California Regional Water Quality Control Board
North Coast Region

MONITORING AND REPORTING PROGRAM NO. R1-2005-0103

FOR

ROBERT BENSON

PRESTIGE LINCOLN MERCURY

2979 Corby Avenue

Santa Rosa, California

Sonoma County

GROUNDWATER MONITORING

1. Prior to purging each monitoring well for sampling, each well shall be checked for the presence or absence of free product. If free product is present, the thickness shall be measured to the nearest 0.01-foot.

2. Prior to purging, the depth to groundwater shall be measured to the nearest 0.01-foot. The groundwater elevations for each monitoring event shall be reported in tabular form indicating the top of casing elevation, the groundwater elevation referenced to mean sea level and the actual depth to groundwater.

3. Prior to purging, each monitoring well shall be tested at the depth of the well screen for the following parameters: oxidation-reduction potential, pH, temperature, and dissolved oxygen.

4. Groundwater samples shall be collected for chemical analysis from all monitoring wells quarterly.

5. Groundwater samples from each monitoring well shall be analyzed for the following constituents:

   a. Total Petroleum Hydrocarbons (TPH) measured as gasoline and as diesel;
   b. Volatile Organics Compounds, including: benzene, toluene, ethyl benzene, xylenes (BTEX); 1,2-dichloroethane (1,2-DCA), ethylene dibromide;
   c. Fuel oxygenates including: methyl tert-butyl ether (MTBE), tert-amyl methyl ether (TAME), diisopropyl ether (DIPE), ethyl tert-butyl ether (ETBE), tert-amyl alcohol (TAA), tert-butyl alcohol (TBA), and ethanol.
   d. Dissolved metals: hexavalent chromium, uranium, vanadium, selenium, lead and molybdenum;
   e. Inorganic Compounds: bromide and bromate.

6. Monitoring wells MW4 and MW-7 shall be evaluated for potential petroleum vapor escapement within one week after startup of the ozone sparging system, and monthly thereafter. The assessment shall consist of pressure testing of the wellheads and analysis of headspace air samples for VOCs, including TPH as gasoline and BTEX. If VOC levels increase by an order of magnitude over baseline levels, then the ozone sparging system shall be shut down until further assessment of the vapor intrusion pathway to indoor air has been completed to the satisfaction of the Executive Officer.

7. Chemical analyses must be performed by a laboratory certified by the State of California Department of Health Services.

8. Analytical methods for sample analyses shall achieve practical quantification reporting limits that are adequate for evaluating regulatory action levels for each constituent. A table of water quality objectives and common laboratory reporting limits for the constituents of concern is incorporated in this Order as Appendix A.

REPORTING

9. Groundwater monitoring reports shall be submitted to the North Coast Regional Water Quality Control Board at 5550 Skylane Boulevard, Suite A, Santa Rosa, California, 95403 according to the following schedule:

First Quarter	=	January, February, March	Report Due April 30th
Second Quarter	=	April, May, June	Report Due July 31st
Third Quarter	=	July, August, September	Report Due October 31st
Fourth Quarter	=	October, November, December	Report Due January 30th

10. Groundwater monitoring data and reports shall also 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).

11. Groundwater monitoring reports shall include the following elements:
    a. A narrative description of the work conducted;
    b. A groundwater elevation map for each sampling event;
    c. A contaminant distribution map showing isograms for constituents of concern detected in groundwater during the monitoring event;
    d. Analytical data tables including both current and historical analytical results;
    e. Copies of the well purging and sampling field logs; chain of custody documents; and signed laboratory reports including quality control data and explanations of analytical anomalies, if any. These supporting documents may be included as appendices to the report.

Ordered by
for Catherine E. Kuhlman
Executive Officer

October 21, 2005

APPENDIX A
Constituents of Concern
Including Petroleum and ORP Sensitive Chemicals

CHEMICAL	Common Minimum Detection Level	WATER QUALITY OBJECTIVE	WATER QUALITY OBJECTIVE CITATION
Bromate	**5 µg/l**	**10 µg/l**	**Primary MCL** US EPA
Bromide	**100 µg/l** [1]	**2300 µg/l**	**Suggested No Adverse Response Levels** National Academy of Sciences
Ethylene dibromide (Dibromoethane)	**0.5 µg/l**	**0.05 µg/l**	**Primary MCL** US EPA
1,2-Dichloroethane	**0.5 µg/l**	**0.5 µg/l**	**For protection of domestic supply, Title 22 Section 64444.5**
Petroleum Hydrocarbons (as gasoline)	**50 µg/l**	**< 50 µg/l**	**Taste and odor threshold is 5 ug/l, but the common detection limit is 50 µg/l**
Petroleum Hydrocarbons (as diesel)	**50 µg/l**	**56 µg/l**	**USEPA Health Advisory Suggested No Adverse Response Level**
Petroleum Hydrocarbons (as motor oil)	**50 µg/l**	**< 50.0 µg/l**	**USEPA Health Advisory Suggested No Adverse Response Level = 1.0 µg/l**
Benzene	**0.5 µg/l**	**0.7 µg/l**	**MCL is 1.0 ug/l; USEPA Health Advisory for cancer risk is 0.7 µg/l**
Toluene	**0.5 µg/l**	**42 µg/l**	**USEPA taste and odor threshold,**
Ethyl Benzene	**0.5 µg/l**	**29 µg/l**	**USEPA taste and odor threshold,**
Xylenes	**0.5µg/l**	**17 µg/l**	**USEPA taste and odor threshold,**
Methyl tertiary butyl ether (MTBE)	**0.5 µg/l**	**5 µg/l**	**USEPA taste and odor threshold,**
Uranium (U)	**1 µg/l**	**0.5 µg/l**	**California Public Health Goal or PHG**
Hexavalent Chromium (Cr)	**5 µg/l**	**21 µg/l**	**USEPA IRIS Reference Dose (RfD) as a drinking water level**
Lead (Pb)	**0.5 µg/l**	**2 µg/l**	**California Public Health Goal or PHG**
Molybdenum (Mo)	**3 µg/l**	**35 µg/l**	**USEPA IRIS Reference Dose (RfD) as a drinking water level**
Selenium (Se)	**5 µg/l**	**35 µg/l**	**USEPA IRIS Reference Dose (RfD) as a drinking water level**
Vanadium (V)	**50 µg/l**	**50 µg/l**	**California State Action Levels (Department of Health Services)**

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[1] Bromide is a naturally occurring constituent analyzed to identify its presence as a potential precursor for the formation of bromate under oxidative conditions. A minimum detection level of 100 µg/l is required.