

**California Regional Water Quality Control Board  
North Coast Region**

MONITORING AND REPORTING PROGRAM NO. R1-2013-0057

FOR

INTERNATIONAL PAPER COMPANY  
FORMER MASONITE WOOD TREATMENT FACILITY  
CLOVERDALE

Sonoma County

This Monitoring and Reporting Program is issued pursuant to California Water Code Section 13267(b) and requires periodic monitoring of groundwater and submission of technical reports. Reports are required on a semiannual basis. The objective of monitoring conducted under this monitoring program is to provide International Paper Company (hereinafter referred to as the Discharger) and the Regional Water Board with information concerning groundwater quality for the final remedy at the former Masonite Wood Treatment Facility located in Cloverdale.

Under the authority of the California Water Code Section 13267(b), the Discharger is required to comply with the following:

**Monitoring**

1. Monitored Natural Attenuation (MNA) has been identified as the final cleanup remedy at the Site for shallow and bedrock groundwater. Different MNA processes are occurring in different areas of the Site [Operable Units (OUs)] identified on Table 1, attached to this Order. The site groundwater monitoring program is to sample the wells and analyze the samples for MNA parameters, and the wood treatment chemical pentachlorophenol and its breakdown products as listed in Table 1.
2. The depth to groundwater in each monitoring well shall be determined to at least 0.01-foot increments semiannually. Groundwater elevation(s) shall be computed by subtracting the measured depth from the well top elevation reference point, both of which should be reported. The data generated from the elevation readings must be referenced to mean sea level.
3. Groundwater monitoring wells shall be sampled for the analytical constituents in accordance with Table 1. Each well shall be measured in the field (or by a certified laboratory, if appropriate) for parameters including dissolved oxygen, pH, groundwater

temperature, oxidation-reduction potential, and specific conductance during purging activities, and sampling shall occur once parameter variance is within 5-10% difference.

### **Reporting**

4. Reports shall be submitted semiannually by January 30 and July 30 of each year. The January 30 report shall be a comprehensive annual groundwater monitoring report. The annual report shall contain isoconcentration maps, depths to groundwater from each sampling event, laboratory results, interpretation of the data including a discussion on the effectiveness of the MNA remedy, and any proposed changes to the sampling program. The analytical data sheets shall be summarized in tabular form illustrating the date, the analytical constituents, the monitoring well elevation, and the concentrations of the constituents.
5. Instrument calibration records, field logs, and QA/QC of data shall be included in each groundwater monitoring report.
6. Groundwater monitoring data and reports shall be submitted electronically to the State Water Resources Control Board's Geographic Environmental Information Management System database (GeoTracker) as required by Title 23, Division 3, Chapter 30, Article 2, Sections 3890-3895 of the California Code of Regulations).

Ordered by: \_\_\_\_\_

Matthias St. John  
Executive Officer

August 20, 2013

**Table 1**

<b>Operable Units Well ID Nos. Water-Bearing Zone Type &amp; Screening Interval</b>	<b>PCP U.S. EPA* Method 8151A</b>	<b>PCP &amp; TCP Breakdown Products (1) U.S. EPA* Method 8151A</b>	<b>MNA Parameters (2)</b>
<b>Railroad Area OU</b>			
MW-12 – shallow (6-22 ft)	Semiannual	Annually in Spring every other year beginning in 2014	Annually in Spring every other year beginning in 2014
MW-13 – shallow (6-19.5 ft)	Semiannual	Every other year beginning in 2014	Every other year beginning in 2014
<b>Wood Treatment Operations Area OU</b>			
MW-23 – shallow (3-10 ft)	Semiannual Not Required		Not Required
<b>Pond/LP Well Area OU</b>			
MW-27 – bedrock (80-90 ft)	Semiannual	Annually in Spring every other year beginning in 2014	Annually in Spring every other year beginning in 2014
MW-37 – bedrock (77-87 ft)	Semiannual	Annually in Spring every other year beginning in 2014	Annually in Spring every other year beginning in 2014

\* U.S. EPA means the United States Environmental Protection Agency

(1) PCP anaerobic degradation products (including 2,3,5,6-TeCP; 2,3,4,5-TeCP)

(2) Nitrate, EPA Method 9056;  
 Nitrite, EPA Method 9056;  
 Sulfate, EPA Method 9056;  
 Sulfide, Standard Methods (SM) 4500S-F;  
 Fe<sup>2+</sup> and Mn<sup>2+</sup> by EPA Method 7199;  
 Carbon Dioxide and Methane, AM20GAX; and  
 Total Alkalinity, SM 2320B