

**STATE OF CALIFORNIA
CALIFORNIA REGIONAL WATER QUALITY CONTROL BOARD
LOS ANGELES REGION**

**MONITORING AND REPORTING PROGRAM NO. CI-8373
FORMER ITT BARTON INSTRUMENTS FACILITY
CITY OF INDUSTRY, CALIFORNIA
(CARBOHYDRATE SOLUTION GROUNDWATER INJECTION)**

(FILE NO. 2001-163)

I. Discharge Monitoring

The Discharger shall sample from groundwater monitoring wells for baseline groundwater parameters two weeks prior to the start of the injections. Monitoring of the remedial project shall consist of samples collected from wells MW-6, MW-7, and MW-8. Monitoring wells shall be monitored for the duration of the remediation project in accordance with the following discharge monitoring program:

Table 1. Monitoring program for monitoring wells MW-6, MW-7, and MW-8.

<u>CONSTITUENT</u>	<u>UNITS</u>	<u>TYPE OF SAMPLE</u>	<u>MINIMUM FREQUENCY OF ANALYSIS</u>
Total daily injection waste flow	gallons/day (indicate solution concentration)	N/A	During injection (specify remediation area)
Dissolved Oxygen Field using YSI 6000 water quality transmitter unit Field using Hach test kit	mg/l	<i>In-situ</i>	<ul style="list-style-type: none"> • Biweekly first 6 weeks. • Every 3 weeks the following 6 weeks. • Every 6 weeks thereafter.
Oxidation Reduction Potential Field using YSI 6000 water quality transmitter unit	millivolts	<i>In-situ</i>	<ul style="list-style-type: none"> • Biweekly first 6 weeks. • Every 3 weeks the following 6 weeks. • Every 6 weeks thereafter.
pH Field using YSI 6000 water quality transmitter unit	pH units	<i>In-situ</i>	<ul style="list-style-type: none"> • Biweekly first 6 weeks. • Every 3 weeks the following 6 weeks. • Every 6 weeks thereafter.
Temperature Field using YSI 6000 water quality transmitter unit	F/ C	<i>In-situ</i>	<ul style="list-style-type: none"> • Biweekly first 6 weeks. • Every 3 weeks the following 6 weeks. • Every 6 weeks thereafter.
Specific Conductivity Field using YSI 6000 water quality transmitter unit	µmhos/cm	<i>In-situ</i>	<ul style="list-style-type: none"> • Biweekly first 6 weeks. • Every 3 weeks the following 6 weeks. • Every 6 weeks thereafter.
Iron, Ferrous Field using Hach test kit	mg/l	grab	<ul style="list-style-type: none"> • Biweekly first 6 weeks. • Every 3 weeks the following 6 weeks. • Every 6 weeks thereafter.

Hydrogen Sulfide Field using Hach test kit	mg/l	grab	<ul style="list-style-type: none"> • Biweekly first 6 weeks. • Every 3 weeks the following 6 weeks. • Every 6 weeks thereafter.
Total dissolved solids and Total suspended solids	mg/l	grab	<ul style="list-style-type: none"> • Biweekly first 6 weeks. • Every 3 weeks the following 6 weeks. • Every 6 weeks thereafter.
Turbidity	NTU	grab	<ul style="list-style-type: none"> • Biweekly first 6 weeks. • Every 3 weeks the following 6 weeks. • Every 6 weeks thereafter.
Chlorinated Volatile Organic Compounds EPA Method 8260 B	µg/l	grab	<ul style="list-style-type: none"> • Every 6 weeks
Total Organic Carbon EPA Method 9060 Modified	mg/l	grab	<ul style="list-style-type: none"> • Biweekly first 6 weeks. • Every 3 weeks the following 6 weeks. • Every 6 weeks thereafter.
Manganese, total EPA Method 6010A	mg/l	grab	<ul style="list-style-type: none"> • Biweekly first 6 weeks. • Every 3 weeks the following 6 weeks. • Every 6 weeks thereafter.
Manganese, dissolved EPA Method 6010A	mg/l	grab	<ul style="list-style-type: none"> • Biweekly first 6 weeks. • Every 3 weeks the following 6 weeks. • Every 6 weeks thereafter.
Iron, total EPA Method 6010A	mg/l	grab	<ul style="list-style-type: none"> • Biweekly first 6 weeks. • Every 3 weeks the following 6 weeks. • Every 6 weeks thereafter.
Sulfate EPA Method 375.4	mg/l	grab	<ul style="list-style-type: none"> • Biweekly first 6 weeks. • Every 3 weeks the following 6 weeks. • Every 6 weeks thereafter.
Nitrate EPA Method 353.2	mg/l	grab	<ul style="list-style-type: none"> • Biweekly first 6 weeks. • Every 3 weeks the following 6 weeks. • Every 6 weeks thereafter.
Nitrite EPA Method 353.2	mg/l	grab	<ul style="list-style-type: none"> • Biweekly first 6 weeks. • Every 3 weeks the following 6 weeks. • Every 6 weeks thereafter.
Chloride EPA Method 325.2	mg/l	grab	<ul style="list-style-type: none"> • Biweekly first 6 weeks. • Every 3 weeks the following 6 weeks.

			<ul style="list-style-type: none"> • Every 6 weeks thereafter.
Major Cations (barium, calcium, potassium and sodium)	mg/l	grab	<ul style="list-style-type: none"> • Monthly first three months • Every 6 weeks thereafter • If no significant change is observed monitor every semester.
Carbon Dioxide	µg/l	grab	<ul style="list-style-type: none"> • Monthly first three months • Every 6 weeks thereafter
Nitrogen	µg/l	grab	<ul style="list-style-type: none"> • Monthly first three months • Every 6 weeks thereafter
Methane	µg/l	grab	<ul style="list-style-type: none"> • Every 6 weeks
Ethane	µg/l	grab	<ul style="list-style-type: none"> • Every 6 weeks
Ethene	µg/l	grab	<ul style="list-style-type: none"> • Every 6 weeks
Color (EPA Method 110.2)	Color unit	grab	<ul style="list-style-type: none"> • Biweekly first 6 weeks. • Every 3 weeks the following 6 weeks. • Every 6 weeks thereafter.
Groundwater Elevation	Feet, mean sea level (msl) and below ground surface (bgs)	<i>In situ</i>	<ul style="list-style-type: none"> • Biweekly first 6 weeks. • Every 3 weeks the following 6 weeks. • Every 6 weeks thereafter.

MW-9 and MW-10 will be used to detect off-site migration of the injection solution and/or contaminants.

Table 2. Monitoring program for monitoring wells MW-9 and MW-10.

<u>CONSTITUENT</u>	<u>UNITS</u>	<u>TYPE OF SAMPLE</u>	<u>MINIMUM FREQUENCY OF ANALYSIS</u>
Dissolved Oxygen Field using YSI 6000 water quality transmitter unit Field using Hach test kit	mg/l	<i>In-situ</i>	<ul style="list-style-type: none"> • Biweekly first 6 weeks. • Every 3 weeks the following 6 weeks. • Every 6 weeks thereafter.
Oxidation Reduction Potential Field using YSI 6000 water quality transmitter unit	millivolts	<i>In-situ</i>	<ul style="list-style-type: none"> • Biweekly first 6 weeks. • Every 3 weeks the following 6 weeks. • Every 6 weeks thereafter.
pH Field using YSI 6000 water quality transmitter unit	pH units	<i>In-situ</i>	<ul style="list-style-type: none"> • Biweekly first 6 weeks. • Every 3 weeks the following 6 weeks. • Every 6 weeks thereafter.
Temperature Field using YSI 6000 water quality	F/°C	<i>In-situ</i>	<ul style="list-style-type: none"> • Biweekly first 6 weeks. • Every 3 weeks the following

transmitter unit			6 weeks. • Every 6 weeks thereafter.
Specific Conductivity Field using YSI 6000 water quality transmitter unit	µmhos/cm	<i>In-situ</i>	• Biweekly first 6 weeks. • Every 3 weeks the following 6 weeks. • Every 6 weeks thereafter.
Total dissolved solids and Total suspended solids	mg/l	grab	• Biweekly first 6 weeks. • Every 3 weeks the following 6 weeks. • Every 6 weeks thereafter.
Turbidity	NTU	grab	• Biweekly first 6 weeks. • Every 3 weeks the following 6 weeks. • Every 6 weeks thereafter.
Chlorinated Volatile Organic Compounds EPA Method 8260 B	µg/l	grab	• Every 12 weeks
Manganese, total EPA Method 6010A	mg/l	grab	• Every 12 weeks.
Manganese, dissolved EPA Method 6010A	mg/l	grab	• Every 12 weeks.
Iron, total EPA Method 6010A	mg/l	grab	• Every 12 weeks.
Iron, Ferrous Field using Hach test kit	mg/l	grab	• Every 12 weeks.
Sulfate EPA Method 375.4	mg/l	grab	• Every 12 weeks.
Nitrate EPA Method 353.2	mg/l	grab	• Every 12 weeks.
Nitrite EPA Method 353.2	mg/l	grab	• Every 12 weeks.
Chloride EPA Method 325.2	mg/l	grab	• Every 12 weeks.
Hydrogen Sulfide Field using Hach test kit	mg/l	grab	• Every 12 weeks.
Total Organic Carbon EPA Method 9060 Modified	mg/l	grab	• Biweekly first 6 weeks. • Every 3 weeks the following 6 weeks. • Monthly thereafter.
Methane	µg/l	grab	• Every 6 weeks
Color (EPA Method 110.2)	Color unit	grab	• Biweekly first 6 weeks. • Every 3 weeks the following 6 weeks. • Every 6 weeks thereafter.
Groundwater Elevation	Feet, mean sea level (msl) and	<i>In situ</i>	• Biweekly first 6 weeks.

	level (msl) and below ground surface (bgs)		<ul style="list-style-type: none"> • Every 3 weeks the following 6 weeks. • Every 6 weeks thereafter.
--	--	--	---

II. Reporting and Laboratory Analyses

A. REPORTING REQUIREMENTS

1. In accordance with section 13267 of the California Water Code, the Discharger shall furnish, under penalty of perjury, technical monitoring reports to the Regional Board during the remediation and during the post-remediation monitoring period. Such reports shall be submitted in accordance with specifications prepared by the Executive Officer.
2. The monitoring reports shall be submitted monthly by the 15th of the following month, with the first report due on the 15th of the month following the first injection event.
3. All monitoring reports shall include discharge limitations in the Order (see A. Discharge Prohibitions), tabulated analytical data, the chain of custody, laboratory report (including but not limited to date and time of sampling, date of analyses, method of analysis and detection limits). If there is no discharge, the report shall so state it.
4. Two months after the end of the remediation, the Discharger shall submit an interim summary report to the Regional Board to report findings during the project.
5. Fourteen (14) months after the end of the remediation, the Discharger shall submit a final summary report to the Regional Board to report the comprehensive findings observed during the remediation and post-remediation monitoring period.
6. The report shall contain both tabular and graphical summaries of the monitoring data obtained prior to and proceeding the remediation. Provided data must ensure that the remediation areas have returned to the pre-existing aerobic environment. In addition, the Discharger shall discuss the compliance record and the corrective actions taken or planned, which may be needed to bring the discharge into full compliance with the site's waste discharge requirements, if any.

B. LABORATORY ANALYSIS REQUIREMENTS

1. All chemical, bacteriological, and toxicity analyses shall be conducted at a laboratory certified for such analyses by the State Department of Health Services Environmental Laboratory Accreditation Program (ELAP) or approved by the Executive Officer.
2. Samples shall be analyzed within allowable holding time limits as specified in 40 CFR Part 136.3. All quality assurance/quality control (QA/QC) items should be run on the same dates when samples were actually analyzed and documentation shall accompany the laboratory reports.

3. The detection limits employed for sample analyses shall be lower than the permit limits established for a given parameter, unless the discharger demonstrates that a particular detection limit is not attainable and obtains approval for a higher detection limit from the Executive Officer.

III. Notification

1. The Discharger shall inform the Regional Board 24 hours before the start of the discharge.
2. The Discharger shall inform the Regional Board within 24 hours in the event that any discharge exceeds the discharge limit. Written confirmation shall follow within one week and shall include date and time, estimated volume and/or concentration, duration, cause, and all corrective actions taken.
3. The Discharger shall inform the Regional Board of the termination of the remediation project.

Ordered by: _____
Dennis A. Dickerson
Executive Officer

Date: January 24, 2002

/ACJ