California Regional Water Quality Control Board
North Coast Region

MONITORING AND REPORTING PROGRAM ORDER NO. R1-2012-0039
SURFACE WATER and GROUNDWATER
(Rescinds and Replaces Monitoring and Reporting Program Order No. R1-2011-0071)

FOR

SIMPSON TIMBER COMPANY
1200 West Del Norte Avenue
Eureka, California
Case No. 1NHU103

Humboldt County

This Monitoring and Reporting Program is issued pursuant to California Water Code (CWC) Section 13267(b) and requires monitoring of groundwater and surface water, and the submission of technical reports. Submission of groundwater and surface water monitoring data is required semi-annually and groundwater and surface water monitoring reports are required annually. The objective of monitoring conducted under this monitoring program is to provide the Discharger and the Regional Water Board with information concerning groundwater quality and contaminant trends at the site.

Under the authority of the California Water Code Section 13267, the Discharger named above is required to comply with the following:

SURFACE WATER MONITORING

1. Surface water monitoring stations are shown in Attachment 1.

2. Each surface water monitoring station (ES-1 and ES-2) shall be sampled twice per wet season (October 1 through May 31). Surface water monitoring points located in the eastern drainage swale, ES-1 and ES-2 shall be sampled during or shortly after a storm event and relatively close to a low tide, when water is observed to be flowing south from the swale into the West Del Norte Street culvert at sufficient depth such that a sample can be collected without disturbing and entraining underlying sediment. The following parameters shall be analyzed: chlorinated phenols, total suspended solids, pH, and specific conductance. The sample from ES-2 shall also be analyzed for dioxin and furan congeners.

3. Surface water samples shall not be filtered prior to analysis.

GROUNDWATER MONITORING

4. At least semi-annually, the depth to groundwater in each monitoring well listed on Table 1 shall be determined to at least 0.01 foot increments. Groundwater elevation data must be referenced to the North American Vertical Datum of 1988.

5. The tidal elevation and cycle at the time of sample collection and groundwater elevation measurements shall be recorded.

6. Each groundwater monitoring well shall be sampled in accordance with the schedule shown in Table 1. At each monitoring event, the groundwater monitoring wells shown in Table 1 shall be sampled for the chemical parameters indicated and also for temperature, pH, and electrical conductivity.

7. Monitoring wells that cannot produce sufficient sample volume to perform all the analyses required in Table 1 within 24 hours following purging shall be sampled for as many parameters as possible by that time. The samples will be collected in the following order of importance: first for dioxin congeners, then chlorinated phenols, then Total Petroleum Hydrocarbons as Mineral Spirits (TPHms) or Total Petroleum Hydrocarbons as gasoline (TPHg), Benzene, Toluene, Ethylbenzene, Xylenes (BTEX), and Methyl-t-butyl ether (MTBE).

8. Samples from monitoring wells that cannot produce relatively sediment free groundwater (less than 5.0 nephelometric turbidity units) may be filtered in the field or by the analytical laboratory using a 0.7 micron glass fiber filter prior to analysis, except for samples for analysis for TPHg, TPHms, BTEX, and MTBE which shall not be filtered.

9. Monitoring wells that contain measurable floating product are not required to be purged and sampled.

10. All laboratory analyses shall be performed at a laboratory certified by the California Department of Public Health.

REPORTING

11. Within 30 days of receipt of the final analytical laboratory results, analytical results from groundwater and surface water monitoring shall be submitted to this office on a compact disk, and electronically to the State Water Resources Control Board GeoTracker database as required by Title 23, Division 3, Chapter 30 of the California Code of Regulations.

12. An annual groundwater and surface water monitoring report for each calendar year, including groundwater gradient, tide data, field-measured parameters, and analytical data, shall be submitted to this office by June 15 of the subsequent year.

13. A groundwater elevation contour map shall be submitted for each monitoring event and shall show the facility, groundwater flow pattern including the direction of the groundwater gradient in both the A- and B-Zones, and the location of monitoring wells.

14. The annual groundwater and surface water monitoring report shall contain current and previous analytical results dating back to December 1999 in tabular format. The current results shall also be reported on a site plan, including the following:

    a. sampling point;
    b. date of sample collection;
    c. constituents and analytical results; and
    d. analytical laboratory reporting limit and/or method detection limit.

15. Each annual groundwater and surface water monitoring report shall contain copies of the sampling field logs and well purging logs; chain-of-custody documents indicating the time and date of sample collection and the person collecting the samples; and signed laboratory sheets including quality control data, reporting limits, and explanations of analytical anomalies, if any. These supporting documents may be included as appendices to the report.

16. If one or more requirements of this program cannot be provided, the annual groundwater and surface water monitoring report shall state the reason for the omission and explain what corrective actions shall be employed to prevent future omissions.

17. The annual groundwater and surface water monitoring report shall be submitted in hard copy form and shall be submitted electronically to the State Water Resources Control Board GeoTracker database as required by Title 23, Division 3, Chapter 30 of the California Code of Regulations.

Ordered by _____
Catherine Kuhlman
Executive Officer

February 22, 2012

Table 1: Groundwater Monitoring Wells Analytes & Required Schedule

	DTW*	TPH-g	TPH-ms	THP-d	BTEX	MtBE	Chlorinated Phenols	Dioxins
A Zone Wells								
GP-02A	X						A	
GMW-01A	X	S	S					
MW-101A	X	S	S		S		S	A
MW-102A	X						S	
MW-103AR	X						S	B
MW-104A	X		A	A			A	
MW-106A	X							
MW-107A	X						A	
MW-108A	X				A			
MW-109A	X				A			
MW-110A	X	S	S	S				
B Zone Wells	X							
MW-101B	X	A	A		A		A	B
MW-102B	X						A	
MW-103B	X						A	B
MW-104B	X		A					
MW-107B	X						A	
MW-108B	X	S			S	S		
MW-109B	X	S	S	S	S	S		
MW-110B	X		S	S	S	S		

*Depth to Groundwater on a Semiannual Schedule

Frequency Requirements:
S = Semi-annual (twice per year) A = Annual (once per year) B = Biennial (once every two years)

Parameter Definitions:
TPH-g: Total petroleum hydrocarbons, gasoline range
TPH-ms: Total petroleum hydrocarbons, mineral spirits range
TPH-d: Total petroleum hydrocarbons, diesel range
BTEX: Benzene, toluene, ethylbenzene, total xylenes
MtBE: Methly *tert*-butyl ether
Chlorinated Phenols: Pentachlorophenol, 2,3,4,6-Tetrachlorophenol
Dioxins: Dioxin and furan congeners

Attachment 1:
Surface Water Monitoring Points – ES1 and ES2

Monitoring Points
Simpson Timber Company, 1200 West Del Norte Avenue, Eureka, California

- Surface Water Monitoring Points, locations approximate

Attachment 2:
Groundwater Monitoring Wells

Monitoring Points
Simpson Timber Company, 1200 West Del Norte Avenue, Eureka, California

★ Monitoring Wells, locations approximate