



# California Regional Water Quality Control Board

## Los Angeles Region



Linda S. Adams  
Cal/EPA Secretary

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Phone (213) 576-6600 FAX (213) 576-6640 - Internet Address: <http://www.waterboards.ca.gov/losangeles>

Arnold Schwarzenegger  
Governor

October 3, 2008

Mr. Robert Scott  
Boeing Corporate Real Estate  
4501 Conant Street  
Long Beach, CA 90808

**APPROVAL OF REVISED MONITORING AND REPORTING PROGRAM CI-8974, INDIVIDUAL WASTE DISCHARGE REQUIREMENTS ORDER NO. R4-2005-0068, THE BOEING COMPANY, FORMER BOEING COMPTON SITE, COMPTON, CALIFORNIA (FILE NOS. 96-056 AND 96-057; SLIC NOS. 462 AND 559; SITE ID NO. 2045B00)**

Dear Mr. Scott:

We have received the "Request for Modification to the Monitoring and Reporting Program, The Boeing Company, Former Compton Site" (Letter) dated July 16, 2008, prepared by Geosyntec Consultants. On October 20, 2005, an Individual WDR permit (WDR Order No. R4-2005-0068, CI-8974) was granted to The Boeing Company (Boeing) to inject carbohydrate solutions into groundwater for use in enhanced in-situ bioremediation (EISB) to remediate the volatile organic compounds (VOCs) groundwater plume. Since the permit was issued, carbohydrate solutions with EISB have been delivered into the subsurface at three pilot test areas and monitoring and sampling have been conducted pursuant to Monitoring and Reporting Program (MRP) CI-8974.

Based on the monitoring data collected to date and in order to continue to monitor the slow progression of biodegradation, Boeing requests in the Letter that an additional annual sampling event be added to the MRP, which would extend the MRP program to 2010. Therefore, the Final Report due date is proposed to be moved from June 30, 2009 to April 30, 2010. The Letter also proposes to remove monitoring well MW0026 from all future monitoring events at the site as it does not appear to be representative of injection activities. Regional Board staff has reviewed the information provided and concurs with Boeing's proposed changes. No other changes to the monitoring and reporting program are being made at this time.

Section 13263 (e) of the California Water Code provides that all Requirements shall be reviewed periodically and, upon such review, may be revised by the Regional Board. Regional Board staff has reviewed the information provided and concurs with Boeing's proposal to revise the MRP to include all of the above referenced changes to the MRP. Attached please find Revised Monitoring and Reporting Program CI-8974 dated September 30, 2008, which supersedes the Monitoring and Reporting Program dated October 6, 2005.

The Revised Monitoring and Reporting Program requires you to implement the monitoring program on the effective date of this Order. All monitoring reports should be sent to the Regional Board, ATTN: INFORMATION TECHNOLOGY UNIT.

**California Environmental Protection Agency**



*Our mission is to preserve and enhance the quality of California's water resources for the benefit of present and future generations.*

Mr. Scott  
Boeing Corporate Real Estate

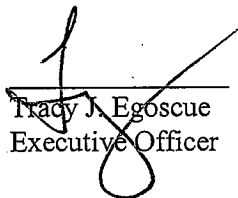
- 2 -

October 3, 2008

When submitting monitoring or technical reports to the Regional Board per these requirements, please include a reference to **Compliance File No. CI-8974** and **Order No. R4-2005-0068**, which will assure that the reports are directed to the appropriate file and staff. Please do not combine your discharge monitoring reports with other reports. Submit each type of report as a separate document.

**Please call Ms. Ana Townsend at (213) 576-6738, or Ms. Su Han at (213) 576-6735 if you have any questions.**


Sincerely,

  
Tracy J. Egoscue  
Executive Officer

Attachment: Revised Monitoring and Reporting Program CI-8974, dated October 3, 2008

cc: John Beach, United States Environmental Protection Agency, Region 9, (WST-5)  
State Water Resources Control Board, Division of Water Quality  
Cheryl Ross, West Basin Municipal Water District  
Chris Nagler, Watermaster - California Department of Water Resources  
City of Compton, Department of Health Services  
Kurt Souza, Department of Health Services, Drinking Water Field Operation Branch  
Los Angeles County, Department of Public Works, Waste Management Division  
Los Angeles County, Department of Health Services  
Mark Schultheis, GeoSyntec Consultants  
Scott Zachary, Haley & Aldrich

***California Environmental Protection Agency***

 Recycled Paper

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

**MONITORING AND REPORTING PROGRAM NO. CI-8974  
FOR  
THE BOEING COMPANY  
FORMER BOEING COMPTON SITE**

**ORDER NO. R4-2005-0068  
FILE NOS. 96-056 AND 96-057**

The Discharger shall implement this monitoring and reporting program on the effective date of this Order.

**I. GROUNDWATER MONITORING PROGRAM**

The following groundwater wells and amendment points will be included in the sampling program:

- Group A: AW0003, AW0008, and AW0034
- Group B1: MW-16, MW0027, MW0028, and MW0029
- Group B2: MW-7, TW-5, TW-1, and MW0037
- Group C: TW-6,
- Group D: MW-3, TW-12, TW-14

Figure 1 shows the location of the Site. Figure 2 shows the locations of the groundwater wells and amendment points. Group A sampling points are amendment points. The Group B points are monitoring wells within each treatment area. Group B1 wells consist of monitoring wells that are located in close proximity to oil distribution zones, and will be used to evaluate oil consumption and distribution. Group B2 wells are monitoring wells located somewhat farther from the amendment wells but within the treatment area; they will be used to evaluate the effectiveness of the biologically active zones over time. All Group A and B wells will be used for performance monitoring purposes. The Group C sampling point is a downgradient sample location, and Group D are upgradient sample points.

Beginning December 2008, wells will be sampled according to the schedule shown below.

CONSTITUENT	UNITS	TYPE OF SAMPLE	MINIMUM FREQUENCY OF ANALYSIS
Total Daily Injections	Liters	Measurement	Per injection
Groundwater Elevation	feet below ground surface (ft bgs)	In situ	Group A-D: Annual for two years
Dissolved Oxygen	mg/L	Grab	Group A-D: Annual for two years
Oxidation-Reduction Potential	Millivolts	Grab	Group A-D: Annual for two years
pH	pH units	Grab	Group A-D: Annual for two years
Temperature	Degrees C	Grab	Group A-D: Annual for two years
Specific Conductance	µS/cm	Grab	Group A-D: Annual for two years
Turbidity	NTU	Grab	Group A-D: Annual for two years
Chlorinated Volatile Organic Compounds	µg/L	Grab	Group A-D: Annual for two years
Total Organic Carbon and Volatile Fatty Acids	mg/L	Grab	Group A-D: Annual for two years
<i>Dehalococcoides</i> PCR (Gene Trac – VC)	presence or absence	Grab	Group A-D: Annual for two years
Dissolved Metals (Manganese, Iron and Arsenic) and Anions (sulfate, nitrate, nitrite and chloride) and Total Sulfides	mg/L	Grab	Group A-D: Annual for two years
Dissolved Hydrocarbon Gases (ethane, ethene, and methane)	mg/L	Grab	Group A-D: Annual for two years

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

- a. Well identification, date and time of sampling;
- b. Sampler identification, and laboratory identification; and
- c. Annual observation of groundwater levels, recorded to 0.01 feet mean sea level and groundwater flow direction.

## II. AMENDMENT INJECTION MONITORING REQUIREMENTS

The reports shall contain the following information regarding injection activities:

1. Depth of injection points;
2. Quantity of amendment injected and dates injected; and
3. Total amount of amendment injected.

### III. REPORTING REQUIREMENTS

The groundwater monitoring wells and amendment points will be gauged and sampled, and results will be reported to the Regional Water Quality Control Board (Regional Board) under the Monitoring and Reporting Program for the Individual Waste Discharge Requirements according to the following schedule:

Reporting Period	Sampling Month(s)	Report Due Date
September – February 2005 (Baseline and Post-Injection)	September – October 2005 (December 2005 – January 2006)	February 28, 2006
March – May 2006	March 2006	June 30, 2006
June – August 2006	June 2006	September 29, 2006
September – November 2006	September 2006	December 31, 2006
December 2006 – February 2007	December 2006	March 30, 2007
March – August 2007	June 2007*	September 28, 2007
September 2007 – February 2008	December 2007	March 31, 2008
March – August 2008	June 2008	September 30, 2008
September 2008 – February 2009	December 2008**	March 31, 2009
March 2009 – February 2010	December 2009	March 31, 2010

**Notes:**

\* Semi-annual sampling begins

\*\* Annual sampling begins

The Discharger shall submit Reports detailing the results of the remediation. The reports should include an evaluation of the effectiveness of using the amendment and KB-1<sup>®</sup> solution to remediate VOC-contaminated groundwater at the Site, the impact of any by-products on the receiving groundwater quality, and any other effects the *in situ* treatment may have. The Discharger is required to submit the following reports pursuant to their respective due dates:

Report	Report Due Dates
Preliminary Report	February 28, 2006
Final Report	April 30, 2010

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.

Whenever wastes associated with the discharge under this Order, are transported to a different disposal site, the following shall be reported in the monitoring report: type and quantity of wastes; name and address of the hauler (or method of transport if other than by hauling); and location of the final point(s) of disposal.

#### 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)"

#### V. MONITORING FREQUENCIES

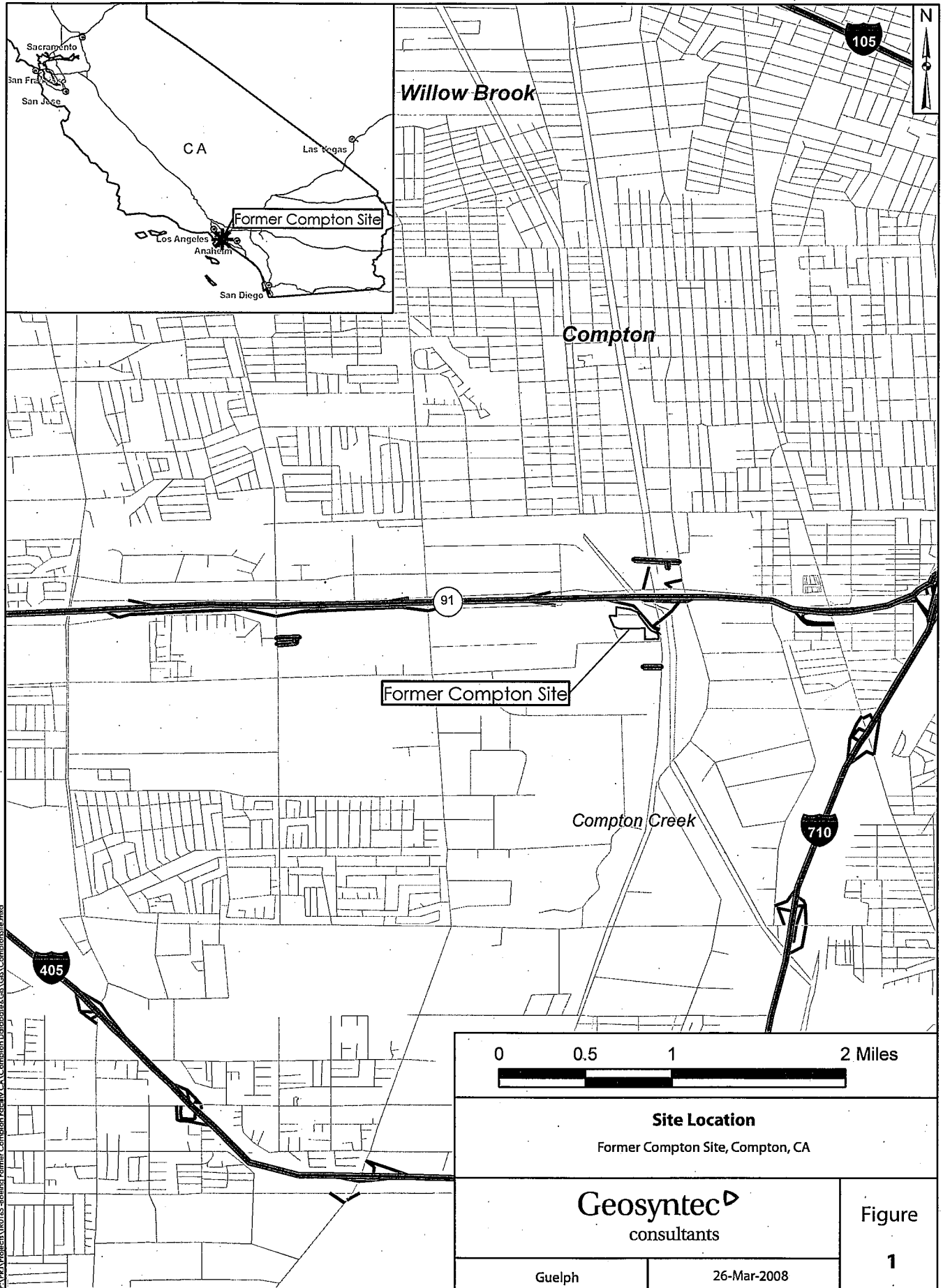
Specifications in this monitoring program are subject to periodic revisions. Monitoring requirements may be modified or revised by the Executive Officer based on review of monitoring data submitted pursuant to this Order. Monitoring frequencies may be adjusted to a less frequent basis or parameters and 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:

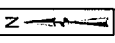
  
\_\_\_\_\_  
Tracy J. Egoscue  
Executive Officer

Date: October 3, 2008



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0      0.5      1      2 Miles 	
<b>Site Location</b> Former Compton Site, Compton, CA	
Guelph	26-Mar-2008
<b>Figure</b>  <b>1</b>	



**LEGEND**

- AMENDMENT WELL
- EXISTING GROUNDWATER MONITORING WELL
- MONITORING LOCATION DESIGNATED FOR EIS ASSESSMENT
- NEW FIRE HYDRANT
- LOCATION OF FLUSH MOUNTED VAULT FOR SUBSURFACE REGENERATION PIPING
- PROPERTY BOUNDARY

(Basemap from Haley and Alditch, 2004)



Location of Amendment and Monitoring Wells  
Former Compton Site, Compton, CA

**Geosyntec**  
CONSULTANTS

Guelph 26-Mar-2008

Figure 2

