This Monitoring and Reporting Program (MRP) describes requirements for monitoring the groundwater beneath the former Sierra Pine Fiber Board Manufacturing Facility. The former facility is located at 4300 Dominguez Road in Rocklin. This MRP is issued pursuant to Water Code section 13267. The Discharger shall not implement any changes to this MRP unless and until a revised MRP is issued by the Executive Officer.

The time, date, and location of each grab sample shall be recorded on the sample chain of custody form.

Field test instruments (such as those used to test pH, temperature, electrical conductivity, and turbidity may be used provided that:

1. The operator is trained in proper use and maintenance of the instruments outlined in the Sampling and Analysis Plan;
2. The instruments are calibrated prior to each monitoring event;
3. Instruments are serviced and/or calibrated by the manufacturer at the recommended frequency; and
4. Field calibration reports are submitted as described in the “Reporting” section of this MRP.

Analytical procedures shall comply with the methods and holding times specified in the following: Methods for Organic Chemical Analysis of Municipal and Industrial Wastewater (EPA); Test Methods for Evaluating Solid Waste (EPA); Methods for Chemical Analysis of Water and Wastes (EPA); Methods for Determination of Inorganic Substances in Environmental Samples (EPA); Standard Methods for the Examination of Water and Wastewater (APHA/AWWA/WEF); and Soil, Plant and Water Reference Methods for the Western Region (WREP 125). Approved editions shall be those that are approved for use by the United States Environmental Protection Agency or the State Water Resources Control Board’s Environmental Laboratory Accreditation Program. The Discharger may propose alternative methods for approval by the Executive Officer.

**GENERAL REQUIREMENTS**

- The Discharger shall monitor the concentrations of tannins and lignin, total dissolved solids, and chemical oxygen demand along with field parameters until their concentrations no longer impact water quality.
The Discharger shall maintain current and future monitoring wells (if necessary) so representative samples from the aquifer can be collected.

**GROUNDWATER MONITORING**

Prior to sampling, depth to groundwater measurements 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. Analytical methods shall be selected to provide reporting limits below the Water Quality Limit for each constituent.

Quarterly groundwater monitoring shall occur in the first (January – March), second (April – June), third (July - September), and fourth (October – December) quarter of each calendar year. At a minimum, the following data shall be collected from background monitoring well (MW-1), MW-2, MW-3, replacement well (MW-3R), M-2, and M-3 during each monitoring event.

<table>
<thead>
<tr>
<th>Constituent</th>
<th>EPA Test Method</th>
<th>Units</th>
<th>Type of Sample</th>
<th>Sampling Frequency</th>
<th>Reporting Frequency</th>
</tr>
</thead>
<tbody>
<tr>
<td>Depth to groundwater</td>
<td>NA</td>
<td>0.01 feet</td>
<td>Measurement</td>
<td>Quarterly</td>
<td>Semi-Annual</td>
</tr>
<tr>
<td>Groundwater elevation</td>
<td>NA</td>
<td>0.01 feet</td>
<td>Calculated</td>
<td>Quarterly</td>
<td>Semi-Annual</td>
</tr>
<tr>
<td>Gradient magnitude</td>
<td>NA</td>
<td>feet/feet</td>
<td>Calculated</td>
<td>Quarterly</td>
<td>Semi-Annual</td>
</tr>
<tr>
<td>Gradient direction</td>
<td>NA</td>
<td>degrees</td>
<td>Calculated</td>
<td>Quarterly</td>
<td>Semi-Annual</td>
</tr>
<tr>
<td>pH</td>
<td>Field Test</td>
<td>pH units</td>
<td>Grab</td>
<td>Quarterly</td>
<td>Semi-Annual</td>
</tr>
<tr>
<td>Turbidity</td>
<td>Field Test</td>
<td>NTU</td>
<td>Grab</td>
<td>Quarterly</td>
<td>Semi-Annual</td>
</tr>
<tr>
<td>Specific Conductivity</td>
<td>Field Test</td>
<td>µmhos/cm</td>
<td>Grab</td>
<td>Quarterly</td>
<td>Semi-Annual</td>
</tr>
<tr>
<td>Tannins and Lignin</td>
<td>5550B</td>
<td>mg/L</td>
<td>Grab</td>
<td>Quarterly</td>
<td>Semi-Annual</td>
</tr>
<tr>
<td>Total Dissolved Solids</td>
<td>2540C</td>
<td>mg/L</td>
<td>Grab</td>
<td>Quarterly</td>
<td>Semi-Annual</td>
</tr>
<tr>
<td>Chemical Oxygen Demand</td>
<td>2540C</td>
<td>mg/L</td>
<td>Grab</td>
<td>Quarterly</td>
<td>Semi-Annual</td>
</tr>
</tbody>
</table>

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.
2. May be measured in the field using hand-held instruments providing that the probe is properly calibrated probe and that calibration records are submitted with the monitoring reports.
REPORTING

All regulatory documents, submissions, materials, data, monitoring reports, and correspondence should be converted to a searchable Portable Document Format (PDF) and submitted electronically. Documents that are less than 50MB should be emailed to:

centralvalleysacramento@waterboards.ca.gov

Documents that are 50 MB or larger should be transferred to a CD, DVD, or flash drive and mailed to the following address:

Central Valley Regional Water Quality Control Board
ECM Mailroom
11020 Sun Center Drive, Suite 200
Rancho Cordova, California 95670

To ensure that your submittals are routed to the appropriate staff, the following information block should be included in any correspondence used to transmit documents to this office:

| Sierra Pine Limited, Placer County | Program: Non-15 Compliance | MRP: R5-2017-0800 | CIWQS Place ID: 253150 |

In reporting monitoring data, the Discharger shall arrange the data in tabular form so that the date, sample type, and reported analytical result for each sample are readily discernible. The data shall be summarized in such a manner to clearly illustrate compliance with the requirements of the Monitoring and Reporting Program, 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 Central Valley Water Board.

A signed letter transmitting the monitoring reports shall accompany each report. 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, which states 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 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.”
As required by the California Business and Professions Code sections 6735, 7835, and 7835.1, all Groundwater Monitoring Reports shall be prepared under the direct supervision of a Registered Professional Engineer or Geologist and signed by the registered professional.

A. Semi-Annual Monitoring Reports

The Discharger shall establish a sampling schedule for groundwater monitoring such that samples are obtained during the first, second, third, and fourth quarter of each calendar year and obtained approximately every three months. Semi-Annual Groundwater Monitoring Reports which include the quarterly sampling results shall be submitted to the Central Valley Water Board by the 1st day of the second month after the reporting period (i.e., the January-June semi-annual report is due by 1 August of each year). The monitoring report shall include the following:

1. Results of the quarterly monitoring of the groundwater in tabular format. The analytical result tables shall include the laboratory PQL for each analyte for each sampling event. A result of “0.0” is not acceptable and shall instead be replaced with “ND <” and the PQL. Any “J” flagged values shall be reported. Results shall be reported exactly as presented on laboratory reports; values shall not be rounded.

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, determination 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;

5. A scaled map showing relevant structures and features of the facility, land application areas, locations of monitoring wells and any other sampling stations, and groundwater elevation contours referenced to mean sea level datum;

6. Isoconcentration map for the following constituents of concern: tannins and lignin, chemical oxygen demand, and total dissolved solids; and

7. Copies of laboratory analytical report(s) for groundwater monitoring.
B. Annual Monitoring Report

An Annual Report shall be submitted to the Central Valley Water Board by 1 February each year and shall include the information required in Section A of this MRP as well as the following:

1. Concentration vs. time series graphs for each monitored constituent for each groundwater monitoring well using all historic groundwater monitoring data.

2. 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.

3. A discussion of any data gaps and potential deficiencies/redundancies in the monitoring system or reporting program.

The Discharger shall implement the above monitoring program as of the date of signature.

Ordered by: ________________________________

PAMELA C. CREEDON, Executive Officer

27 January 2017

(Date)

Original signed by

gjc: 27 Jan-17