

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

MONITORING AND REPORTING PROGRAM NO. CI-9067 (REVISED)  
FOR  
PARAPLAST AREA  
FORMER NORTHROP GRUMMAN FACILITY  
1515 RANCHO CONEJO BOULEVARD, NEWBURY PARK, CALIFORNIA  
FILE NO. 08-172

ORDER NO. R4-2007-0019  
SERIES NO. 056

I. REPORTING REQUIREMENTS

- A. The Discharger shall implement this monitoring program on the effective date of this enrollment (December 31, 2008) under Regional Board Order No. R4-2007-0019. The first monitoring report under this Program is due by April 15, 2009.

Monitoring reports shall be received by the dates in the following schedule:

<u>Reporting Period</u>	<u>Report Due</u>
January – March	April 15
April – June	July 15
July – September	October 15
October – December	January 15

- B. If there is no discharge or injection, during any reporting period, the report shall so state. Monitoring reports must be addressed to the Regional Board, Attention: Information Technology Unit.
- C. By March 1 of each year, the Discharger shall submit an annual summary report to the Regional Board. The report shall contain both tabular and graphical summaries of the monitoring data obtained during the previous calendar year. 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 waste discharge requirements.
- D. The Discharger shall comply with requirements contained in Section G of Order No. R4-2007-0019 "*Monitoring and Reporting Requirement*" in addition to the aforementioned requirements.

December 31, 2008

**II. IN-SITU CHEMICAL OXIDATION (ISCO) INJECTION MONITORING REQUIREMENTS**

The quarterly reports shall contain the following information regarding injection activities:

- A. Location maps showing barriers and injection points for the permanganate solution,
- B. Written summary defining:
  - 1. Depth of injection points;
  - 2. Quantity of permanganate solution injected per injection point;
  - 3. Total amount of permanganate solution injected at site; and
  - 4. Verification of permanganate solution injected.

**III. GROUNDWATER MONITORING PROGRAM**

A groundwater monitoring program shall be designed to detect and evaluate impacts associated with the each ISCO injection activity. The following shall constitute the monitoring program for a total of 13 monitoring wells (Figure 2). The Discharger shall conduct baseline sampling prior to ISCO (potassium permanganate) injection, followed by week 1, week 2, week 4, week 8, week 12, quarterly, and annually sampling events after the ISCO injection from monitoring wells and injection wells (listed below<sup>1</sup>) for the following groundwater parameters:

WELL NUMBER	WELL STATUS
PA-ISCO-5S through PA-ISCO-21S	Injection wells
PA-ISCO-5D through PA-ISCO-19D	Injection wells
PA-MW-3S through PA-MW-14S	Monitoring wells
PA-MW-3D through PA-MW-14D	Monitoring wells
PPIRZ-06	Monitoring well

(1) – A phased injection and monitoring programs is in place; therefore, some injection wells may become monitoring wells, and all the injection and monitoring wells will not be used at the same time.

CONSTITUENT	UNITS	TYPE OF SAMPLE	MINIMUM FREQUENCY OF ANALYSIS
Total daily injection waste flow	gallons/day (to indicate solution concentration)	In-Situ	Daily during injection
Groundwater Elevation	Feet, mean sea level (msl) and below ground surface (bgs)	In-Situ	Baseline, Weeks 1, 2, 4, 8, 12, quarterly for one year, and annually thereafter

CONSTITUENT	UNITS	TYPE OF SAMPLE	MINIMUM FREQUENCY OF ANALYSIS
Total Dissolved Solids	mg/l	grab	Baseline, Weeks 1, 2, 4, 8, 12, quarterly for one year, and annually thereafter
Sulfate	mg/l	grab	Baseline, Weeks 1, 2, 4, 8, 12, quarterly for one year, and annually thereafter
Chloride	mg/l	grab	Baseline, Weeks 1, 2, 4, 8, 12, quarterly for one year, and annually thereafter
Boron	mg/l	grab	Baseline, Weeks 1, 2, 4, 8, 12, quarterly for one year, and annually thereafter
pH	pH units	grab	Baseline, Weeks 1, 2, 4, 8, 12, quarterly for one year, and annually thereafter
Temperature	Degrees F	grab	Baseline, Weeks 1, 2, 4, 8, 12, quarterly for one year, and annually thereafter
Dissolved Oxygen	µg/l	grab	Baseline, Weeks 1, 2, 4, 8, 12, quarterly for one year, and annually thereafter
Turbidity	NTU	grab	Baseline, Weeks 1, 2, 4, 8, 12, quarterly for one year, and annually thereafter
Specific Conductance	mS/cm	grab	Baseline, Weeks 1, 2, 4, 8, 12, quarterly for one year, and annually thereafter
Oxidation-Reduction Potential	Millivolts	grab	Baseline, Weeks 1, 2, 4, 8, 12, quarterly for one year, and annually thereafter

CONSTITUENT	UNITS	TYPE OF SAMPLE	MINIMUM FREQUENCY OF ANALYSIS
Total Organic Carbon (EPA Method 415.1)	µg/l	grab	Baseline, Weeks 1, 2, 4, 8, 12, quarterly for one year, and annually thereafter
Chlorinated Volatile Organic Compounds (EPA Method 8260B)	µg/l	grab	Baseline, Weeks 1, 2, 4, 8, 12, quarterly for one year, and annually thereafter
Dissolved Metals (arsenic, barium, boron, cadmium, chromium, hexavalent chromium, copper, iron, lead, manganese, mercury, selenium, and zinc)	µg/l	grab	Baseline, Weeks 1, 2, 4, 8, 12, quarterly for one year, and annually thereafter
Major Anions (bromide, nitrate as nitrogen, nitrite as nitrogen, O-phosphate, and sulfide)	mg/l	grab	Baseline, Weeks 1, 2, 4, 8, 12, quarterly for one year, and annually thereafter
Major Cations (barium, calcium, magnesium, manganese, potassium, and sodium)	mg/l	grab	Baseline, Weeks 1, 2, 4, 8, 12, quarterly for one year, and annually thereafter
Color	color unit	grab	Baseline, Weeks 1, 2, 4, 8, 12, quarterly for one year, and annually thereafter
Permanganate	mg/l	grab	Baseline, Weeks 1, 2, 4, 8, 12, quarterly for one year, and annually thereafter
Alkalinity, as CaCO <sub>3</sub>	mg/l	grab	Baseline, Weeks 1, 2, 4, 8, 12, quarterly for one year, and annually thereafter
1,4-Dioxane	µg/l	grab	Baseline, Weeks 1, 2, 4, 8, 12, quarterly for one year, and annually thereafter

CONSTITUENT	UNITS	TYPE OF SAMPLE	MINIMUM FREQUENCY OF ANALYSIS
1,2,3-trichloropropane	µg/l	grab	Baseline, Weeks 1, 2, 4, 8, 12, quarterly for one year, and annually thereafter

All groundwater monitoring reports must include, at minimum, the following:

- A. Well identification, date and time of sampling;
- B. Sampler identification, and laboratory identification;
- C. Observation of groundwater levels, recorded to 0.01 feet mean sea level and groundwater flow direction; and
- D. Tabular and graphical summaries of all the monitoring data.

#### IV. CERTIFICATION STATEMENT

Each report shall contain the following completed declaration:

"I certify under penalty of law that this document, including all attachments and supplemental information, was prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gathered and evaluated the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of a fine and imprisonment.

Executed on the \_\_\_\_\_ day of \_\_\_\_\_ at \_\_\_\_\_

\_\_\_\_\_  
(Signature)

\_\_\_\_\_  
(Title)"

Former Northrop Grumman Facility  
(Paraplast Area)  
WDR Order No. R4-2007-0019  
Monitoring and Reporting Program No. CI-9067 (Revised)

File No. 08-172

**V. MONITORING FREQUENCIES**

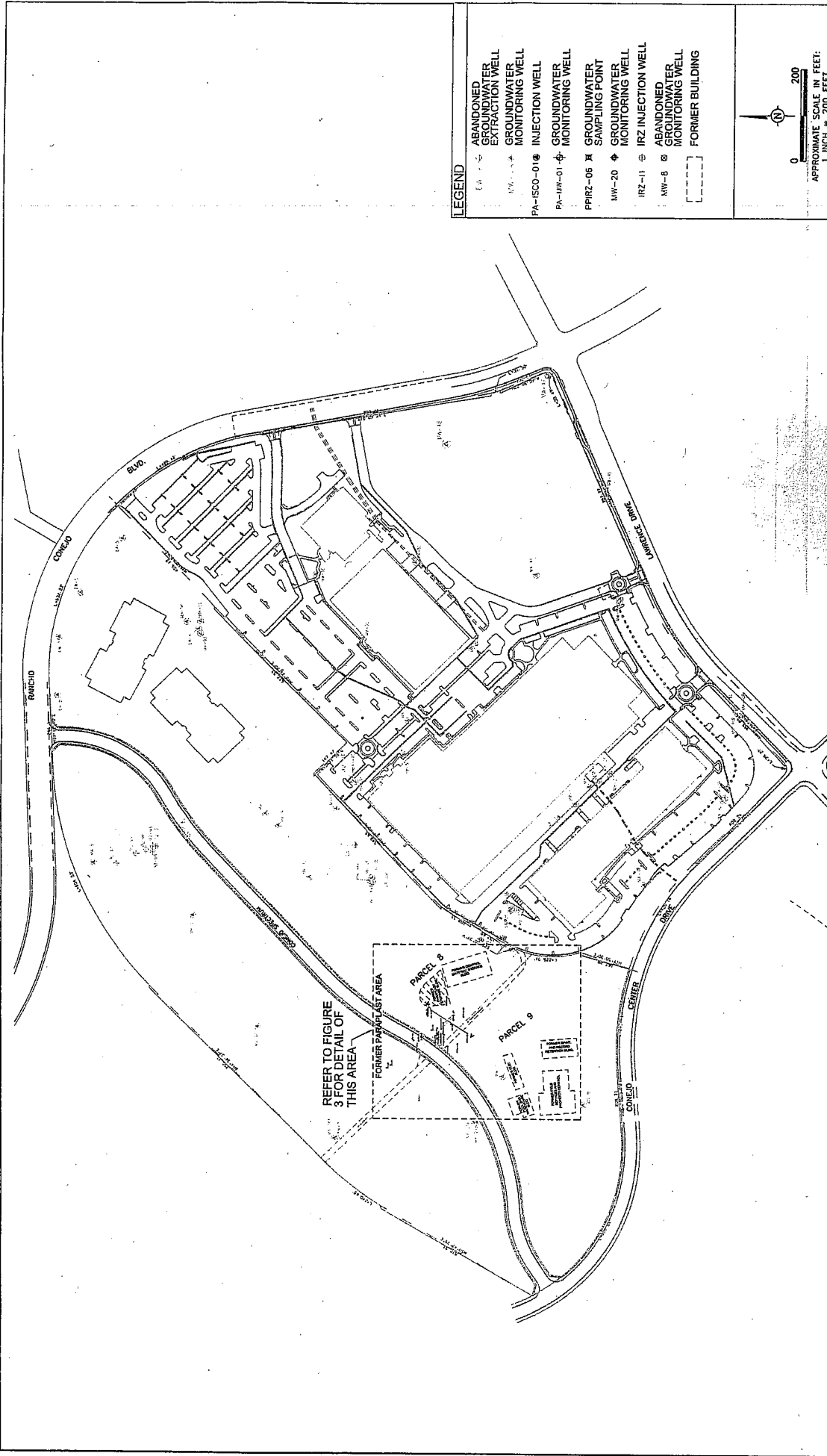
Specifications in this monitoring program are subject to periodic revisions. Monitoring requirements may be modified or revised by the Executive Officer based on review of monitoring data submitted pursuant to this Order. Monitoring frequencies may be adjusted to a less frequent basis or parameters and locations dropped by the Executive Officer if the Discharger makes a request and the request is backed by statistical trends of monitoring data submitted.

These records and reports are public documents and shall be made available for inspection during normal business hours at the office of the California Regional Water Quality Control Board, Los Angeles Region.

Ordered by:

*David A. Bachowski, CEO*  
Tracy J. Egoscue  
Executive Officer  
*fw*

Date: December 31, 2008



**LEGEND**

(Symbol)	ABANDONED GROUNDWATER EXTRACTION WELL
(Symbol)	GROUNDWATER MONITORING WELL
(Symbol)	INJECTION WELL
(Symbol)	GROUNDWATER MONITORING WELL
(Symbol)	GROUNDWATER SAMPLING POINT
(Symbol)	GROUNDWATER MONITORING WELL
(Symbol)	IRZ INJECTION WELL
(Symbol)	ABANDONED GROUNDWATER MONITORING WELL
(Symbol)	FORMER BUILDING

0 200  
 APPROXIMATE SCALE IN FEET:  
 1 INCH = 200 FEET

North Arrow

Area Manager A. JONES	Project Number CA000514.0013.00001
Project Manager N. SHUKLA	Drawing Date 1/2/05
Task Manager V. SALAZAR	Figure 2
Technical Review T. HENDERSON	

SITE PLAN WITH WELL LOCATIONS

FIGURE 1.3. FORMERPARAPLAST AREA

NORTHROP GRUMMAN SYSTEMS CORPORATION  
 NEWBURY PARK, CALIFORNIA

**ARCADIS**

ARCADIS U.S., Inc.  
 1400 N. Park Boulevard  
 Fullerton, California 92635-4127  
 Tel: 714.276.0992 Fax: 714.276.0051  
 www.arcadis-us.com

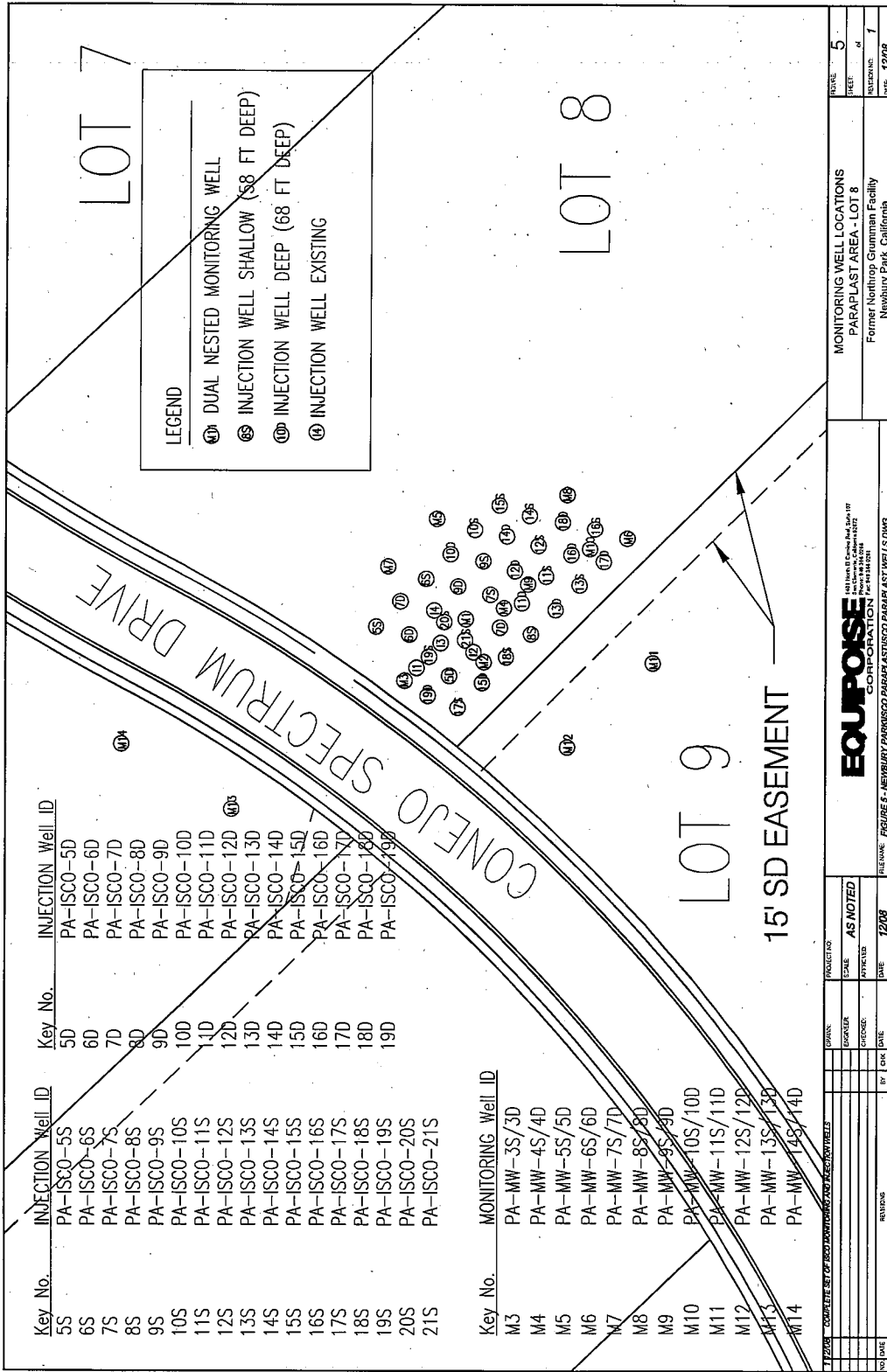


Figure 2: Proposed Injection and Monitoring Wells Location