

**CALIFORNIA REGIONAL WATER QUALITY CONTROL BOARD
CENTRAL VALLEY REGION**

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ORDER R5-2008-0167-01

**WASTE DISCHARGE REQUIREMENTS FOR
SIERRAPINE LIMITED
SIERRAPINE – AMPINE DIVISION
AMADOR COUNTY**

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

Table 1. Discharger Information

Discharger	SierraPine Limited
Name of Facility	SierraPine – Ampine Division
Facility Address	11300 Ridge Road
	Martell, CA 95654
	Amador County

The discharge by SierraPine Limited from the discharge points identified below is subject to waste discharge requirements as set forth in this Order:

Table 2. Discharge Information

Discharge Point	Discharge Description
Irrigation Pond, and Groundwater	Boiler Blowdown, Non-Contact Cooling Water, Turbine Cooling Water, Equipment/Facilities Washwater, and Biofilter Blowdown

Table 3. Administrative Information

This Order was adopted by the Regional Water Quality Control Board on:	24 October 2008
This Order shall become effective on:	24 October 2008

I, PAMELA C. CREEDON, 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, Central Valley Region, on 24 October 2008, and amended on 5 December 2014.

Original signed by

PAMELA C. CREEDON, 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 4. Facility Information

Discharger	SierraPine Limited
Name of Facility	SierraPine – Ampine Division
Facility Address	11300 Ridge Road
	Martell, CA 95654
	Amador County
Facility Contact, Title, and Phone	Dave Scott, EH & S Manager, (209) 223-1690
Mailing Address	P.O. Box 115
	Martell, CA 95654
Type of Facility	Particleboard Manufacturing Facility (SIC Code 2493)
Facility Design Flow	Not Applicable

II. FINDINGS

The California Regional Water Quality Control Board, Central Valley Region (hereinafter Central Valley Water Board), finds:

A. Background. SierraPine Limited (hereinafter Discharger) was previously discharging pursuant to Order R5-2002-0018 and National Pollutant Discharge Elimination System (NPDES) Permit No. CA0004219. The Discharger submitted a Report of Waste Discharge (ROWD), dated 31 August 2006, and applied for an individual NPDES permit renewal to discharge approximately 0.047 mgd of treated wastewater from SierraPine – Ampine Division, hereinafter Facility. A revised ROWD was submitted on 1 July 2008. The application was deemed complete on 2 July 2008.

Waste Discharge Requirements Order R5-2008-0167 (NPDES Permit No. CA0004219) was adopted by the Central Valley Water Board on 24 October 2008. A complete ROWD was submitted by the Discharger, dated 29 March 2013. Pursuant to Title 23, California Code of Regulations, section 2235.4, the permit is administratively extended and the permit will remain in force, fully effective and enforceable.

The Discharger has not discharged from the Irrigation Pond to surface waters since March 2004, and there is no longer the need for coverage under an individual NPDES permit. (In April 2011, there was a discharge to Stony Creek from the irrigation field catch pond due to pump failure.) Therefore, Order R5-2014-0165 was adopted by the Central Valley Water Board on 5 December 2014 rescinding NPDES Permit CA0004219 and amending Waste Discharge Requirements Order R5-2008-0167 to remove NPDES permit requirements but retain certain requirements as they relate to the land discharge of wastewater.

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

B. Facility Description. The Discharger owns and operates the Sierra Pine – Ampine Division particleboard manufacturing facility. The facility produces up to 0.010 mgd of process wastewater that includes boiler blowdown, cooling tower water, turbine cooling water, equipment and facilities wash waters, and when operational, biofilter blowdown. The process wastewaters are comingled in a pond with approximately 0.037 mgd of stormwater prior to discharge. The Discharger’s particleboard manufacturing process is a dry process, and no wastewater is generated from the particleboard manufacturing process.

All treatment at the Facility is accomplished using unlined settling ponds, which have an approximate capacity of 7 million gallons. The treatment system is composed of two parallel trains of settling ponds—one is used to treat Facility process waters and storm water runoff from a parking lot, while the second treatment train solely treats storm water runoff that is regulated under the Industrial Storm Water General Permit. Both treatment trains are composed of unlined settling ponds and vegetated ditches.

Process wastewater flows to the Plant Process Catch Basin, the first of four ponds. Wastewater then flows through a vegetated ditch to the Log Deck Settling Pond. Afterwards, the wastewater flows to the Irrigation Pond, and from there, wastewater is sent to the Irrigation Field Catch Pond and land applied to a 6 to 8 acre bermed Irrigation Field (Land Application Area). Excess runoff from the Irrigation Field drains back to the Irrigation Field Catch Pond. Water in the Irrigation Field Catch Pond can be rerouted to the Irrigation Pond. Discharges to land via the irrigation field last occurred in 2011. In April 2011, there was a discharge to Stony Creek from the Irrigation Field Catch Pond due to pump failure.

The Discharger has the ability to discharge wastewater from the Irrigation Pond through a vegetated channel to Stony Creek; however, no discharges of wastewater from the Irrigation Pond to Stony Creek have occurred since March 2004 and this 2014 Order does not authorize such discharges. Discharges through the pond system and ultimately the irrigation field, and the underlying groundwater, are regulated through this Order. The Discharger may also obtain coverage under the general order for Limited Threat Discharges of Treated/Untreated Groundwater from Cleanup Sites, Wastewater from Superchlorination Projects, and Other Limited Threat Wastewaters to Surface Water (Order R5-2013-0073, NPDES No. CAG995002) for its potential discharges to Stony Creek.

Attachment B provides a map of the area around the Facility and site features. Attachment C provides a flow schematic of the Facility.

C. Legal Authorities. This Order serves as Waste Discharge Requirements (WDRs) pursuant to Article 4, Chapter 4, Division 7 of the Water Code (commencing with Section 13260).

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

E. California Environmental Quality Act (CEQA). The action to adopt revised waste discharge requirements for this existing facility is exempt from the provisions of CEQA, in accordance with the California Code of Regulations, title 14, section 15301 because this Order does not authorize any change in the discharge envisioned in the prior analyses.

F. Technology-based Effluent Limitations. - Not Applicable

G. Water Quality-based Effluent Limitations. - Not Applicable

H. Water Quality Control Plans. The Central Valley Water Board adopted a *Water Quality Control Plan, Fourth Edition (Revised October 2011), for the Sacramento and San Joaquin River Basins* (hereinafter Basin Plan) that designates beneficial uses, establishes water quality objectives, and contains implementation programs and policies to achieve those objectives for all waters addressed through the plan.

The Basin Plan implements State Water Resources Control Board (State Water Board) Resolution 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 Stony Creek and groundwater are as follows:

Table 5. Basin Plan Beneficial Uses

Discharge Point	Receiving Water Name	Beneficial Use(s)
--	Groundwater	<u>Existing:</u> Municipal and domestic supply (MUN), agricultural supply (AGR), industrial service supply (IND), and industrial process supply (PRO).

Requirements of this Order implement the Basin Plan.

I. National Toxics Rule (NTR) and California Toxics Rule (CTR). – Not Applicable

J. State Implementation Policy. – Not Applicable

K. Compliance Schedules and Interim Requirements. – Not Applicable

L. Alaska Rule. - Not Applicable

M. Stringency of Requirements for Individual Pollutants. - Not Applicable

N. Antidegradation Policy. - Not Applicable

O. Anti-Backsliding Requirements. - Not Applicable

P. Endangered Species Act. - Not Applicable

Q. Monitoring and Reporting. Water Code sections 13267 and 13383 authorize the Central Valley Water Board to require technical and monitoring reports. The Monitoring and Reporting Program establishes monitoring and reporting requirements to implement State requirements. This Monitoring and Reporting Program is provided in Attachment E.

R. Standard and Special Provisions. - Not Applicable

S. Provisions and Requirements Implementing State Law. The provisions/requirements in this Order are included to implement state law.

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

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

IT IS HEREBY ORDERED, that Order No. R5-2002-0018 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.

III. DISCHARGE PROHIBITIONS

A. Discharge of wastewater at a location or in a manner different from that described in the Findings is prohibited.

- B. Treatment system bypass (including screens) of untreated or partially treated waste is prohibited, except as allowed by Standard Provision E.2 of the *Standard Provisions and Reporting Requirements for Waste Discharge Requirements*.
- C. Treatment system by-pass or overflow of wastes to surface waters is prohibited, except if the Discharger has enrolled in the NPDES general order for *Limited Threat Discharges of Treated/Untreated Groundwater from Cleanup Sites, Wastewater from Superchlorination Projects, and Other Limited Threat Wastewaters to Surface Water* (Order R5-2013-0073, NPDES No. CAG995002) and the discharge is in compliance with that Order.
- D. Neither the discharge nor its treatment shall create a nuisance as defined in Section 13050 of the California Water Code.
- E. The Discharge of waste classified as 'hazardous' or toxic substances, as defined in the California Code of Regulations, title 23, section 2510 et seq., is prohibited.
- F. Only the discharge of boiler blowdown, cooling tower water, turbine cooling water, equipment and facilities wash waters, and biofilter blowdown are allowed under this Order. The discharge of particleboard manufacturing process wastewater is prohibited.

IV. EFFLUENT LIMITATIONS AND DISCHARGE SPECIFICATIONS

A. Surface Water Effluent Limitations – Not Applicable

B. Land Discharge Specifications

1. No waste constituent shall be released, discharged, or placed where it will be released or discharged, in a manner that causes violation of the Groundwater Limitations of this Order.
2. Wastewater treatment, storage, and disposal shall not cause pollution or a nuisance as defined by Water Code section 13050.
3. The discharge shall remain within the permitted waste treatment/containment structures and land application areas at all times.
4. The Discharger shall operate all systems and equipment to optimize the quality of the discharge.
5. All conveyance, treatment, storage, and disposal systems shall be designed, constructed, operated, and maintained to prevent inundation or washout due to floods with a 100-year return frequency.
6. Wastewater treatment, storage, and disposal ponds or structures shall have sufficient capacity to accommodate allowable wastewater flow, design seasonal precipitation, and ancillary inflow and infiltration during the winter while ensuring continuous compliance with all requirements of this Order. Design seasonal precipitation shall be based on total annual precipitation using a return period of 100 years, distributed monthly in accordance with historical rainfall patterns.
7. Freeboard shall never be less than 2 feet, measured vertically from the surface of the pond water to the lowest point of overflow of the surrounding berm for the Log Deck Settling Pond, the Irrigation Pond, and the Irrigation Field Catch Pond, and from the surface of the pond water to the lowest point of overflow at surface grade for the Plant Process Catch Basin.
8. On or about **1 October** of each year, available capacity shall at least equal the volume necessary to comply with Discharge Specification B.7.
9. Newly constructed or rehabilitated berms or levees (excluding internal berms that separate ponds or control the flow of water within a pond) shall be designed and constructed under the supervision of a California Registered Civil Engineer.
10. The Discharge shall comply with Treatment Pond Operating Requirements and Land Application Requirements below.

C. Reclamation Specifications

[Not Applicable]

V. RECEIVING WATER LIMITATIONS

A. Surface Water Limitations – Not Applicable

B. Groundwater Limitations

1. Release of waste constituents from any storage, treatment, or disposal component associated with the Facility, shall not cause the underlying groundwater to contain waste constituents in concentrations greater than background water quality or water quality objectives, whichever is greater.

VI. PROVISIONS

A. Standard Provisions

1. The Discharger shall comply with all *Standard Provisions and Reporting Requirements for Waste Discharge Requirements* dated 1 March 1991 included in Attachment D of this Order.

B. Monitoring and Reporting Program (MRP) Requirements

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

C. Special Provisions

1. Reopener Provisions - Not Applicable

2. Special Studies, Technical Reports and Additional Monitoring Requirements

a. Chronic Whole Effluent Toxicity. - Not Applicable

- b. **Groundwater Monitoring.** To determine compliance with Groundwater Limitations contained in section V.B of this Order, Discharger shall monitor groundwater as required by the MRP, in Attachment E of this Order. All monitoring wells shall comply with the appropriate standards as described in California Well Standards Bulletin 74-90 (June 1991) and Water Well Standards: State of California Bulletin 74-81 (December 1981), and any more stringent standards adopted by the Discharger or County pursuant to California Water Code section 13801.

If the monitoring shows that any constituent concentrations are increased above background water quality, the Discharger shall perform BPTC evaluation tasks as required in section VI.C.2.c below.

- c. **BPTC Evaluation Tasks.** If the groundwater monitoring results conducted under this Order show that the discharge of waste is threatening to cause or has caused groundwater to contain waste constituents in concentrations statistically greater than background water quality, the Discharger shall propose a work plan and schedule for providing BPTC as required by Resolution 68-16. The work plan and schedule shall be submitted, within 6 months the after the first full year of monitoring that documents constituent concentrations increased beyond background water quality. The technical report describing the work plan and schedule shall contain a preliminary evaluation of each component and propose a time schedule for completing the comprehensive technical evaluation.

Following completion of the comprehensive technical evaluation, the Discharger shall submit a technical report describing the evaluation’s results and critiquing each evaluated component with respect to BPTC and minimizing the discharge’s impact on groundwater quality. Where deficiencies are documented, the technical report shall provide recommendations for necessary modifications (e.g., new or revised salinity source control measures, Facility component upgrade and retrofit) to achieve BPTC and identify the source of funding and proposed schedule for modifications. The schedule shall be as short as practicable but in no case shall completion of the necessary modifications exceed 4 years past the Executive Officer’s determination of the adequacy of the comprehensive technical evaluation, unless the schedule is reviewed and specifically approved by the Central Valley Water Board. The technical report shall include specific methods the Discharger proposes as a means to measure processes and assure continuous optimal performance of BPTC measures. The Discharger shall comply with the following compliance schedule in implementing the work required by this Provision:

<u>Task</u>	<u>Compliance Date</u>
i. Submit technical report: work plan and schedule for comprehensive evaluation	Within 6 months after first full year of monitoring that documents constituent concentrations increased beyond background water quality.
ii. Commence comprehensive evaluation	30 days following Executive Officer approval of Task i.
iii. Complete comprehensive evaluation	As established by Task i and/or 2 years following Task ii, whichever is sooner.
iv. Submit technical report: comprehensive evaluation results	60 days following completion of Task iii.
v. Submit annual report, if applicable, describing the overall status of BPTC implementation and compliance with groundwater limitations over the past reporting year	To be submitted in accordance with the MRP (Attachment E, Section X.D.1).

- d. **Biofilter Monitoring Study.** Upon reactivation of the Facility’s biofilter, the Discharger shall complete and submit a report on the characteristics of the biofilter blowdown wastewater. At a minimum, the study report shall provide monitoring data for the discharge from the unit, as well as provide information related to the operation of the unit (including chemical additives used, if any). The Discharger shall comply with the following time schedule to complete the study:

<u>Task</u>	<u>Compliance Date</u>
i. Submit Workplan for approval by the Executive Officer	Within 3 months following startup of the biofilter.
ii. Complete Study and Submit Study Report	Within 1 year following use of the biofilter and production of biofilter blowdown wastewater.

3. Best Management Practices and Pollution Prevention – Not Applicable

4. Construction, Operation and Maintenance Specifications

a. Pond Operating Requirements.

- i. All ponds and open containment structures shall be managed to prevent breeding of mosquitoes. In particular,
 - a) An erosion control program shall be implemented to ensure that small coves and irregularities are not created around the perimeter of the water surface.
 - b) Weeds shall be minimized through control of water depth, harvesting, or herbicides.
 - c) Dead algae, vegetation, and debris shall not accumulate on the water surface.
 - d) The Discharger shall consult and coordinate with the local Mosquito Abatement District to minimize the potential for mosquito breeding as needed to supplement the above measures.
- ii. Freeboard shall never be less than 2 feet, measured vertically from the surface of the pond water to the lowest point of overflow of the surrounding berm for the Log Deck Settling Pond, the Irrigation Pond, and the Irrigation Field Catch Pond, and from the surface of the pond water to the lowest point of overflow at surface grade for the Plant Process Catch Basin.
- iii. Objectionable odors originating at the Facility shall not be perceivable beyond the limits of the wastewater treatment and disposal areas.
- iv. As a means of discerning compliance with Pond Operating Requirement VI.C.4.a.iii above, the dissolved oxygen content in the upper zone (1 foot) of wastewater in ponds shall not be less than 1.0 mg/L.
- v. Ponds shall not have a pH less than 6.5 or greater than 9.0.

b. Land Application Requirements.

- i. The discharge shall be distributed uniformly on adequate acreage.
- ii. Public contact with effluent shall be precluded through such means as fences, signs, and other acceptable alternatives.
- iii. Areas irrigated with effluent shall be managed to prevent breeding of mosquitoes. More specifically:
 - a) All applied irrigation water must infiltrate completely within 24 hours.
 - b) Ditches not serving as wildlife habitat should be maintained free of emergent, marginal, and floating vegetation.
 - c) Low-pressure and un-pressurized pipelines and ditches, which are accessible to mosquitoes, shall not be used to store reclaimed water.
- iv. Discharges to the Irrigation Field shall be managed to minimize erosion. Runoff from the disposal area must be captured and returned to the treatment facilities or spray fields.
- v. The Discharger may not discharge effluent to the disposal fields 24 hours before precipitation, during periods of precipitation, and for at least 24 hours after cessation of precipitation, or when soils are saturated.
- vi. A 50-foot buffer zone shall be maintained between any watercourse and the wetted area produced during irrigation used for effluent disposal.
- vii. A 100-foot buffer zone shall be maintained between any spring, domestic well or irrigation well and the wetted area produced during irrigation used for effluent disposal.
- viii. A 50-foot buffer zone shall be maintained between effluent disposal areas and all property boundaries.
- ix. The resulting effect of the wastewater discharge on the soil pH shall not exceed the buffering capacity of the soil profile.

5. Special Provisions for Municipal Facilities (POTWs Only)

[Not Applicable]

6. Other Special Provisions

- a. 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 the existence of this Order by letter, a

copy of which shall be immediately forwarded to the Central Valley Water Board.

To assume operation under this Order, the succeeding owner or operator must apply in writing to the Executive Officer requesting transfer of the Order. The request must contain the requesting entity's full legal name, the State of incorporation if a corporation, address and telephone number of the persons responsible for contact with the Central Valley Water Board and a statement. The statement shall comply with the signatory and certification requirements in the Standard Provisions of this Order (Attachment D, Section V.B.) and state that the new owner or operator assumes full responsibility for compliance with this Order. Failure to submit the request shall be considered a discharge without requirements, a violation of the California Water Code. Transfer shall be approved or disapproved in writing by the Executive Officer.

7. Compliance Schedules

[Not Applicable]

VII. COMPLIANCE DETERMINATION

[Not Applicable]

ATTACHMENT A – DEFINITIONS

Arithmetic Mean (μ), also called the average, is the sum of measured values divided by the number of samples. For ambient water concentrations, the arithmetic mean is calculated as follows:

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

Best Practicable Treatment or Control (BPTC): BPTC is a requirement of State Water Resources Control Board Resolution 68-16 – “Statement of Policy with Respect to Maintaining High Quality of Waters in California” (referred to as the “Antidegradation Policy”). BPTC is the treatment or control of a 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.” Pollution is defined in CWC Section 13050(I). In general, an exceedance of a water quality objective in the Basin Plan constitutes “pollution”.

Detected, but Not Quantified (DNQ) are those sample results less than the RL, but greater than or equal to the laboratory’s MDL.

Estimated Chemical Concentration is the estimated chemical concentration that results from the confirmed detection of the substance by the analytical method below the ML value.

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

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

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

Not Detected (ND) are those sample results less than the laboratory’s MDL.

Reporting Level (RL) is the ML (and its associated analytical method) chosen by the Discharger for reporting and compliance determination from the MLs included in this Order. The ML is based on the proper application of method-based analytical procedures for sample preparation and the absence of any matrix interferences. Other factors may be applied to the

ML depending on the specific sample preparation steps employed. For example, the treatment typically applied in cases where there are matrix-effects is to dilute the sample or sample aliquot by a factor of ten. In such cases, this additional factor must be applied to the ML in the computation of the RL.

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

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

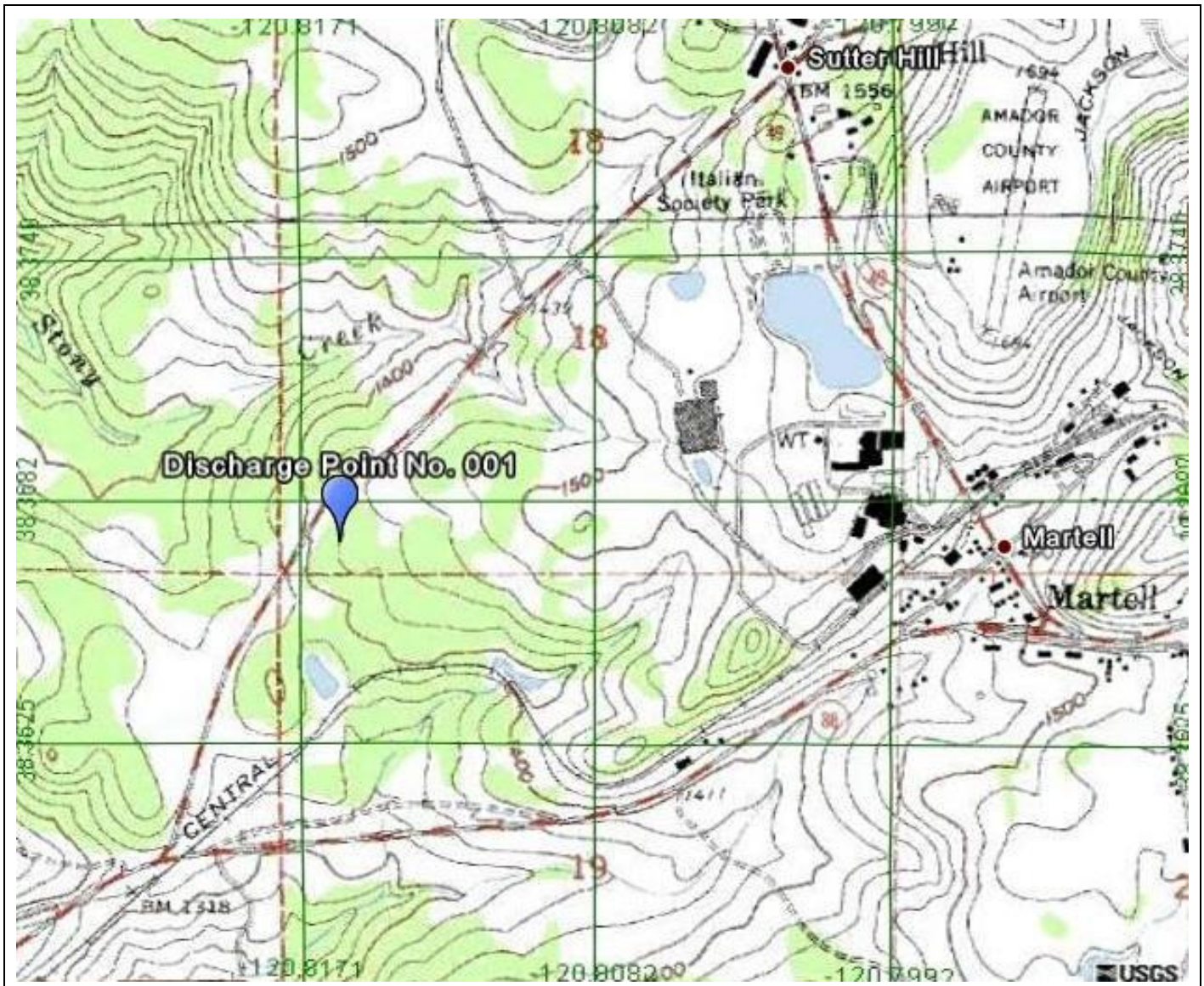
where:

x is the observed value;

μ is the arithmetic mean of the observed values; and

n is the number of samples.

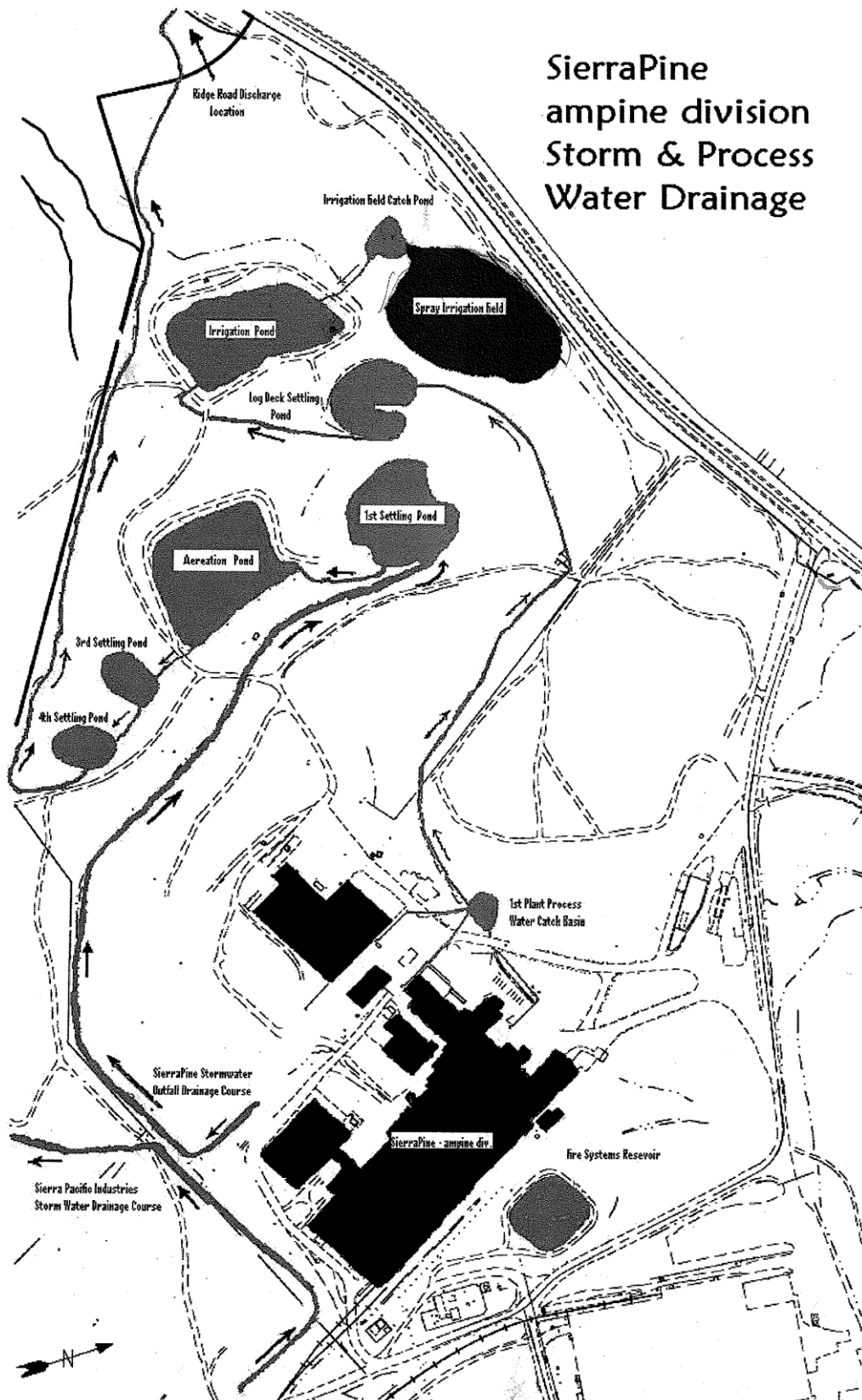
ATTACHMENT B – MAP



SITE LOCATION MAP

SIERRAPINE LIMITED
SIERRAPINE – AMPINE DIVISION
AMADOR COUNTY

ATTACHMENT C – FLOW SCHEMATIC



ATTACHMENT D – STANDARD PROVISIONS

The Discharger shall comply with the “*Standard Provisions and Reporting Requirements for Waste Discharge Requirements*”, dated 1 March 1991, which are attached hereto and made part of this Order by reference. This attachment and its individual paragraphs are commonly referenced as “Standard Provisions”.

CALIFORNIA REGIONAL WATER QUALITY CONTROL BOARD
CENTRAL VALLEY REGION
STANDARD PROVISIONS AND REPORTING REQUIREMENTS
FOR
WASTE DISCHARGE REQUIREMENTS

1 March 1991

A. General Provisions:

1. The requirements prescribed herein do not authorize the commission of any act causing injury to the property of another, or protect the Discharger from liabilities under federal, state, or local laws. This Order does not convey any property rights or exclusive privileges.
2. The provisions of this Order are severable. If any provision of this Order is held invalid, the remainder of this Order shall not be affected.
3. After notice and opportunity for a hearing, this Order may be terminated or modified for cause, including, but not limited to:
 - a. Violation of any term or condition contained in this Order;
 - b. Obtaining this Order by misrepresentation, or failure to disclose fully all relevant facts;
 - c. A change in any condition that results in either a temporary or permanent need to reduce or eliminate the authorized discharge;
 - d. A material change in the character, location, or volume of discharge.
4. Before making a material change in the character, location, or volume of discharge, the discharger shall file a new Report of Waste Discharge with the Regional Board. A material change includes, but is not limited to, the following:
 - a. An increase in area or depth to be used for solid waste disposal beyond that specified in waste discharge requirements.

- b. A significant change in disposal method, location or volume, e.g., change from land disposal to land treatment.
 - c. The addition of a major industrial, municipal or domestic waste discharge facility.
 - d. The addition of a major industrial waste discharge to a discharge of essentially domestic sewage, or the addition of a new process or product by an industrial facility resulting in a change in the character of the waste.
5. Except for material determined to be confidential in accordance with California law and regulations, all reports prepared in accordance with terms of this Order shall be available for public inspection at the offices of the Board. Data on waste discharges, water quality, geology, and hydrogeology shall not be considered confidential.
 6. The discharger shall take all reasonable steps to minimize any adverse impact to the waters of the state resulting from noncompliance with this Order. Such steps shall include accelerated or additional monitoring as necessary to determine the nature and impact of the noncompliance.
 7. The discharger shall maintain in good working order and operate as efficiently as possible any facility, control system, or monitoring device installed to achieve compliance with the waste discharge requirements.
 8. The discharger shall permit representatives of the Regional Board (hereafter Board) and the State Water Resources Control Board, upon presentations of credentials, to:
 - a. Enter premises where wastes are treated, stored, or disposed of and facilities in which any records are kept,
 - b. Copy any records required to be kept under terms and conditions of this Order,
 - c. Inspect at reasonable hours, monitoring equipment required by this Order, and
 - d. Sample, photograph and video tape any discharge, waste, waste management unit, or monitoring device.
 9. For any electrically operated equipment at the site, the failure of which would cause loss of control or containment of waste materials, or violation of this Order, the discharger shall employ safeguards to prevent loss of control over wastes. Such safeguards may include alternate power sources, standby generators, retention capacity, operating procedures, or other means.
 10. The fact that it would have been necessary to halt or reduce the permitted activity in Order to maintain compliance with this Order shall not be a defense for the discharger's violations of the Order.

11. Neither the treatment nor the discharge shall create a condition of nuisance or pollution as defined by the California Water Code, Section 13050.
12. The discharge shall remain within the designated disposal area at all times except as allowed by the Limited Threat General Waste Discharge Requirements Order R5-2013-0073-01.

B. General Reporting Requirements:

1. In the event the discharger does not comply or will be unable to comply with any prohibition or limitation of this Order for any reason, the discharger shall notify the Board by telephone at **(916) 464-3291** *[Note: Current phone numbers for all three Regional Board offices may be found on the internet at http://www.swrcb.ca.gov/rwqcb5/contact_us.]* as soon as it or its agents have knowledge of such noncompliance or potential for noncompliance, and shall confirm this notification in writing within **two weeks**. The written notification shall state the nature, time and cause of noncompliance, and shall include a timetable for corrective actions.
2. The discharger shall have a plan for preventing and controlling accidental discharges, and for minimizing the effect of such events.

This plan shall:

- a. Identify the possible sources of accidental loss or leakage of wastes from each waste management, treatment, or disposal facility.
- b. Evaluate the effectiveness of present waste management/treatment units and operational procedures, and identify needed changes of contingency plans.
- c. Predict the effectiveness of the proposed changes in waste management/treatment facilities and procedures and provide an implementation schedule containing interim and final dates when changes will be implemented.

The Board, after review of the plan, may establish conditions that it deems necessary to control leakages and minimize their effects.

3. All reports shall be signed by persons identified below:
 - a. For a corporation: by a principal executive officer of at least the level of senior vice-president.
 - b. For a partnership or sole proprietorship: by a general partner or the proprietor.
 - c. For a municipality, state, federal or other public agency: by either a principal executive officer or ranking elected or appointed official.

- d. A duly authorized representative of a person designated in 3a, 3b or 3c of this requirement if;
- (1) the authorization is made in writing by a person described in 3a, 3b or 3c of this provision;
 - (2) 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 waste management unit, superintendent, or position of equivalent responsibility. (A duly authorized representative may thus be either a named individual or any individual occupying a named position); and
 - (3) the written authorization is submitted to the Board

Any person signing a document under this Section shall make the following certification:

“I certify under penalty of law that I have personally examined and am familiar with the information submitted in this document and all attachments and that, based on my inquiry of the those individuals immediately responsible for obtaining the information, I believe that the information is true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment.”

4. Technical and monitoring reports specified in this Order are requested pursuant to Section 13267 of the Water Code. Failing to furnish the reports by the specified deadlines and falsifying information in the reports, are misdemeanors that may result in assessment of civil liabilities against the discharger.
5. The discharger shall mail a copy of each monitoring report and any other reports required by this Order to:

California Regional Water Quality Control Board
Central Valley Region
11020 Sun Center Drive, #200
Rancho Cordova, CA 95670-6114

*Note: Current addresses for all three Regional Board offices may be found on the internet at http://www.swrcb.ca.gov/rwqcb5/contact_us.
or the current address if the office relocates.*

C. Provisions for Monitoring:

1. All analyses shall be made in accordance with the latest edition of: (1) *Methods for Organic Chemical Analysis of Municipal and Industrial Wastewater* (EPA 600 Series) and (2) *Test Methods for Evaluating Solid Waste* (SW 846-latest edition). The test method may be modified subject to application and approval of alternate test procedures under the Code of Federal Regulations (40 CFR 136).

2. Chemical, bacteriological, and bioassay analysis shall be conducted at a laboratory certified for such analyses by the State Department of Health Services. In the event a certified laboratory is not available to the discharger, analyses performed by a noncertified laboratory will be accepted provided a Quality Assurance-Quality Control Program is instituted by the laboratory. A manual containing the steps followed in this program must be kept in the laboratory and shall be available for inspection by Board staff. The Quality Assurance-Quality Control Program must conform to EPA guidelines or to procedures approved by the Board.

Unless otherwise specified, all metals shall be reported as Total Metals.

3. The discharger shall retain records of all monitoring information, including all calibration and maintenance records, all original strip chart recordings of continuous monitoring instrumentation, copies of all reports required by this Order, and records of all data used to complete the application for this Order. Records shall be maintained for a minimum of three years from the date of the sample, measurement, report, or application. This period may be extended during the course of any unresolved litigation regarding this discharge or when requested by the Regional Board Executive Officer.

Record of monitoring information shall include:

- a. the date, exact place, and time of sampling or measurements,
 - b. the individual(s) who performed the sampling of the measurements,
 - c. the date(s) analyses were performed,
 - d. the individual(s) who performed the analyses,
 - e. the laboratory which performed the analysis,
 - f. the analytical techniques or methods used, and
 - g. the results of such analyses.
4. All monitoring instruments and devices used by the discharger to fulfill the prescribed monitoring program shall be properly maintained and calibrated at least yearly to ensure their continued accuracy.
 5. The discharger shall maintain a written sampling program sufficient to assure compliance with the terms of this Order. Anyone performing sampling on behalf of the discharger shall be familiar with the sampling plan.
 6. The discharger shall construct all monitoring wells to meet or exceed the standards stated in the State Department of Water Resources *Bulletin 74-81* and subsequent revisions, and shall comply with the reporting provisions for wells required by Water Code Sections 13750 through 13755.22

D. Standard Conditions for Facilities Subject to California Code of Regulations, Title 23, Division 3, Chapter 15 (Chapter 15)

1. All classified waste management units shall be designed under the direct supervision of a California registered civil engineer or a California certified engineering geologist. Designs shall include a Construction Quality Assurance Plan, the purpose of which is to:
 - a. demonstrate that the waste management unit has been constructed according to the specifications and plans as approved by the Board.
 - b. provide quality control on the materials and construction practices used to construct the waste management unit and prevent the use of inferior products and/or materials which do not meet the approved design plans or specifications.
2. Prior to the discharge of waste to any classified waste management unit, a California registered civil engineer or a California certified engineering geologist must certify that the waste management unit meets the construction or prescriptive standards and performance goals in Chapter 15, unless an engineered alternative has been approved by the Board. In the case of an engineered alternative, the registered civil engineer or a certified engineering geologist must certify that the waste management unit has been constructed in accordance with Board-approved plans and specifications.
3. Materials used to construct liners shall have appropriate physical and chemical properties to ensure containment of discharged wastes over the operating life, closure, and post-closure maintenance period of the waste management units.
4. Closure of each waste management unit shall be performed under the direct supervision of a California registered civil engineer or a California certified engineering geologist.

E. Conditions Applicable to Discharge Facilities Exempted from Chapter 15 Under Section 2511

1. If the discharger's wastewater treatment plant is publicly owned or regulated by the Public Utilities Commission, it shall be supervised and operated by persons possessing certificates of appropriate grade according to California Code of Regulations, Title 23, Division 4, Chapter 14.
2. By-pass (the intentional diversion of waste streams from any portion of a treatment facility, except diversions designed to meet variable effluent limits) is prohibited. The Board may take enforcement action against the discharger for by-pass unless:
 - a. (1) By-pass was unavoidable to prevent loss of life, personal injury, or severe property damage. (Severe property damage means substantial physical damage to property, damage to the treatment facilities that causes them to become inoperable, or substantial and permanent loss of natural resources that can reasonably be expected to occur in the absence of a by-pass. Severe property damage does not mean economic loss caused by delays in production); and

- (2) There were no feasible alternatives to by-pass, such as the use of auxiliary treatment facilities or retention of untreated waste. This condition is not satisfied if adequate back-up equipment should have been installed in the exercise of reasonable engineering judgment to prevent a by-pass that would otherwise occur during normal periods of equipment downtime or preventive maintenance; or
- b. (1) by-pass is required for essential maintenance to assure efficient operation; and
- (2) neither effluent nor receiving water limitations are exceeded; and
- (3) the discharger notifies the Board ten days in advance.

The permittee shall submit notice of an unanticipated by-pass as required in paragraph B.1. above.

3. A discharger that wishes to establish the affirmative defense of an upset (see definition in E.6 below) in an action brought for noncompliance shall demonstrate, through properly signed, contemporaneous operating logs, or other evidence, that:
- a. an upset occurred and the cause(s) can be identified;
- b. the permitted facility was being properly operated at the time of the upset;
- c. the discharger submitted notice of the upset as required in paragraph B.1. above; and
- d. the discharger complied with any remedial measures required by waste discharge requirements.

In any enforcement proceeding, the discharger seeking to establish the occurrence of an upset has the burden of proof.

4. A discharger whose waste flow has been increasing, or is projected to increase, shall estimate when flows will reach hydraulic and treatment capacities of its treatment, collection, and disposal facilities. The projections shall be made in January, based on the last three years' average dry weather flows, peak wet weather flows and total annual flows, as appropriate. When any projection shows that capacity of any part of the facilities may be exceeded in four years, the discharger shall notify the Board by **31 January**.
5. Effluent samples shall be taken downstream of the last addition of wastes to the treatment or discharge works where a representative sample may be obtained prior to disposal. Samples shall be collected at such a point and in such a manner to ensure a representative sample of the discharge.

6. Definitions

- a. Upset means an exceptional incident in which there is unintentional and temporary noncompliance with effluent limitations because of factors beyond the reasonable control of the Discharger. An upset does not include noncompliance to the extent caused by operational error, improperly designed treatment facilities, inadequate treatment facilities, lack of preventive maintenance, or careless or improper action.
- b. The monthly average discharge is the total discharge by volume during a calendar month divided by the number of days in the month that the facility was discharging. This number is to be reported in gallons per day or million gallons per day.

Where less than daily sampling is required by this Order, the monthly average shall be determined by the summation of all the measured discharges by the number of days during the month when the measurements were made.

- c. The monthly average concentration is the arithmetic mean of measurements made during the month.
- d. The “daily maximum” **discharge** is the total discharge by volume during any day.
- e. The “daily maximum” **concentration** is the highest measurement made on any single discrete sample or composite sample.
- f. A “grab” sample is any sample collected in less than 15 minutes.
- g. Unless otherwise specified, a composite sample is a combination of individual samples collected over the specified sampling period;
 - (1) at equal time intervals, with a maximum interval of one hour
 - (2) at varying time intervals (average interval one hour or less) so that each sample represents an equal portion of the cumulative flow.

The duration of the sampling period shall be specified in the Monitoring and Reporting Program. The method of compositing shall be reported with the results.

7. Annual Pretreatment Report Requirements:

Applies to dischargers required to have a Pretreatment Program as stated in waste discharge requirements.)

The annual report shall be submitted **by 28 February** and include, but not be limited to, the following items:

- a. A summary of analytical results from representative, flow-proportioned, 24-hour composite sampling of the influent and effluent for those pollutants EPA has identified under Section 307(a) of the Clean Water Act which are known or suspected to be discharged by industrial users.

The discharger is not required to sample and analyze for asbestos until EPA promulgates an applicable analytical technique under 40 CFR (Code of Federal Regulations) Part 136. Sludge shall be sampled during the same 24-hour period and analyzed for the same pollutants as the influent and effluent sampling analysis. The sludge analyzed shall be a composite sample of a minimum of 12 discrete samples taken at equal time intervals over the 24-hour period. Wastewater and sludge sampling and analysis shall be performed at least annually. The discharger shall also provide any influent, effluent or sludge monitoring data for nonpriority pollutants which may be causing or contributing to Interference, Pass Through or adversely impacting sludge quality. Sampling and analysis shall be performed in accordance with the techniques prescribed in 40 CFR Part 136 and amendments thereto.

- b. A discussion of Upset, Interference, or Pass Through incidents, if any, at the treatment plant which the discharger knows or suspects were caused by industrial users of the system. The discussion shall include the reasons why the incidents occurred, the corrective actions taken and, if known, the name and address of the industrial user(s) responsible. The discussion shall also include a review of the applicable pollutant limitations to determine whether any additional limitations, or changes to existing requirements, may be necessary to prevent Pass Through, Interference, or noncompliance with sludge disposal requirements.
- c. The cumulative number of industrial users that the discharger has notified regarding Baseline Monitoring Reports and the cumulative number of industrial user responses.
- d. An updated list of the discharger's industrial users including their names and addresses, or a list of deletions and additions keyed to a previously submitted list. The discharger shall provide a brief explanation for each deletion. The list shall identify the industrial users subject to federal categorical standards by specifying which set(s) of standards are applicable. The list shall indicate which categorical industries, or specific pollutants from each industry, are subject to local limitations that are more stringent than the federal categorical standards. The discharger shall also list the noncategorical industrial users that are subject only to local discharge limitations. The discharger shall characterize the compliance status through the year of record of each industrial user by employing the following descriptions:
 - (1) Complied with baseline monitoring report requirements (where applicable);
 - (2) Consistently achieved compliance;
 - (3) Inconsistently achieved compliance;
 - (4) Significantly violated applicable pretreatment requirements as defined by 40 CFR 403.8(f)(2)(vii);

- (5) Complied with schedule to achieve compliance (include the date final compliance is required);
- (6) Did not achieve compliance and not on a compliance schedule;
- (7) Compliance status unknown.

A report describing the compliance status of any industrial user characterized by the descriptions in items (d)(3) through (d)(7) above shall be **submitted quarterly from the annual report date** to EPA and the Board. The report shall identify the specific compliance status of each such industrial user. This quarterly reporting requirement shall commence upon issuance of this Order.

- e. A summary of the inspection and sampling activities conducted by the discharger during the past year to gather information and data regarding the industrial users. The summary shall include but not be limited to, a tabulation of categories of dischargers that were inspected and sampled; how many and how often; and incidents of noncompliance detected.
- f. A summary of the compliance and enforcement activities during the past year. The summary shall include the names and addresses of the industrial users affected by the following actions:
 - (1) Warning letters or notices of violation regarding the industrial user's apparent noncompliance with federal categorical standards or local discharge limitations. For each industrial user, identify whether the apparent violation concerned the federal categorical standards or local discharge limitations;
 - (2) Administrative Orders regarding the industrial user's noncompliance with federal categorical standards or local discharge limitations. For each industrial user, identify whether the violation concerned the federal categorical standards or local discharge limitations;
 - (3) Civil actions regarding the industrial user's noncompliance with federal categorical standards or local discharge limitations. For each industrial user, identify whether the violation concerned the federal categorical standards or local discharge limitations;
 - (4) Criminal actions regarding the industrial user's noncompliance with federal categorical standards or local discharge limitations. For each industrial user, identify whether the violation concerned the federal categorical standards or local discharge limitations.
 - (5) Assessment of monetary penalties. For each industrial user identify the amount of the penalties;
 - (6) Restriction of flow to the treatment plant; or

(7) Disconnection from discharge to the treatment plant.

- g. A description of any significant changes in operating the pretreatment program which differ from the discharger's approved Pretreatment Program, including, but not limited to, changes concerning: the program's administrative structure; local industrial discharge limitations; monitoring program or monitoring frequencies; legal authority of enforcement policy; funding mechanisms; resource requirements; and staffing levels.
- h. A summary of the annual pretreatment budget, including the cost of pretreatment program functions and equipment purchases.
- i. A summary of public participation activities to involve and inform the public.
- j. A description of any changes in sludge disposal methods and a discussion of any concerns not described elsewhere in the report.

Duplicate signed copies of these reports shall be submitted to the Board and:

Regional Administrator
U.S. Environmental Protection Agency W-5
75 Hawthorne Street
San Francisco, CA 94105

and

State Water Resource Control Board
Division of Water Quality
P.O. Box 100
Sacramento, CA 95812

ATTACHMENT E – MONITORING AND REPORTING PROGRAM

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ATTACHMENT E – MONITORING AND REPORTING PROGRAM (MRP)

Water Code Sections 13267 and 13383 authorize the Central Valley Regional Water Quality Control Board (Central Valley Water Board) to require technical and monitoring reports. This Monitoring and Reporting Program (MRP) presents requirements for monitoring wastewater, ponds, spray fields and groundwater.

I. GENERAL MONITORING PROVISIONS

- A.** All samples shall be taken at the monitoring locations specified below. Monitoring locations shall not be changed without notification to and the approval of the Central Valley Water Board. All samples shall be representative of the volume and nature of the discharge. The time, date, and location of each grab sample shall be recorded on the sample chain of custody form.

II. MONITORING LOCATIONS

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

Table E-1. Monitoring Station Locations

Monitoring Location Name	Monitoring Location Description
LND 001	Shall be located within the Plant Process Catch Basin.
LND-002	Shall be located within the Log Deck Settling Pond.
LND-003	Shall be located within the Irrigation Pond.
LND-004	Shall be located within Irrigation Field Catch Pond.
LND-005	Shall be located within the Land Application Area.
GW-001	Groundwater monitoring well (identified as WQ1 in the Discharger’s Groundwater Characterization Work Plan).
GW-002	Groundwater monitoring well (identified as WQ3 in the Discharger’s Groundwater Characterization Work Plan).
GW-003	Groundwater monitoring well (identified as WQ5 in the Discharger’s quarterly groundwater monitoring reports).

III. INFLUENT MONITORING REQUIREMENTS

[Not Applicable]

IV. EFFLUENT MONITORING REQUIREMENTS

[Not Applicable]

V. WHOLE EFFLUENT TOXICITY TESTING REQUIREMENTS

[Not Applicable]

VI. LAND DISCHARGE MONITORING REQUIREMENTS

A. Monitoring Location LND-001 (Plant Process Catch Basin)

- Freeboard shall be measured vertically from the surface of the pond water to the lowest point of overflow at surface grade surrounding the Plant Process Catch Basin and shall be measured to the nearest 0.1 feet. The Discharger shall monitor the Plant Process Catch Basin at Monitoring Location LND-001 as follows:

Table E-2 Land Discharge Monitoring Requirements, LND-001

Parameter	Units	Sample Type	Minimum Sampling Frequency	Required Analytical Test Method
Freeboard	feet	Measure	1/Month	--
Odors ¹	--	Observation	1/Week	--

¹ The presence of strong or unusual odors shall be reported.

- The monitoring results shall be included in the monthly monitoring report described in Section X below.

B. Monitoring Location LND-002 (Log Deck Settling Pond)

- Freeboard shall be measured vertically from the surface of the pond water to the lowest elevation of the surrounding berm and shall be measured to the nearest 0.1 feet. The Discharger shall monitor the Log Deck Settling Pond at Monitoring Location LND-002 as follows:

Table E-3 Land Discharge Monitoring Requirements, LND-002

Parameter	Units	Sample Type	Minimum Sampling Frequency	Required Analytical Test Method
Freeboard	Feet	Measure	1/Month	--
Berm Condition ¹	--	Observation	1/Month	--
Odors ²	--	Observation	1/Week	--

¹ Containment berms shall be observed for signs of seepage or surfacing water along the exterior toe of the berms.

² The presence of strong or unusual odors shall be reported.

- The monitoring results shall be included in the monthly monitoring report described in Section X below.

C. Monitoring Location LND-003 (Irrigation Pond)

- Wastewater samples shall be representative of the mixture of wastewater and storm water in the Irrigation Pond. Grab samples obtained at a location opposite the pond inlet will be considered representative of the waste. Freeboard shall be measured vertically from the surface of the pond water to the lowest elevation of the surrounding berm and shall be measured to the nearest 0.1 feet. The Discharger shall monitor the Irrigation Pond at monitoring location LND-003 as follows:

Table E-4. Land Discharge Monitoring Requirements, LND-003

Parameter	Units	Sample Type	Minimum Sampling Frequency ⁴	Required Analytical Test Method
Freeboard	Feet	Measure	1/Month	--
Berm Condition ²	--	Observation	1/Month	--
Odors ³	--	Observation	1/Week	--
pH	standard units	Grab ¹	1/Quarter	--
Hardness (as CaCO ₃)	mg/L	Grab ¹	1/Quarter	--
Total Dissolved Solids	mg/L	Grab ¹	1/Quarter	--
Ammonia Nitrogen, Total (as N)	mg/L	Grab ¹	1/Quarter	²
Chloride	mg/L	Grab ¹	1/Quarter	--
Iron, Dissolved	µg/L	Grab ¹	1/Quarter	--
Manganese, Dissolved	µg/L	Grab ¹	1/Quarter	--
Nitrogen, Total	mg/L	Grab ¹	1/Quarter	--

Parameter	Units	Sample Type	Minimum Sampling Frequency ⁴	Required Analytical Test Method
Sulfate	mg/L	Grab ¹	1/Quarter	--

- ¹ Samples shall be collected at a depth of one foot, opposite the inlet.
- ² Containment berms shall be observed for signs of seepage or surfacing water along the exterior toe of the berms.
- ³ The presence of strong or unusual odors shall be reported.
- ⁴ After four consecutive quarters of compliance with monitoring requirements, the Discharger may request that the Executive Officer of the Central Valley Water Board consider reduction in the monitoring frequency.

2. The monitoring results shall be included in the monthly monitoring report described in Section X below.

D. Monitoring Location LND-004 (Irrigation Field Catch Pond)

1. Freeboard shall be measured vertically from the surface of the pond water to the lowest elevation of the surrounding berm and shall be measured to the nearest 0.1 feet. The Discharger shall monitor the Irrigation Field Catch Pond at monitoring location LND-003 as follows:

Table E-5. Land Discharge Monitoring Requirements, LND-004

Parameter	Units	Sample Type	Minimum Sampling Frequency	Required Analytical Test Method
Freeboard	Feet	Measure	1/Week	--
Berm Condition ¹	--	Observation	1/Month	--
Odors ²	--	Observation	1/Week	--

- ¹ Containment berms shall be observed for signs of seepage or surfacing water along the exterior toe of the berms.
- ² The presence of strong or unusual odors shall be reported.

2. The monitoring results shall be included in the monthly monitoring report described in Section X below.

E. Monitoring Location LND-005 (Land Application Area or LAA)

1. The Discharger shall monitor the Land Application Area at monitoring location LND-005 during wastewater application as follows:

Table E-6. Land Discharge Monitoring Requirements, LND-005

Parameter	Units	Sample Type	Minimum Sampling Frequency	Required Analytical Test Method
Flow to the LAA	gallons	Meter	1/Day	--
Local Rainfall	inches	Observation	1/Day	--
Application Area	acres	Calculate	1/Day	--
Hydraulic Loading Rate	gallons/acre/day	Calculate	1/Day	--

2. In addition, the Discharger shall maintain a log of discharges to the Land Application Area. Evidence of erosion, saturation, wastewater runoff, or the presence of nuisance conditions shall be noted in the log. A copy of the entries made in the log during each month shall be submitted along with monthly monitoring reports. The monthly report shall clearly state whether or not the LAA was used during that month.
3. The monitoring results shall be included in the monthly monitoring report described in Section X below.

VII. RECLAMATION MONITORING REQUIREMENTS

[Not Applicable]

VIII. RECEIVING WATER MONITORING REQUIREMENTS – GROUNDWATER

A. Monitoring Location RSW-001 – Not Applicable

B. Monitoring Location GW-001 (Background WQ-1), GW-002 (WQ-3), and GW-003 (WQ-5)

1. Prior to construction of any groundwater monitoring wells, the Discharger shall submit plans and specifications to the Regional Water Board for review and approval. Once installed, all new wells shall be added to the compliance monitoring network.
2. Prior to sampling, depth to groundwater shall be measured in each monitoring well to the nearest 0.01 feet. Groundwater elevations shall then be calculated to determine groundwater gradient and flow direction.
3. Low or no-purge sampling methods are acceptable, if described in an approved Sampling and Analysis Plan. Otherwise, each well shall be purged of at least three casing volumes until temperature, pH, and electrical conductivity have stabilized. Samples shall be collected and analyzed using standard EPA methods. The Discharger shall monitor the groundwater at Monitoring Locations GW-001, GW-002, and GW-003 as follows:

Table E-7. Groundwater Monitoring Requirements

Parameter	Units	Sample Type	Minimum Sampling Frequency	Required Analytical Test Method
Depth to Groundwater	0.01 feet	Measure	1/Quarter	--
Groundwater Elevation ¹	0.01 feet	Calculate	1/Quarter	--
Gradient magnitude	feet/feet	Calculate	1/Quarter	--
Gradient direction	degrees	Calculate	1/Quarter	--
pH	standard units	Grab	1/Quarter	--
Total Dissolved Solids	mg/L	Grab	1/Quarter	--

Parameter	Units	Sample Type	Minimum Sampling Frequency	Required Analytical Test Method
Chloride	mg/L	Grab	1/Quarter	--
Sodium	mg/L	Grab	1/Quarter	--
Total Nitrogen	mg/L	Grab	1/Quarter	--

¹ Groundwater elevation shall be determined based on depth-to-water measurements using a surveyed measuring point elevation on the well and surveyed reference elevation.

- The monitoring results shall be included in the quarterly monitoring report described in Section X below.

IX. OTHER MONITORING REQUIREMENTS

[Not Applicable]

X. REPORTING REQUIREMENTS

A. General Monitoring and Reporting Requirements

- In reporting monitoring data, the Discharger shall arrange the data in tabular form so that the date, sample type (e.g., effluent, pond, etc.), and reported analytical result for each sample are readily discernible. The data shall be summarized in such a manner to clearly illustrate compliance with waste discharge requirements and spatial or temporal trends, as applicable. The results of any monitoring done more frequently than required at the locations specified in the Monitoring and Reporting Program shall be reported to the Regional Water Board.

B. Monthly Monitoring Reports

Daily, weekly, and monthly monitoring data shall be reported in monthly monitoring reports. Monthly reports shall be submitted to the Regional Water Board on the **1st day of the second month following sampling** (i.e. the January Report is due by 1 March). At a minimum, the reports shall include:

- Results of the wastewater, pond, and land application area monitoring.
- Calculation of the total monthly influent flow and cumulative annual influent flow to date.
- Copies of laboratory analytical report(s).
- Copies of current calibration logs for all field test instruments.

C. Quarterly Monitoring Reports

The Discharger shall establish a quarterly sampling schedule for groundwater monitoring such that samples are obtained approximately every three months. Quarterly monitoring reports shall be submitted to the Central Valley Water Board by the **1st day of the second month after the quarter** (i.e. the January-March quarterly report is due by May 1st). The Quarterly Report shall include the following:

1. Results of the groundwater monitoring in tabular format, including a graphical summary of the historical data;
2. A narrative description of all preparatory, monitoring, sampling, and analytical testing activities for the groundwater monitoring. The narrative shall be sufficiently detailed to verify compliance with the WDR, this MRP, and the Standard Provisions and Reporting Requirements. The narrative shall be supported by field logs for each well documenting depth to groundwater; parameters measured before, during, and after purging; method of purging; calculation of casing volume; and total volume of water purged;
3. Calculation of groundwater elevations, an assessment of groundwater flow direction and gradient on the date of measurement, comparison of previous flow direction and gradient data, and discussion of seasonal trends if any;
4. Summary data tables of historical and current groundwater elevations and analytical results.
5. A scaled map showing relevant structures and features of the facility, the locations of monitoring wells and any other sampling stations, and groundwater elevation contours referenced to mean sea level datum; and
6. Copies of laboratory analytical report(s) for groundwater monitoring.

D. Annual Report

The Annual Report shall be submitted to the Central Valley Water Board by **1 February each year**. The Annual Report shall include the following:

1. Calculations to determine the total annual influent flow.
2. Tabular and graphical summaries of all data collected during the year.
3. An evaluation of the groundwater quality beneath the ponds and LAA, and determination of compliance with the groundwater limitations of the WDRs based on statistical analysis for each constituent monitored for each compliance well. Include all calculations and data input/analysis tables derived from use of statistical software, as applicable.
4. A discussion of compliance and the corrective actions taken, as well as any planned or proposed actions needed to bring the discharge into full compliance with the waste discharge requirements.

5. A discussion of any data gaps and potential deficiencies/redundancies in the monitoring system or reporting program.
6. A forecast of influent flows for the next calendar year,
7. A discussion of the following:
 - a. Waste constituent reduction efforts implemented in accordance with any required workplan;
 - b. Other best practical treatment and control measures implemented pursuant to any approved BPTC Workplan (if required by the Executive Officer); and
 - c. Based on monitoring data, an evaluation of the BPTC measures that were implemented.

A letter transmitting the self-monitoring reports shall accompany each report. The letter shall include a discussion of requirement violations found during the reporting period, and actions taken or planned for correcting noted violations, such as operation or facility modifications. If the Discharger has previously submitted a report describing corrective actions and/or a time schedule for implementing the corrective actions, reference to the previous correspondence will be satisfactory. The transmittal letter shall contain the penalty of perjury statement by the Discharger, or the Discharger's authorized agent, as described in the Standard Provisions General Reporting Requirements Section B.3.

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ATTACHMENT F – FACT SHEET

As described in section II of this Order, this Fact Sheet includes the legal requirements and technical rationale that serve as the basis for the requirements of this Order.

This Order has been prepared under a standardized format to accommodate a broad range of discharge requirements for Dischargers in California. Only those sections or subsections of this Order that are specifically identified as “not applicable” have been determined not to apply to this Discharger. Sections or subsections of this Order not specifically identified as “not applicable” are fully applicable to this Discharger.

I. PERMIT INFORMATION

The following table summarizes administrative information related to the facility.

Table F-1. Facility Information

WDID	5B032000001
Discharger	SierraPine Limited
Name of Facility	SierraPine – Ampine Division
Facility Address	11300 Ridge Road
	Martell, CA 95654
	Amador County
Facility Contact, Title and Phone	Dave Scott, EH & S Manager, (209) 223-1690
Authorized Person to Sign and Submit Reports	Terry Velasco, General Manager, (209) 223-6070
Mailing Address	SierraPine Limited
	P.O. Box 115
	Martell, CA 95654
Billing Address	Same as mailing address
Type of Facility	Particleboard Manufacturing Facility (SIC 2493)
Major or Minor Facility	Not Applicable
Threat to Water Quality	3
Complexity	C
Pretreatment Program	Not Applicable
Reclamation Requirements	Not Applicable
Facility Permitted Flow	Not Applicable
Facility Design Flow	Not Applicable
Watershed	Sacramento – San Joaquin Delta
Receiving Water	Groundwater

A. SierraPine Limited (hereinafter Discharger) is the owner and operator of SierraPine – Ampine Division (hereinafter Facility), a particleboard manufacturing facility.

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

- B.** The discharge is currently regulated by Order R5-2008-0167 which was adopted on 24 October 2008. A complete ROWD was submitted by the Discharger, dated 29 March 2013. Pursuant to Title 23, California Code of Regulations, section 2235.4, the permit was administratively extended until a new permit was issued by the Central Valley Water Board.
- C.** The Discharger filed a report of waste discharge and submitted an application for renewal of its Waste Discharge Requirements (WDRs) and National Pollutant Discharge Elimination System (NPDES) permit on 29 March 2013. Site visits were conducted on 13 December 2013 and 9 April 2014 to observe operations and collect additional information to develop permit limitations and conditions. Central Valley Water Board staff has determined that a Limited Threat General Order is appropriate for the Facility’s potential discharge to surface water. However, land disposal and groundwater discharges will remain. Therefore, all references to the NPDES program and surface water discharge have been removed from this Order, while the Waste Discharge Requirements portion has been retained. The Discharger must enroll under the general order for *Limited Threat Discharges of Treated/Untreated Groundwater from Cleanup Sites, Wastewater from Superchlorination Projects, and Other Limited Threat Wastewaters to Surface Water* (Order R5-2013-0073, NPDES No. CAG995002) for the potential discharges to surface water.

II. FACILITY DESCRIPTION

Order R5-2002-0018 was held by three parties: Wheelabrator Martell, Sierra Pacific Industries, and the Discharger. The application for renewal was intended solely for the Discharger’s particleboard manufacturing facility. The co-generation facility which was owned and operated by Wheelabrator Martell no longer exists and storm water run-off from properties owned by Sierra Pacific Industries no longer enters the drainage course. The Discharger has minimized discharges of process waters by means of spray irrigation with a catch basin for containment and has not discharged process water from the Irrigation Pond since March 2004. In April 2011, there was a discharge to Stony Creek from the irrigation field catch pond due to pump failure. The Discharger also connected the domestic outfall from the plant to the service area sewer system. The septic tank and leach field system was dismantled and abandoned under the oversight of the Amador Water Agency.

The Facility is a particleboard manufacturing facility. Wastewater is discharged to a series of ponds and is land applied using a sprinkler system. The wastewater includes biofilter blowdown (not operational as of 2014), boiler blowdown, cooling tower water, turbine cooling water, and material storage yard equipment and facilities wash water. The Discharger’s particleboard manufacturing process is a dry process and no wastewater is generated from the particleboard manufacturing process. The biofilter blowdown, boiler blowdown, cooling tower water, turbine cooling water, and material storage yard equipment and facilities wash water are directed, via a combination of overland flow and a concrete

ditch, to an unlined process water catch basin. From the unlined Plant Process Catch Basin, flow is directed through an unlined ditch to the northwest corner of the Facility to the horseshoe-shaped Log Deck Settling Pond, and then via gravity flow through an unlined drainage ditch to the Irrigation Pond. From the Irrigation Pond, water is pumped to the spray Irrigation Field. The spray Irrigation Field is bermed to collect any overland runoff which is then directed to an Irrigation Field Catch Pond. The Irrigation Field Catch Pond is emptied by rerouting the water back to the Irrigation Pond. If capacity is exceeded in the Irrigation Field Catch Pond or the Irrigation Pond, then water overflows are directed to an unlined ditch where it eventually combines with the storm water that discharges to Stony Creek. Discharge of wastewater from the Irrigation Pond has not occurred since March 2004. In April 2011, there was a discharge to Stony Creek from the irrigation field catch pond due to pump failure. The potential discharges to Stony Creek will be covered under the general order for *Limited Threat Discharges of Treated/Untreated Groundwater from Cleanup Sites, Wastewater from Superchlorination Projects, and Other Limited Threat Wastewaters to Surface Water* (Order R5-2013-0073, NPDES No. CAG995002).

The Discharger estimated in the permit renewal application that the total average flow from the Facility is approximately 47,000 gallons per day (gpd) or 0.047 million gallons per day (mgd), based on the following:

<u>Operation</u>	<u>Average Flow (gpd)</u>
Cooling Tower/Humidifier	420
Boiler Blowdown	1,440
Storm Water	36,390 (seasonal average)
Facility/Equipment Wash Water	5,000
Biofilter Blowdown	2,880
Turbine Cooling Water	9,000

The Discharger uses chemicals at the Facility for controlling corrosion, scale, and biological growth in the boilers and cooling towers. The following chemicals are added to the cooling towers or boilers: sodium hydroxide, sodium hypochlorite, sodium nitrite, cyclohexamine, and diethylaminethanol. Order R5-2002-0018 contained effluent limits and monitoring requirements for cyclohexamine and diethylaminethanol. Order R5-2008-0167 did not contain effluent limits or monitoring requirements for cyclohexamine.

The waste discharge requirements renewal application indicated that in order to comply with recent Maximum Achievable Control Technology (MACT) air emission standards, the Discharger is planning the construction and start-up of a biofilter. According to the application, the Discharger expects to generate wastewater in the form of blowdown from the biofilter with an estimated discharge flow volume ranging from 1,500 to 4,500 gallons per day (gpd). As a result, the Discharger requested that discharge of biofilter blowdown be authorized under the revised 2008 Order. The biofilter was installed in 2008, however, it is currently not operating.

Storm water from the Discharger’s site is collected in a series of four unlined settling ponds that overflow to Stony Creek. The storm water discharges from the Facility are covered under the state-wide Industrial NPDES Storm Water General Order.

A. Description of Wastewater Treatment or Controls

Wastewater from the Facility is discharged to a series of ponds. The Discharger maximizes the disposal of wastewater to land by spray irrigation of 6 to 8 acres of pasture from May to October. Discharge to Stony Creek occurs when water overflows from the Irrigation Pond and flows through an unlined channel to the discharge point. The wastewater and storm water flow channels combine at the discharge point. This Order does not regulate surface water discharges. The potential discharges to Stony Creek are covered under the general order for Limited Threat Discharges of Treated/Untreated Groundwater from Cleanup Sites, Wastewater from Superchlorination Projects, and Other Limited Threat Wastewaters to Surface Water (Order R5-2013-0073, NPDES No. CAG995002).

B. Discharge Point and Surface Waters

1. The Facility is located in Sections 17, 18, 19, and 24, T6N, R11E, MDB&M, as shown in Attachment B, a part of this Order.
2. Wastewater is discharged at approximately latitude 38° 22' 02" N and longitude 120° 48' 57" W to a series of ponds and an irrigation field. The potential discharges to Stony Creek are covered under the general order for *Limited Threat Discharges of Treated/Untreated Groundwater from Cleanup Sites, Wastewater from Superchlorination Projects, and Other Limited Threat Wastewaters to Surface Water* (Order R5-2013-0073, NPDES No. CAG995002).
3. Stormwater flow is to Stony Creek, an ephemeral stream that emanates from the Facility site and flows into Sutter Creek. Sutter Creek flows into Dry Creek, which flows into the Mokelumne River at a point within the boundaries of the Sacramento – San Joaquin Delta. Stony Creek is typically dry from May to October.

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

Effluent limitations contained in Order R5-2002-0018 for discharges from Discharge Point No. 001 (Monitoring Location No. 001) and representative monitoring data from the term of Order R5-2002-0018 are shown in Table F-2a, below. Effluent limitations contained in Order R5-2008-0167 and representative monitoring data from the term of Order R5-2008-0167 are shown in Table F-2b, below.

Table F-2a. Historic Effluent Limitations and Monitoring Data – March 2002 - April 2008

Parameter	Units	Effluent Limitation			Monitoring Data (From March 2002 through April 2008 ¹)		
		Annual Average	30-Day Average	Maximum Daily	Highest Annual Average Discharge	Highest 30-day Average Discharge	Highest Daily Discharge
Biological Oxygen Demand	mg/L	--	20	40	--	<2	<2
Total Suspended Solids	mg/L	--	20	40	--	28	28
Settleable Solids	ml/L	--	0.1	0.2	--	<1	<1
Oil & Grease	mg/L	--	15	20	--	NA	NA
Electrical Conductivity	µmhos/cm	450	900	1,600	384	448	679
pH	standard units	--	--	²	--	--	8.4
Acute Toxicity	% survival	--	--	³	--	--	NA
Chlorine, Residual	mg/L	--	0.01 ⁴	0.02	--	<0.1	<0.1
Nitrite	mg/L	--	1.0	--	--	2.0	2.0
Nitrate as N	mg/L	--	10	--	--	3.6	3.6
Chloride	mg/L	106	--	--	26	--	26
Sulfate	mg/L	250	--	--	36	--	36
Dioxin / Furan TEQ ⁵	µg/L	--	1.3 x 10 ⁻⁸	--	--	0.00474	0.00474
Cyclohexamine	µg/L	1400	--	--	NA	--	--
Diethylaminethanol	mg/L	22,000	--	--	NA	--	--
Pentachlorophenol	µg/L	0.28	--	--	1.0	--	1.0

NA – Not Available

¹ Discharge from the Irrigation Pond has not occurred since March 2004. Summary includes monitoring data for discharges from March 2002 through March 2004 as well as results of Irrigation Pond monitoring that occurred on 10 April 2008.

² The discharge shall not have a pH less than 6.5 nor greater than 8.5.

³ Survival of test fish in a 96-hour bioassay of undiluted waste shall be no less than
 Minimum for any one bioassay ~~~~~ 70%
 Median for any three or more consecutive bioassays ~~~~~ 90%

⁴ Applied as a 4-day average effluent limitation.

⁵ TEQ = Toxicity equivalence relative to 2,3,7,8-TCDD.

Table F-2b. Historic Effluent Limitations and Monitoring Data – November 2008 - April 2013

Parameter	Units	Effluent Limitation			Monitoring Data (From March 2013 ¹)		
		Annual Average	30-Day Average	Maximum Daily	Highest Annual Average Discharge	Highest 30-day Average Discharge	Highest Daily Discharge
Electrical Conductivity	µmhos/cm	450	900	1,600	--	--	380
pH	standard units	--	--	²	--	--	NA
Acute Toxicity	% survival	--	--	³	--	--	NA
TCDD Equivalents	µg/L	--	1.30×10^{-8}	2.61×10^{-8}	--	--	ND
	lbs/day ⁴	--	5.10×10^{-12}	10.23×10^{-12}	--	--	--
Diethylamin-ethanol	mg/L	22,000	--	--	--	--	NA

NA – Not Available

ND – Not Detected

¹ Discharge from the Irrigation Pond has not occurred since March 2004. Summary includes monitoring data for one irrigation pond sample collected in March 2013.

² The discharge shall not have a pH less than 6.5 nor greater than 8.5.

³ Survival of test fish in a 96-hour bioassay of undiluted waste shall be no less than

Minimum for any one bioassay----- 70%

Median for any three or more consecutive bioassays----- 90%

⁴ Based on a production flow of approximately 0.047 mgd from the particleboard facility.

D. Compliance Summary

1. The Central Valley Water Board issued Cease and Desist Order R5-2002-0019 on 1 March 2002 requiring the Discharger to comply with effluent limitations for chlorine, nitrite, nitrate, chloride, sulfate, dioxin/furan, cyclohexane, diethylaminethanol, and pentachlorophenol. In order to comply with the Cease and Desist Order, the Discharger implemented the following:
 - a. The Discharger connected the domestic outfall from the plant to the service area sewer system. The onsite septic tank and leach field system was dismantled and abandoned under the oversight of the Amador Water Agency.
 - b. The Discharger installed a spray irrigation system and associated catchment basin in an effort to minimize discharges of process wastewater. As a result, the Facility has not discharged wastewater from the Irrigation Pond to Stony Creek since March 2004.
2. The Central Valley Water Board issued Administrative Civil Liability (ACL) Complaint R5-2008-0505 to the Discharger on 6 February 2008 for a serious violation of the 30-day average total suspended solids effluent limit (20 mg/L) contained in Order R5-2002-0018 that occurred on 24 February 2004. The ACL included a mandatory minimum penalty of \$3,000.

E. Planned Changes

[Not Applicable]

III. APPLICABLE PLANS, POLICIES, AND REGULATIONS

The requirements contained in this Order are based on the applicable plans, policies, and regulations identified in section II of the Limitations and Discharge Requirements (Findings). This section provides supplemental information, where appropriate, for the plans, policies, and regulations relevant to the discharge.

A. Legal Authority

See Limitations and Discharge Requirements - Findings, Section II.C.

B. California Environmental Quality Act (CEQA) – Not Applicable

C. State Regulations, Policies, and Plans

1. **Water Quality Control Plan.** The Central Valley Water Board adopted a *Water Quality Control Plan, Fourth Edition (Revised October 2011), for the Sacramento and San Joaquin River Basins* (Basin Plan) that designates beneficial uses, establishes water quality objectives, and contains implementation programs and policies to achieve those objectives for all waters addressed through the plan. In addition, State Water Board Resolution 88-63 requires that, with certain exceptions, the Central Valley Water Board assign the municipal and domestic supply use to water bodies that do not have beneficial uses listed in the Basin Plan. The beneficial uses of Stony Creek, which is tributary to the Sacramento – San Joaquin Delta, downstream of the stormwater discharge are municipal and domestic supply; agricultural supply, including irrigation and stock watering; industrial process water supply; industrial service supply; water contact recreation, including canoeing and rafting; other non-contact water recreation, including aesthetic enjoyment; warm freshwater aquatic habitat; cold freshwater aquatic habitat; warm and cold fish migration habitat; warm spawning habitat; wildlife habitat; navigation; and groundwater recharge.

The Basin Plan on page II-1.00 states: “*Protection and enhancement of existing and potential beneficial uses are primary goals of water quality planning...*” and with respect to disposal of wastewaters states that “*...disposal of wastewaters is [not] a prohibited use of waters of the State; it is merely a use which cannot be satisfied to the detriment of beneficial uses.*”

2. **Bay-Delta Plan.** The *Water Quality Control Plan for the San Francisco Bay/Sacramento-San Joaquin Delta Estuary* (Bay-Delta Plan) was adopted in May 1995 by the State Water Board superseding the 1991 Bay-Delta Plan. The Bay-Delta Plan identifies the beneficial uses of the estuary and includes objectives for flow, salinity, and endangered species protection.

The Bay-Delta Plan attempts to create a management plan that is acceptable to the stakeholders while at the same time is protective of beneficial uses of the San Joaquin River. The State Water Board adopted Decision 1641 (D-1641) on 29 December 1999. D-1641 implements flow objectives for the Bay-Delta Estuary, approves a petition to change points of diversion of the Central Valley Project and the State Water Project in the Southern Delta, and approves a petition to change places of use and purposes of use of the Central Valley Project. The water quality objectives of the Bay-Delta Plan are implemented as part of this Order.

D. Impaired Water Bodies on CWA 303(d) List – Not Applicable

E. Other Plans, Policies and Regulations – Not Applicable

IV. RATIONALE FOR DISCHARGE SPECIFICATIONS

A. Discharge Prohibitions

1. Discharge Prohibitions were established based on the requirements of Order R5-2008-0167, and applicable State regulations.
2. As stated in section I.G of Attachment D, Standard Provisions, this Order prohibits bypass from any portion of the treatment facility.
3. **Discharges.** Stony Creek emanates from the Facility and is ephemeral. Because of the Facility's land discharge practices, flows from the Facility are almost entirely dependent on storm water flows. During dry weather the Facility's land discharge system has the capacity to handle all of the biofilter blowdown, boiler blowdown, cooling tower water, turbine cooling water, and facility equipment washwater. Therefore, during the dry season (1 May through 31 October) it is expected that the Facility does not need to discharge to surface water. In addition, discharges during the dry season have the potential to have greater impacts on the receiving water because of a lack of storm water flows to dilute the discharge. The previous Order contained the requirement that the Facility is prohibited from discharging from 1 May through 31 October.

The treatment system consists of a series of unlined ponds that are much larger than the current manufacturing process requires. The biofilter blowdown, boiler blowdown, cooling tower water, turbine cooling water, and material storage yard equipment and facilities wash water are directed, via a combination of overland flow and a concrete ditch, to an unlined Process Water Catch Basin. From the unlined Process Water Catch Basin, flow is directed through an unlined ditch to the northwest corner of the Facility to the Settling Pond, and then through an unlined drainage ditch to the Irrigation Pond. From the Irrigation Pond, water is pumped to the spray Irrigation Field. The spray Irrigation Field is bermed to collect any overland runoff which is then directed to an Irrigation Field Catch Pond. The Irrigation Field Catch Pond is emptied by rerouting the water back to the Irrigation

Pond. If capacity is exceeded in the Irrigation Field Catch Pond or the Irrigation Pond, then water overflows are directed to an unlined ditch where it eventually combines with the storm water that discharges to Stony Creek. Discharge of wastewater from the Irrigation Pond has not occurred since March 2004. In April 2011, there was a discharge to Stony Creek from the irrigation field catch pond due to pump failure. The potential discharges to Stony Creek are covered under the general order for Limited Threat Discharges of Treated/Untreated Groundwater from Cleanup Sites, Wastewater from Superchlorination Projects, and Other Limited Threat Wastewaters to Surface Water (Order R5-2013-0073, NPDES No. CAG995002).

4. **Particleboard Manufacturing Process Wastewater.** The discharge of particleboard manufacturing process wastewater from the Facility is prohibited. Discharge, to the Ponds and Irrigation Field, of non-contact cooling water, turbine cooling water, material storage yard runoff, boiler blowdown, and biofilter blowdown is permitted by this Order.

B. Technology-Based Effluent Limitations – Not Applicable

C. Water Quality-Based Effluent Limitations (WQBELs) - Not Applicable

D. Final Effluent Limitations

1. **Mass-based Effluent Limitations – Not Applicable**
2. **Averaging Periods for Effluent Limitations – Not Applicable**
3. **Satisfaction of Anti-Backsliding Requirements – Not Applicable**
4. **Satisfaction of Antidegradation Policy**
 - a. **Surface Water. - Not Applicable**
 - b. **Facility Groundwater.** The Discharger utilizes a series of unlined ponds. The wastewater contains constituents such as total dissolved solids (TDS), specific conductivity, nitrates, and metals. Percolation from the ponds may result in an increase in the concentration of these constituents in groundwater. The increase in the concentration of these constituents in groundwater must be consistent with Resolution 68-16. Any increase in pollutant concentrations in groundwater must be shown to be necessary to allow wastewater utility service necessary to accommodate housing and economic expansion in the area and must be consistent with maximum benefit to the people of the State of California. Some degradation of groundwater by the Discharger is consistent with Resolution 68-16 provided that:
 - i. The degradation is consistent with the maximum benefit to the people of the state.

- ii. The degradation will not unreasonably affect present and anticipated future beneficial uses.
 - iii. The Discharger minimizes the degradation by fully implementing, regularly maintaining, and optimally operating best practicable treatment and control (BPTC) measures.
 - iv. The degradation does not result in water quality less than that prescribed in state and regional policies, including violation of one or more water quality objectives.
 - v. Degradation of groundwater by some of the typical waste constituents associated with discharges from a food processing facility, after effective source control, treatment, and control measures are implemented, is consistent with the maximum benefit to the people of the state. The Discharger aids in the economic prosperity of the foothill communities by direct employment. In addition, the Discharger provides a tax base for local and county governments. The economic prosperity of foothill communities and associated industry is of maximum benefit to the people of the State, and provides sufficient justification for allowing the limited groundwater degradation that may occur pursuant to this Order.
- c. **Groundwater Contamination History.** Sierra Pacific Industries (SPI) — Martell Division owns, or owned, 242 acres of property that includes: a former lumber mill, wood manufacturing operations (now SierraPine Ampine), a wood waste landfill, an unlined leachate basin, and an ash disposal area. The SPI property completely surrounds the SierraPine-Ampine Facility. Past activities at SPI have caused some residual soil and groundwater contamination that are undergoing remediation and site closure activities under Central Valley Water Board Order R5-2014-0025. The separate Closure WDRs and a CAO, include requirements for closure and post-closure maintenance and monitoring. Numerous groundwater monitoring wells are maintained by SPI and sampled on a regular basis for the SPI facility.

The first encountered groundwater, at or directly adjacent to the waste management units, ranges from 3 to 58 feet below the native ground surface. The depth to groundwater fluctuates seasonally as much as 18 feet. The direction of shallow groundwater flow is generally to the southwest. Groundwater down gradient of the Ash Disposal Area has been impacted by elevated concentrations of calcium, magnesium, bicarbonate, and total dissolved solids with sporadic detection of dioxins. The existing closure operations at the SPI site have been designed to remediate groundwater conditions.

Several reports indicated that ash samples from the site contained dioxins. The Ash Disposal Area has been closed. There should no longer be movement of the ash to adjacent properties and groundwater contact has been minimized.

The Discharger (SierraPine Limited) maintains three groundwater monitoring wells - one (WQ-5) near the spray irrigation field, the second (WQ-3) on the south side of the irrigation pond, and the third (WQ-1) on the east side of the site.

The groundwater monitoring program in Order R5-2008-0167 included only monitoring for pH, TDS, and EC, along with elevation measurements. No dioxin sampling of the groundwater has been conducted by the Discharger during the term of the existing permit.

While the SierraPine site was not used for ash disposal, through the years airborne or windblown ash undoubtedly settled upon the site and may be the source of dioxins in the Irrigation Pond water samples.

Groundwater flow direction is generally southwest, therefore, the site is not downgradient of the ash pile. However, any groundwater contamination currently found at the SierraPine site is the result of past milling, cogeneration, manufacturing, and waste storage practices at the SPI property. Some remediation of the soil and groundwater contamination on the SPI property surrounding the SierraPine site has been completed and some continues.

E. Interim Effluent Limitations

[Not Applicable]

F. Land Discharge Specifications

[Not Applicable]

G. Reclamation Specifications

[Not Applicable]

V. RATIONALE FOR RECEIVING WATER LIMITATIONS

Basin Plan water quality objectives to protect the beneficial uses of surface water and groundwater include numeric objectives and narrative objectives, including objectives for chemical constituents, toxicity, and tastes and odors. The toxicity objective requires that surface water and groundwater be maintained free of toxic substances in concentrations that produce detrimental physiological responses in humans, plants, animals, or aquatic life. The chemical constituent objective requires that surface water and groundwater shall not contain chemical constituents in concentrations that adversely affect any beneficial use or that exceed the maximum contaminant levels (MCLs) in Title 22, CCR. The tastes and odors objective states that surface water and groundwater shall not contain taste- or odor-producing substances in concentrations that cause nuisance or adversely affect beneficial uses. The Basin Plan requires the application of the most stringent objective necessary to ensure that surface water and groundwater do not contain chemical constituents, toxic substances, radionuclides, or taste and odor producing substances in concentrations that adversely affect domestic drinking water supply, agricultural supply, or any other beneficial use.

A. Surface Water - Not Applicable

B. Groundwater

1. The beneficial uses of the underlying ground water are municipal and domestic supply, industrial service supply, industrial process supply, and agricultural supply.
2. Basin Plan water quality objectives include narrative objectives for chemical constituents, tastes and odors, and toxicity of groundwater. The toxicity objective requires that groundwater be maintained free of toxic substances in concentrations that produce detrimental physiological responses in humans, plants, animals, or aquatic life. The chemical constituent objective states groundwater shall not contain chemical constituents in concentrations that adversely affect any beneficial use. The tastes and odors objective prohibits taste- or odor-producing substances in concentrations that cause nuisance or adversely affect beneficial uses. The Basin Plan also establishes numerical water quality objectives for chemical constituents and radioactivity in groundwaters designated as municipal supply. These include, at a minimum, compliance with MCLs in Title 22 of the CCR. The bacteria objective prohibits coliform organisms at or above 2.2 MPN/100 mL. The Basin Plan requires the application of the most stringent objective necessary to ensure that waters do not contain chemical constituents, toxic substances, radionuclides, taste- or odor-producing substances, or bacteria in concentrations that adversely affect municipal or domestic supply, agricultural supply, industrial supply or some other beneficial use.
3. Order R5-2002-0018 and Order R5-2008-0167 contained groundwater limitations due to the potential for percolation of wastewater from the ponds and spray irrigation fields. Although monitoring by the Discharger during the term of Order R5-2002-0018 and Order R5-2008-0167 indicated no impact from the ponds and spray irrigation fields (in terms of pH, total dissolved solids, and electrical conductivity concentrations), these units are still in use and therefore the groundwater limitations are being retained from Order R5-2008-0167 to protect the beneficial uses of the underlying groundwater.

VI. RATIONALE FOR MONITORING AND REPORTING REQUIREMENTS

Section 122.48 requires that all NPDES permits specify requirements for recording and reporting monitoring results. Water Code sections 13267 and 13383 authorizes the Central Valley Water Board to require technical and monitoring reports. The Monitoring and Reporting Program (MRP), Attachment E of this Order, establishes monitoring and reporting requirements to implement federal and state requirements. The following provides the rationale for the monitoring and reporting requirements contained in the MRP for this facility.

A. Influent Monitoring

[Not Applicable]

B. Effluent Monitoring - Not Applicable

C. Whole Effluent Toxicity Testing Requirements - Not Applicable

D. Receiving Water Monitoring

1. Surface Water - Not Applicable

2. Groundwater

- a. Section 13267 of the California Water Code states, in part, *“(a) A Regional Water Board, in establishing...waste discharge requirements... may investigate the quality of any waters of the state within its region”* and *“(b) (1) In conducting an investigation..., the Regional Water Board may require that any person who... discharges... waste...that could affect the quality of waters within its region shall furnish, under penalty of perjury, technical or monitoring program reports which the Regional Water Board requires. The burden, including costs, of these reports shall bear a reasonable relationship to the need for the report and the benefits to be obtained from the reports.”* The burden, including costs, of these reports shall bear a reasonable relationship to the need for the report and the benefits to be obtained from the reports. In requiring those reports, the Central Valley Water Board shall provide the person with a written explanation with regard to the need for the reports, and shall identify the evidence that supports requiring that person to provide the reports. The Monitoring and Reporting Program (Attachment E) is issued pursuant to California Water Code Section 13267. The groundwater monitoring and reporting program required by this Order and the Monitoring and Reporting Program are necessary to assure compliance with these waste discharge requirements. The Discharger is responsible for the discharges of waste at the facility subject to this Order.
- b. Monitoring of the groundwater must be conducted to determine if the discharge has caused an increase in constituent concentrations, when compared to background. The monitoring must, at a minimum, require a complete assessment of groundwater impacts including the vertical and lateral extent of degradation, an assessment of all wastewater-related constituents which may have migrated to groundwater, an analysis of whether additional or different methods of treatment or control of the discharge are necessary to provide best practicable treatment or control to comply with Resolution 68-16. Economic analysis is only one of many factors considered in determining best practicable treatment or control. If monitoring indicates that the discharge has incrementally increased constituent concentrations in groundwater above background, this permit may be reopened and modified. Until groundwater monitoring is sufficient, this Order contains Groundwater Limitations that allow groundwater quality to be

degraded for certain constituents when compared to background groundwater quality, but not to exceed water quality objectives. If groundwater quality has been degraded by the discharge, the incremental change in pollutant concentration (when compared with background) may not be increased. If groundwater quality has been or may be degraded by the discharge, this Order may be reopened and specific numeric limitations established consistent with Resolution 68-16 and the Basin Plan.

- c. This Order requires the Discharger to continue groundwater monitoring and includes a regular schedule of groundwater monitoring in the attached Monitoring and Reporting Program. The groundwater monitoring reports are necessary to evaluate impacts to waters of the State to assure protection of beneficial uses and compliance with Central Valley Water Board plans and policies, including Resolution 68-16.

E. Other Monitoring Requirements

- 1. Water Supply Monitoring – Not Applicable**
- 2. Land Application Area Monitoring**

Monitoring of the land application area is required to prevent overloading the area with wastewater constituents that can cause groundwater degradation and to determine compliance with land discharge specifications.

- 3. Pond Monitoring**

Monitoring of the ponds is required to determine compliance with the treatment pond operation requirements and determine whether there are potential impacts to water quality from the discharge to land.

VII. RATIONALE FOR PROVISIONS

A. Standard Provisions

Standard Provisions, are provided in Attachment D. The Discharger must comply with all standard provisions.

This Order incorporates by reference Water Code section 13387(e).

B. Special Provisions

- 1. Reopener Provisions – Not Applicable**
- 2. Special Studies and Additional Monitoring Requirements**

- a. **Groundwater Monitoring.** To determine compliance with Groundwater Limitations contained in section V.B of this Order, the Discharger shall continue to implement a groundwater monitoring program. All monitoring wells shall comply with the appropriate standards as described in California Well Standards Bulletin 74-90 (June 1991) and Water Well Standards: State of California Bulletin 74-81 (December 1981), and any more stringent standards adopted by the Discharger or County pursuant to CWC section 13801.

If the monitoring shows that any constituent concentrations are increased above background water quality, the Discharger shall perform BPTC evaluation tasks as required in section VI.C.2.c below.

- b. **Best Practical Treatment or Control (BPTC).** If the groundwater monitoring results show that the discharge of waste is threatening to cause or has caused groundwater to contain waste constituents in concentrations statistically greater than background water quality, the Discharger shall submit, within 6 months following the first year of monitoring that documents constituent concentrations increased beyond background water quality, a BPTC Evaluation Work Plan. This work plan shall set forth a scope and schedule for a systematic and comprehensive technical evaluation of each component of the Facilities' waste management system to determine best practicable treatment or control for each of the waste constituents of concern. The work plan shall include a preliminary evaluation of each component of the waste management system and propose a time schedule for completing the comprehensive technical evaluation. The schedule to complete the evaluation shall be as short as practicable, and shall not exceed 1 year.
- c. **Biofilter Monitoring Study.** At the time Order R5-2008-0167 permit was developed, the Discharger was planning to install a biofilter to control air emissions and expected to generate wastewater in the form of blowdown with an estimated discharge flow volume ranging from 1,500 to 4,500 gpd. Due to the uncertainty of the characteristics of biofilter blowdown, the existing permit required a monitoring study subject to the Executive Officer's approval. The Discharger installed the biofilter in October 2008 and submitted a workplan in April 2009 which proposed one-time monitoring of the blowdown for priority pollutants, pH, chloride, EC, hardness, iron, nitrite, nitrate, sulfate, and TDS.

On 14 September 2012, the biofilter monitoring workplan was approved by the Executive Officer of the Central Valley Water Board and was to be completed by 14 September 2014. However, the biofilter was taken out of service in October 2013. Therefore, monitoring data is not available to characterize this waste stream. Currently the biofilter is not in use, however, the Discharger intends to retain it for potential use in the future. Due to the uncertainty regarding the characteristics of the biofilter blowdown, a monitoring study is required in this Order when the biofilter is placed in use.

The biofilter utilizes biomass to filter organic nutrients in the particleboard press vent air stream, which has the potential to contain low concentrations of

formaldehyde and methanol. The byproducts of the respiration reaction are carbon dioxide and water. No chemical additives are used in the biofilter. The addition of water is necessary to maintain the biofilm growing on the inert media inside the biofilter. Water is intermittently sprayed on the media beds and collects in low point sumps. The majority of the water is recycled back into the system. In an effort to reduce the buildup of solids in the system, the blow down water overflows from the sump and is commingled with the other process water streams prior to entering the first settling pond.

3. Best Management Practices and Pollution Prevention – Not Applicable

4. Construction, Operation, and Maintenance Specifications

- a. For the protection of public health, avoidable nuisances, and for the protection of ground water, treatment pond operating requirements have been retained from Order R5-2008-0167.
- b. The land applications specifications for the spray irrigation system are necessary to protect the beneficial uses of the groundwater and are based on the requirements contained in Order R5-2008-0167.

5. Special Provisions for Municipal Facilities (POTWs Only)

[Not Applicable]

6. Other Special Provisions

- a. **Ownership Change.** To maintain the accountability of the operation of the Facility, the Discharger is required to notify the succeeding owner or operator of the existence of this Order by letter if, and when, there is any change in control or ownership of land or waste discharge facilities presently owned or controlled by the Discharger.

7. Compliance Schedules

[Not Applicable]

VIII. PUBLIC PARTICIPATION

The California Regional Water Quality Control Board, Central Valley Region (Central Valley Water Board) is considering the issuance of waste discharge requirements (WDRs) for SierraPine – Ampine Division. As a step in the WDR adoption process, the Central Valley Water Board staff has developed tentative WDRs. The Central Valley Water Board encourages public participation in the WDR adoption process.

A. Notification of Interested Parties

The Central Valley Water Board has notified the Discharger and interested agencies and persons of its intent to prescribe waste discharge requirements for the discharge and has provided them with an opportunity to submit their written comments and recommendations. Notification was provided through by posting in public areas (the nearest courthouse or city hall, the post office nearest the Facility, and near the entrance of the Facility by 5 September 2008.

B. Written Comments

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

To be fully responded to by staff and considered by the Central Valley Water Board, written comments should be received at the Central Valley Water Board offices by 5:00 p.m. on 29 September 2008.

C. Public Hearing

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

Date: 5 December 2014
Time: 8:30 am
Location: Regional Water Quality Control Board, Central Valley Region
11020 Sun Center Dr., Suite #200
Rancho Cordova, CA 95670

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

Please be aware that dates and venues may change. Our Web address is <http://www.waterboards.ca.gov/rwqcb5/> where you can access the current agenda for changes in dates and locations.

D. Waste Discharge Requirements Petitions

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

State Water Resources Control Board
Office of Chief Counsel

P.O. Box 100, 1001 I Street
Sacramento, CA 95812-0100

E. Information and Copying

The Report of Waste Discharge (ROWD), related documents, tentative effluent limitations and special provisions, comments received, and other information are on file and may be inspected at the address above at any time between 8:30 a.m. and 4:45 p.m., Monday through Friday. Copying of documents may be arranged through the Central Valley Water Board by calling (916) 464-3291.

F. Register of Interested Persons

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

G. Additional Information

Requests for additional information or questions regarding this order should be directed to Ken Landau at (916) 464-4726.

