneous fractured bedrock geologic setting. A robust groundwater monitoring program would be necessary to adequately detect and characterize the discharges from the ponds. While this may be possible, this approach could be cost prohibitive relative to increased treatment and containment, and does not provide adequate water quality protection in the interim. Staff provided the District flexibility in determining the best solution by developing a treatment and containment plan while concurrently conducting groundwater monitoring.