California Regional Water Quality Control Board
North Coast Region

MONITORING AND REPORTING PROGRAM NO. R1-2001-29

FOR

UNION PACIFIC RAILROAD COMPANY
736 BROADWAY
EUREKA, CALIFORNIA

Humboldt County

## GROUNDWATER MONITORING

1. The presence of floating product shall be evaluated in each onsite monitoring well. If detected, the thickness shall be measured to at least 0.01 foot increments quarterly.

2. The depth to groundwater in each monitoring well shall be determined to at least 0.01 foot increments quarterly. The results of each quarter's monitoring shall be reported in tabular form indicating the surveyed elevations of each well reference point, depth to groundwater from reference point, and the actual groundwater elevation. The data generated from the elevation readings must be referenced to mean sea level.

3. Each monitoring well shall be sampled quarterly. The analyses shall be performed at a certified laboratory for total petroleum hydrocarbons as gasoline, total petroleum hydrocarbons as diesel, total recoverable petroleum hydrocarbons, polynuclear aromatic hydrocarbons (PNAs), arsenic, barium, copper, lead, and zinc.

## SURFACE WATER MONITORNG

4. The presence of visible product or sheen shall be evaluated monthly during the periods rainfall runoff at each monitoring station shown on attachment A.

5. Surface water monitoring events shall be timed to coincide with the first rainfall event each month that produces runoff.

6. The flow at each monitoring station shall be calculated in gallons per minute during each monitoring event.

7. Monitoring stations A, B, D, F, and G shall be sampled monthly during periods rainfall runoff. The analyses shall be performed at a certified laboratory for turbidity, total petroleum hydrocarbons as gasoline, total petroleum hydrocarbons as diesel, total recoverable petroleum hydrocarbons, polynuclear aromatic hydrocarbons (PNAs), arsenic, barium, copper, lead, and zinc. Surface water samples shall not be filtered prior to analysis.

8. Receiving-water monitoring stations C and E shall be sampled monthly during periods rainfall runoff. The analyses shall be performed at a certified laboratory for total hardness as CaCO3.

## REPORTING

9. An elevation contour map shall be submitted for each quarterly set of groundwater measurements depicting the facility, groundwater flow pattern including the direction of the groundwater gradient, and the location of the wells measured.

10. A monitoring station map shall be submitted for surface water runoff samples depicting, pertinent runoff patterns, onsite wetlands, and other receiving surface waters.

11. Quarterly groundwater monitoring reports, including current and historic gradient, flow, and sampling data shall be submitted to this office in tabular form in accordance with the following schedule:

| Reporting Period | Due Date |
|---|---|
| May, June, July | August 15 |
| August, September, October | November 15 |
| November, December, January | February 15 |
| February, March, April | May 15 |

12. Monthly surface water monitoring reports shall be submitted by the 30th day of the month following sampling and/or observations. Monthly reports shall include current and historic flow and sampling data in tabular form. During periods when there is no runoff, the monitoring report shall state no runoff occurred at the Site.

Ordered by _____

Lee A. Michlin
Executive Officer

May 9, 2001

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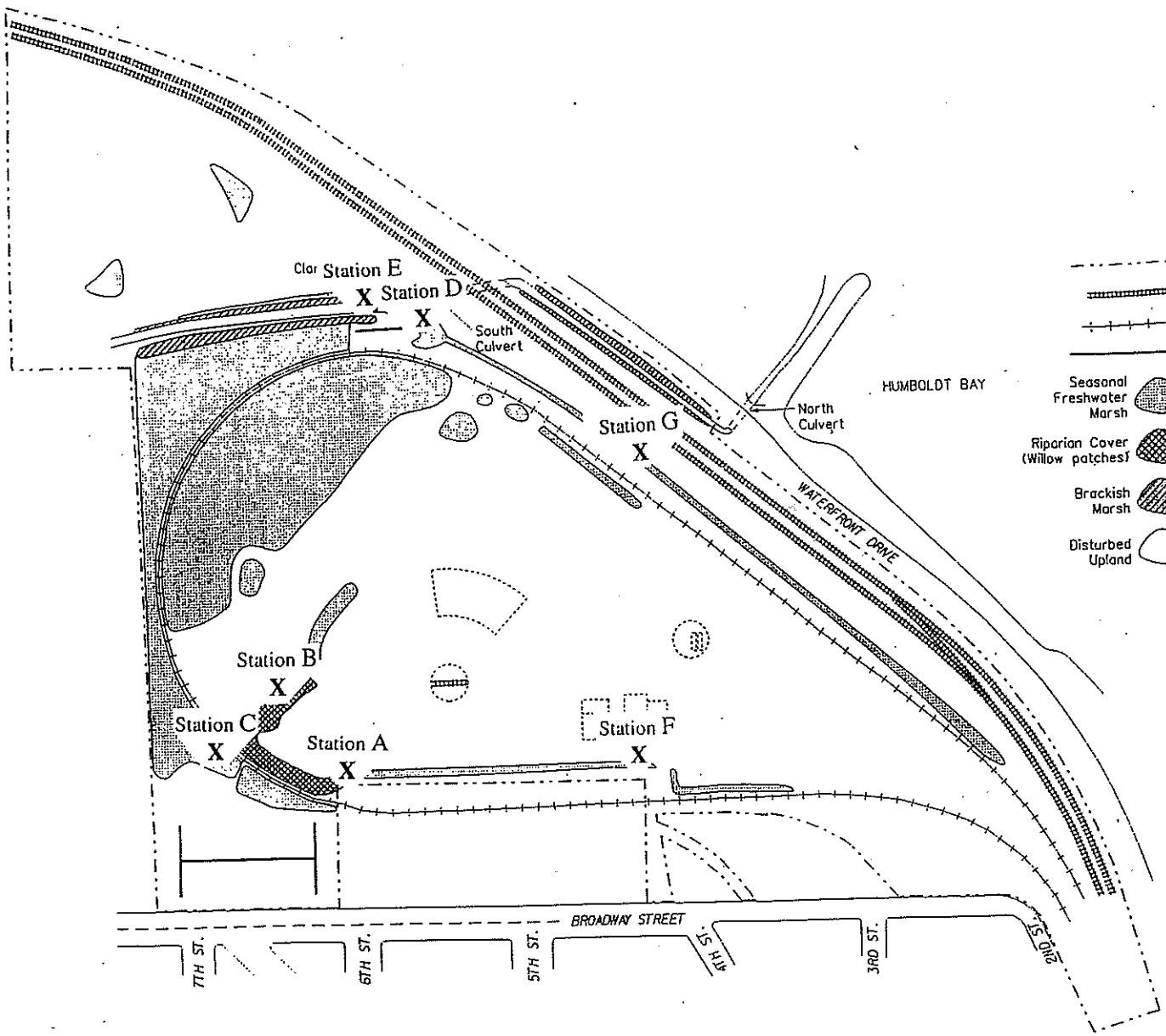


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SCALE IN FEET

EXPLANATION

- Approximate site boundary
- Railroad tracks
- Former railroad tracks
- Proposed trenching location

Seasonal Freshwater Marsh
Riparian Cover (Willow patches)
Brackish Marsh
Disturbed Upland

Approximate boundaries for Hydrophytic Vegetation Areas Mapped by Winzler & Kelly Consulting Engineers, August 1995. Not a product of a formal wetland delineation or survey.

Notes:

Only the former "balloon" railroad track is shown for illustrative purpose. Other former railroad tracks are not shown on the base map.

Base map adapted from aerial photograph taken on 28 June 1990 by Richard B. Davis, Inc., of Smith River, California

Former SPTCo Railroad Yard
Eureka, California

GEOMATRIX