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

## MONITORING AND REPORTING PROGRAM NO. CI-8379 USG CORPORATION, LA MIRADA FACILITY (POTASSIUM PERMANGANATE INJECTION PILOT TEST) (FILE NO. 2001-164)

## I. Discharge Monitoring

The Discharger shall sample from groundwater monitoring wells for baseline groundwater parameters two weeks prior to the start of the pilot test. Monitoring of the Potassium Permanganate Pilot Test shall consist of samples collected from one injection well, RW-7, and six monitoring wells in the pilot study area (RW-2, RW-3, RW-6, GTI-1, GTI-2, and GTI-3). Monitoring wells, with the exception of well RW-3 as stated in Note 1, shall be monitored for six months accordance with the following discharge monitoring program:

| <u>CONSTITUENT</u>                                   | <u>UNITS</u>   | <u>TYPE OF</u><br>SAMPLE | MINIMUM FREQUENCY<br>OF ANALYSIS <sup>[1]</sup>                                 |
|--|--|--------------------------|---|
| Total daily injection waste flow                     | liters/day<br>(to indicate<br>solution<br>concentration) | In situ                  | Daily during injection  |
| Volatile Organic<br>Compounds (EPA Method<br>8260 B) | µg/l   | grab                     | <ul> <li>Every two weeks first<br/>month</li> <li>Monthly thereafter</li> </ul> |
| Total Organic Carbon (EPA<br>Method 415.1)           | μg/l   | grab                     | <ul> <li>Every two weeks first<br/>month</li> <li>Monthly thereafter</li> </ul> |
| Total dissolved solids and<br>Total suspended solids | mg/l   | grab                     | <ul><li>Every two weeks first<br/>month</li><li>Monthly thereafter</li></ul>    |
| Specific Conductivity                                | µmhos/cm   | grab                     | <ul> <li>Every two weeks first<br/>month</li> <li>Monthly thereafter</li> </ul> |
| Turbidity  | NTU  | grab                     | <ul> <li>Every two weeks first<br/>month</li> <li>Monthly thereafter</li> </ul> |
| рН   | pH units   | grab                     | <ul> <li>Every two weeks first<br/>month</li> <li>Monthly thereafter</li> </ul> |
| Oxidation-reduction<br>potential                     | millivolts   | grab                     | <ul> <li>Every two weeks first<br/>month</li> <li>Monthly thereafter</li> </ul> |

| Temperature   | <sup>0</sup> F/ <sup>0</sup> C  | grab    | <ul> <li>Every two weeks first<br/>month</li> <li>Monthly thereafter</li> </ul> |
|---|---|---------|---|
| Groundwater Elevation   | Feet, mean<br>sea level (msl)<br>and below<br>ground<br>surface (bgs) | In situ | <ul> <li>Every two weeks first month</li> <li>Monthly thereafter</li> </ul>     |
| Dissolved Oxygen  | μg/l  | grab    | <ul> <li>Every two weeks first<br/>month</li> <li>Monthly thereafter</li> </ul> |
| Major Anions<br>(bromide, chloride, sulfate,<br>nitrate, nitrite, O-phosphate,<br>and<br>sulfide) | μg/l  | grab    | <ul> <li>Every two weeks first month</li> <li>Monthly thereafter</li> </ul>     |
| Major Cations<br>(barium, calcium,<br>magnesium, manganese,<br>potassium and sodium)              | μg/l  | grab    | <ul> <li>Every two weeks first month</li> <li>Monthly thereafter</li> </ul>     |
| Permanganate  | µg/l  | grab    | <ul> <li>Every two weeks first<br/>month</li> <li>Monthly thereafter</li> </ul> |
| Color<br>(EPA Method 110.2)   | Color unit  | grab    | <ul> <li>Every two weeks first<br/>month</li> <li>Monthly thereafter</li> </ul> |
| Arsenic<br>(EPA Method 200.7<br>or Method 6010B)  | μg/l  | grab    | <ul><li>Every two weeks first<br/>month</li><li>Monthly thereafter</li></ul>    |
| Cadmium<br>(EPA Method 200.7<br>or Method 6010B)  | μg/l  | grab    | <ul> <li>Every two weeks first<br/>month</li> <li>Monthly thereafter</li> </ul> |
| Chromium<br>(EPA Method 200.7<br>or Method 6010B)   | µg/l  | grab    | <ul> <li>Every two weeks first<br/>month</li> <li>Monthly thereafter</li> </ul> |
| Hexavalent chromium<br>(EPA Method 218.6 or<br>Method 7199)                                       | μg/l  | grab    | <ul> <li>Every two weeks first<br/>month</li> <li>Monthly thereafter</li> </ul> |
| Copper<br>(EPA Method 200.7<br>or Method 6010B)   | µg/l  | grab    | <ul> <li>Every two weeks first<br/>month</li> <li>Monthly thereafter</li> </ul> |
| Lead<br>(EPA Method 200.9<br>or Method 6010B)   | μg/l  | grab    | <ul> <li>Every two weeks first<br/>month</li> <li>Monthly thereafter</li> </ul> |
| Mercury<br>(EPA Method 245.2<br>or Method 6010B)  | μg/l  | grab    | <ul> <li>Every two weeks first<br/>month</li> <li>Monthly thereafter</li> </ul> |

#### USG Corporation La Mirada Facility Potassium Permanganate Injection Pilot Test

| Selenium             | μg/l          | grab | • Every two weeks first |
|----------------------|---------------|------|-------------------------|
| (EPA Method 200.8 or | μ <u>θ</u> /1 | gruo | month                   |
|                      |               |      |                         |
| 200.9                |               |      | • Monthly thereafter    |
| or Method 6010B)     |               |      |                         |

1 - Extraction Well RW-3 shall be sampled weekly for the first month, every two weeks for the second month and monthly 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 pilot test and during the post-test 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 15<sup>th</sup> of the following month, with the first report due April 15, 2002.
- 3. All monitoring reports shall include discharge limitations in the Order (see A. Discharge Limitations), tabulated analytical data, the chain of custody, and 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 field pilot test, the Discharger shall submit an interim summary report to the Regional Board to report findings during the field pilot test.
- 5. Five (5) months after the end of the field pilot test, the Discharger shall submit a final summary report to the Regional Board to report the comprehensive findings observed during the pilot test and post-test monitoring period. The report shall contain both tabular and graphical summaries of the monitoring data obtained prior to, during and following the pilot test. In addition, USG Corporation 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.

# 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 can 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:

Date: January 24, 2002

Dennis A. Dickerson Executive Officer