

CALIFORNIA REGIONAL WATER QUALITY CONTROL BOARD
CENTRAL VALLEY REGION

MONITORING AND REPORTING ORDER NO. R5-2023-0810

CALIFORNIA WATER CODE SECTION 13267
FOR
THE BOEING COMPANY
AND AEROJET ROCKETDYNE, INC.

INACTIVE RANCHO CORDOVA TEST SITE
RANCHO CORDOVA, SACRAMENTO COUNTY

This Monitoring and Reporting Order (No. R5-2023-0810; Order) is issued to The Boeing Company (Boeing) and Aerojet Rocketdyne, Inc. (Aerojet) (collectively, Dischargers) for the Inactive Rancho Cordova Test Site (IRCTS) in Rancho Cordova, Sacramento County, pursuant to California Water Code (CWC) section 13267, which authorizes the Central Valley Regional Water Quality Control Board (Central Valley Water Board) to require the submission of technical and monitoring reports. This Order defines the site-wide groundwater monitoring and reporting requirements for the IRCTS. This Order also terminates previous monitoring and reporting orders which are redundant with this Order and/or are no longer applicable to current environmental activities at the IRCTS.

The Assistant Executive Officer finds:

INTRODUCTION

1. The original IRCTS consisted of approximately 3,900 acres bordered by White Rock Road to the north, Douglas Road to the south, Sunrise Boulevard and commercial / industrial land to the west, and undeveloped ranch land to the east. As part of the remedial investigation, the original IRCTS was subdivided into several manageable areas including the Central Area Operable Unit (CAOU), Western Non-Aerospace / Non-Industrial area (WNN), the Northern Groundwater Study Area, and Southern Groundwater Study Area.
2. Between 1915 and 1962, the IRCTS was owned primarily by the Natomas Company and was mined for gold using bucket-line dredges. The dredges were capable of excavating sediments to a depth of 110 feet below ground surface (bgs). The typical depth of dredging at the IRCTS was reportedly between 70 and 80 feet bgs.
3. In 1956, Aerojet (then Aerojet General Corporation) purchased the IRCTS from the Natomas Company and leased approximately 1,700 acres to McDonnell Douglas Corporation (MDC). In 1961, Aerojet sold the entire IRCTS to MDC to establish a static rocket test facility. From 1957 through 1969, MDC used the IRCTS to assemble and static-test various liquid and solid fuel rocket systems at six separate facilities.

4. Although rocket test-firing activities ended in 1969, MDC maintained the IRCTS in a state of readiness until 1972. Between 1972 and 1977, the IRCTS test stand structures were dismantled, leaving the concrete foundations largely intact, and other facilities were demolished. In 1984, MDC transferred ownership of much of the IRCTS back to Aerojet. Aerojet's activities at the IRCTS included disposal of burn waste propellant, liquid fuels, laboratory chemicals, and nitroglycerine.
5. The Dischargers have identified six hydrostratigraphic units (Units A through F) at the IRCTS. The majority of IRCTS monitoring wells are screened in Units B, C, and D, where impacts to groundwater have been identified. During the 2021 monitoring events, the Dischargers generally observed first-encountered groundwater within hydrostratigraphic Unit B at approximately 150 feet bgs. Groundwater at the IRCTS typically flows to the west-southwest.
6. Investigations have shown that elevated levels of perchlorate and volatile organic compounds (VOCs), primarily trichloroethene (TCE), are present in groundwater beneath the IRCTS. The Water Quality Control Plan for the Sacramento River and San Joaquin River Basins designates groundwater beneath the IRCTS for beneficial uses including municipal and domestic supply. Groundwater samples collected during the 2022 semi-annual monitoring events contained up to 2,300 micrograms per liter ($\mu\text{g/L}$) perchlorate (STSW-172A) and up to 160 $\mu\text{g/L}$ TCE (STSW-30A). These concentrations exceed the California Division of Drinking Water Maximum Contaminant Levels (MCLs) of 6 $\mu\text{g/L}$ and 5 $\mu\text{g/L}$, respectively, for perchlorate and TCE. Thus, this pollution has impaired the beneficial use of groundwater resources at the IRCTS.
7. Investigation and remediation activities have been completed and are ongoing at the IRCTS pursuant to the requirements of the 1994 *Imminent and/or Substantial Endangerment Determination and Consent Order* (Consent Order) issued by the California Department of Toxic Substances Control (DTSC), and Cleanup and Abatement Order No. 97-093 issued by the Central Valley Water Board. Both orders were issued to MDC (which was subsequently merged into Boeing) and Aerojet (as Aerojet General Corporation). The current extent of the IRCTS is smaller than the 1994 extent due to cleanup and delisting activities which removed the CAO and WNN from the Consent Order.
8. Prior to construction of any new groundwater monitoring or extraction wells, and prior to destruction of any groundwater monitoring or extraction wells, the Dischargers shall submit plans and specifications to the Central Valley Water Board for review and approval. Once installed, all new monitoring wells shall be added to the monitoring program and shall be sampled and analyzed according to the schedule provided in the 'Required Actions' section of this Order.
9. The Dischargers shall not implement any changes to this Order unless and until a revised Monitoring and Reporting Order is issued by the Assistant Executive Officer.

TERMINATION OF PREVIOUS MONITORING AND REPORTING ORDERS

10. This Order is issued by the Central Valley Water Board pursuant to CWC section 13267 and is necessary to monitor the existing IRCTS groundwater pollutant plumes.
11. This Order replaces and terminates the previously issued monitoring and reporting orders listed below. Select monitoring wells included in these previous Sigma Complex monitoring and reporting orders have been incorporated into this Order, which addresses site-wide groundwater monitoring requirements at the IRCTS.
 - (a) Monitoring and Reporting Program No. R5-2007-0110
 - (b) Monitoring and Reporting Program No. R5-2008-0830 California Water Code Section 13267 for Inactive Rancho Cordova Test Site (dated 29 August 2008)
 - (c) Monitoring and Reporting Program No. R5-2010-0126 for The Boeing Company Sigma Complex In-Situ Groundwater Bioremediation Project (dated 10 December 2010)
 - (d) Revised Monitoring and Reporting Program No. R5-2010-0126 for The Boeing Company Sigma Complex In-Situ Groundwater Bioremediation Project (dated 26 July 2012)
 - (e) Revised Monitoring and Reporting Program No. R5-2010-0126 for The Boeing Company Sigma Complex In-Situ Groundwater Bioremediation Project (dated 12 January 2015)

LEGAL AUTHORITY

12. CWC section 13267 provides, in part:
 - (a) A regional board, in establishing or reviewing any...waste discharge requirements, or in connection with any action relating to any plan or requirement authorized by [Water Code division 7], may investigate the quality of any waters of the state within its region.
 - (b)(1) In conducting an investigation specified in subdivision (a), the regional board may require that any person who has discharged, discharges, or is suspected of having discharged or, discharging, or who proposes to discharge waste within its region, ... shall furnish, under penalty of perjury, technical or monitoring program reports which the regional board requires. The burden, including costs, of these reports shall bear a reasonable relationship to the need for the report and the benefits to be obtained from the reports. In requiring those reports, the regional board shall provide the person with a written explanation with regard to the need for the reports, and shall identify the evidence that supports requiring that person to provide the reports.

The reports required herein are necessary for the reasons described in this Order, to assure protection of waters of the state, and to protect public health and the environment. The burden, including costs, of the required reports bears a reasonable relationship to the need for those reports and the benefits to be obtained thereby.

13. CWC section 13268 states, in part:

(a)(1) Any person failing or refusing to furnish technical or monitoring program report as required by subdivision (b) of Section 13267...or falsifying any information provided therein, is guilty of a misdemeanor, and may be liable civilly in accordance with subdivision (b).

(b)(1) Civil liability may be administratively imposed by a regional board in accordance with Article 2.5 (commencing with Section 13323) of Chapter 5 for a violation of subdivision (a) in an amount which shall not exceed one thousand dollars (\$1,000) for each day in which the violation occurs.

Failure to submit the required reports to the Central Valley Water Board according to the schedule detailed herein may result in enforcement action(s) being taken against you, which may include the imposition of administrative civil liability pursuant to CWC section 13268. Administrative civil liability of up to \$1,000 per violation per day may be imposed for non-compliance with the directives contained herein.

REQUIRED ACTIONS

IT IS HEREBY ORDERED that, Monitoring and Reporting Order Nos. R5-2007-0110, R5-2008-0830, and R5-2010-0126 are hereby terminated and, pursuant to CWC section 13267, the Dischargers shall conduct monitoring and reporting in compliance with this Monitoring and Reporting Order No. R5-2023-0810 according to the following:

Monitoring Specifications

1. The Dischargers shall implement monitoring according to the schedule shown in Table 1. This Order applies to the existing monitoring wells and any monitoring wells installed subsequent to the issuance of this Order.
2. Depth-to-groundwater shall be measured at each accessible monitoring well semi-annually during the second and fourth quarters. Depth-to-groundwater measurements shall also be collected prior to sample collection at each well.
3. Monitoring wells scheduled for semi-annual sampling shall be sampled during the second and fourth quarters. Monitoring wells scheduled for annual sampling shall be sampled during the second and third quarters. Monitoring wells scheduled for triennial sampling shall be sampled during the first quarter.

4. The Dischargers shall analyze samples for perchlorate using United States Environmental Protection Agency (USEPA) Method 314 and for VOCs using USEPA Method 8260B.

Reporting Specifications

5. When reporting data, the Dischargers shall arrange the information in tabular form so that the date, the constituents, and the concentrations are readily discernible. In addition, the Dischargers shall summarize the data in such a manner as to illustrate clearly the compliance with this Order.
6. Semi-annual technical memoranda shall be submitted by **1 February and 1 August**, or as otherwise indicated by the Central Valley Water Board, until such time as the Assistant Executive Officer determines that the submittals are no longer necessary. Each submittal shall include the following minimum information:
 - (a) A description and discussion of the groundwater sampling event and results, including trends in groundwater elevation and the concentrations of groundwater pollutants.
 - (b) An explanation for any required groundwater gauging or sampling that was not completed during the reporting period.
 - (c) A comparison of groundwater sample concentrations to threshold concentrations at designated sentinel wells, along with proposed response action(s) for any threshold concentration exceedances.¹
 - (d) A summary of any monitoring wells that were installed or destroyed during the reporting period.
 - (e) If applicable, a proposal and rationale for any revisions to the groundwater sampling plan frequency and/or list of analytes.
7. An Annual Report shall be submitted to the Central Valley Water Board by **1 May** of each year. This report shall contain an evaluation of the effectiveness and progress of the investigation and remediation, and may be substituted for the first semi-annual technical memorandum, provided that all information that must be submitted in the first semi-annual technical memorandum is included, along with the following minimum information:
 - (a) A description of how and when samples were collected.

¹ Threshold concentrations and associated response actions are presented in:
Montgomery & Associates, *Groundwater Remediation Contingency Plan Southern Groundwater Study Area Groundwater Extraction and Treatment System Version 2.0*. 3 April 2015.
Montgomery & Associates, *Groundwater Remediation Contingency Plan Mather Field Groundwater Extraction and Treatment System*. 15 June 2015.

- (b) Field logs that contain, at a minimum, water quality parameters measured before, during, and after purging, method of purging, depth of water, volume of water purged, etc.
- (c) Groundwater contour maps containing all data obtained during the previous year for hydrostratigraphic units (groundwater zones) B, C, D, and E.
- (d) Isoconcentration pollutant contour maps containing all data obtained during the previous year for hydrostratigraphic units (groundwater zones) B, C, D, and E for the major constituents of concern, perchlorate and TCE.
- (e) A table showing well construction details such as well number, groundwater zone being monitored, coordinates (longitude and latitude), ground surface elevation, reference elevation, elevation of screen, elevation of bentonite, elevation of filter pack, and elevation of well bottom.
- (f) A table showing lateral and vertical (if applicable) flow directions and gradients for the previous year for hydrostratigraphic units (groundwater zones) B, C, D, and E.
- (g) Both tabular and graphical summaries of data obtained during the year.
- (h) Cumulative data tables for all major constituents of concern containing the water quality analytical results and depth to groundwater for all monitoring wells. Continued routine distribution of the electronic groundwater database may substitute for this requirement.
- (i) A copy of the laboratory analytical data report(s).
- (j) A description of remedial activities conducted during the year, including cumulative information on the mass of pollutant removed from the subsurface, system operating time, the effectiveness of the remediation system, and any plans to improve remediation system effectiveness.
- (k) If applicable, the reasons for and duration of all interruptions in the operation of any remediation system, and actions planned or taken to correct and prevent interruptions.
- (l) An analysis of whether the pollutant plume is being contained by a remediation system or is continuing to spread.
- (m) A discussion of the long-term trends in the concentrations of the pollutants in the groundwater monitoring wells and whether the pollutant plume(s) is delineated.
- (n) An identification of any data gaps and potential deficiencies/redundancies in the monitoring system or reporting program.

8. The results of any monitoring done more frequently than required at the locations specified in the Order also shall be reported to the Central Valley Water Board.
9. The Dischargers shall implement the above monitoring program as of the effective date of the Order.

General Reporting Requirements

10. Except as expressly provided otherwise, all materials, information and correspondence submitted to the Central Valley Water Board under this Order shall be submitted electronically to the State Water Board's **GeoTracker Database** at <http://geotracker.waterboards.ca.gov> (See Cal. Code of Regs., title 23, §§ 3890-95.).
11. All technical documents (i.e., involving planning, investigation, evaluation or design; or other work requiring interpretation and proper application of engineering or geologic sciences) submitted under this Order shall be:
 - a. Prepared by a registered professional engineer or professional geologist (Bus. & Prof. Code, §§ 6735, 7835, 7835.1), or another individual working under their direction;
 - b. Signed and stamped by the preparing or supervising professional; and
 - c. Presented in a manner that clearly and unequivocally attributes work to the registered professional responsible for its preparation.
12. Each report shall be accompanied by a signed statement from the submitting Discharger or their representative indicating:
 - a. Whether the submitting Dischargers agree with any of the report's recommendations and proposals;
 - b. Whether the submitting Dischargers approve implementation of the report's proposals; and
 - c. **Shall make the following certification;**

<p>I certify under penalty of law that I have personally examined, and am familiar with, all of the information set forth in this document and the attachments thereto; and based on my personal knowledge and on my inquiry of those individuals immediately responsible for obtaining the information, I believe that the information is true, accurate, and complete.</p>
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OTHER PROVISIONS

13. Reasonable Access to Site

- a. To the extent it is within their control, the Dischargers shall provide Central Valley Water Board staff and representatives with reasonable Site access to conduct inspections (during business hours), ensure compliance with this Order and any other applicable orders of the Central Valley Water Board, and take other actions as necessary to implement division 7 of the Water Code.

14. Requests for Extension

- a. If, for any reason, the Dischargers are unable to perform an activity or submit a report under this Order (and materials incorporated herein), the Dischargers may **request an extension from the Assistant Executive Officer.**
- b. An extension is not valid unless granted by means of a revision to this Order or a letter from the Assistant Executive Officer.
- c. **Central Valley Water Board staff lack authority to approve any extensions under this Order. Only an Assistant Executive Officer or Executive Officer can approve an extension.**
- d. **To be considered by the Assistant Executive Officer, an extension request must be made in writing**, set forth a definite period of extension (no indefinite extensions), and include justification for the delay.
- e. Any extension request **shall be submitted as soon as the situation is recognized and no later than the compliance date.** Untimely requests may be disregarded.
- f. **All requests not approved by the Assistant Executive Officer in writing with reference to this Order are denied.**

15. Reimbursement of Oversight Costs and Financial Liability

- a. The Central Valley Water Board is entitled to, and may seek reimbursement for, all reasonable costs actually incurred in the course of investigating and abating effects of unauthorized waste discharges (releases), and in the course of supervising any remedial activities required under this Order. (Wat. Code, § 13304, subd. (c)(1).)
- b. Liability for reimbursement of oversight costs shall be joint and several.

16. Enforcement

- a. If, in the opinion of the Assistant Executive Officer, the Dischargers fail to comply with the provisions of this Order, the Assistant Executive Officer may refer the matter to the Attorney General for judicial enforcement, issue a complaint for administrative civil liability, or take other appropriate enforcement actions. Noncompliance with this Order may result in the assessment of administrative


civil liability up to \$10,000 per violation per day, depending on the violation. (Wat. Code, §§ 13268, 13308, 13350–51.) The Central Valley Water Board reserves its right to take enforcement actions authorized by law.

17. Administrative Review

- a. Any person aggrieved by this Central Valley Water Board action may petition the State Water Board for review in accordance with Water Code section 13320 and Title 23 section 2050–68. Petitions must be received by the State Water Board by 5pm on the 30th day after the date of this Order, except if the 30th day falls on a Saturday, Sunday or state holiday, the petition must be received by the State Water Board by 5pm on the next business day. Instructions and applicable laws and regulations are available online at www.waterboards.ca.gov/public_notices/petitions/water_quality/wqpetition_instr.shtml, or will be provided upon request. Judicial review is contingent on exhaustion of administrative remedies. (See Wat. Code, § 13330, subd. (a).)

This Order is issued under authority delegated to the Assistant Executive Officer by the Central Valley Water Board pursuant to Resolution R5-2018-0057 and is effective upon signature.

Any deviation from, or modification to, this Order, except by prior written approval from the Executive Officer or their delegate, shall be considered invalid.



Digitally signed by John
J. Baum
Date: 2023.11.09
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JOHN J. BAUM, Assistant Executive Officer

Attachments:

- 1. Table 1 – Monitoring and Reporting Program R5-2023-0810
- 2. Figure 1 – Site Map

Table 1
Monitoring and Reporting Program No. R5-2023-0810
Inactive Rancho Cordova Test Site
Rancho Cordova, Sacramento County

Well	HSU	Sampling Frequency	
		Perchlorate	VOCs
New Wells	Any	Semi-annual	Semi-annual
STSW-03C	C	Triennial	Triennial
STSW-04C	C	Triennial	Triennial
STSW-07A	B	---	Triennial
STSW-07B	C	---	Annual
STSW-08B	C	Triennial	Triennial
STSW-08C	C	Annual	Annual
STSW-09B	C	Triennial	Triennial
STSW-09C	D	Triennial	Triennial
STSW-12A	B	Triennial	Triennial
STSW-12B	C	---	Triennial
STSW-15A	C	Triennial	Annual
STSW-15B	C	Triennial	Annual
STSW-25B	C	---	Triennial
STSW-26A	B	---	Annual
STSW-26B	C	---	Annual
STSW-26C	C	---	Triennial
STSW-29B	C	Triennial	Triennial
STSW-29C	D	Triennial	Triennial
STSW-30A	C	Triennial	Annual
STSW-30B	C	Triennial	Annual
STSW-31A	C	Annual	Annual
STSW-31B	C	Annual	Annual
STSW-36B	C	---	Annual
STSW-38A	B	Annual	Annual
STSW-38B	B	Annual	Annual
STSW-38C	C	Annual	Annual
STSW-39A	B	Triennial	Triennial
STSW-39B	C	Triennial	Triennial
STSW-39C	C	Triennial	Triennial
STSW-40A	C	Triennial	Triennial
STSW-40B	C	Triennial	Triennial
STSW-40C	C	Triennial	Triennial
STSW-43C	C	---	Triennial
STSW-44B	C	---	Triennial
STSW-46A	C	Triennial	Triennial
STSW-46B	C	Triennial	Triennial
STSW-46C	D	Triennial	Triennial
STSW-47A	B	Annual	Annual
STSW-47B	C	Triennial	Triennial
STSW-47C	C	Triennial	Triennial

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Inactive Rancho Cordova Test Site
Rancho Cordova, Sacramento County

Well	HSU	Sampling Frequency	
		Perchlorate	VOCs
STSW-59A	C	Semi-annual	Semi-annual
STSW-59B	C	Semi-annual	Semi-annual
STSW-59C	D	Semi-annual	---
STSW-60A	C	Annual	Annual
STSW-60B	C	Annual	Annual
STSW-60C	D	Annual	Annual
STSW-61A	C	Annual	Annual
STSW-61B	D	Annual	Annual
STSW-61C	D	Annual	Annual
STSW-63A	B	---	Triennial
STSW-65B	C	---	Triennial
STSW-67A	B	---	Triennial
STSW-67B	C	---	Annual
STSW-67C	C	---	Triennial
STSW-69A	C	Annual	Annual
STSW-69B	D	Annual	---
STSW-69C	D	Annual	---
STSW-73A	B	Semi-annual	---
STSW-73B	C	Annual	Annual
STSW-74A	C	Annual	Annual
STSW-74B	D	Semi-annual	Semi-annual
STSW-74C	D	Semi-annual	Semi-annual
STSW-75A	C	Annual	Triennial
STSW-75B	C	Annual	Triennial
STSW-76A	B	---	Triennial
STSW-77A	C	Annual	Annual
STSW-77B	C	Annual	Annual
STSW-77C	D	Annual	---
STSW-80A	B	---	Annual
STSW-80B	C	Triennial	Triennial
STSW-80C	C	Triennial	Triennial
STSW-81A	C	Semi-annual	---
STSW-81B	C	Semi-annual	---
STSW-81C	D	Annual	---
STSW-82A	C	Annual	Annual
STSW-82B	C	Annual	Annual
STSW-82C	D	Annual	Triennial
STSW-83B	C	---	Triennial
STSW-84B	C	---	Triennial
STSW-85A	C	Triennial	Triennial
STSW-85B	C	Triennial	Triennial

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Rancho Cordova, Sacramento County

Well	HSU	Sampling Frequency	
		Perchlorate	VOCs
STSW-85C	D	Triennial	Triennial
STSW-86A	C	Semi-annual	---
STSW-86B	C	Semi-annual	---
STSW-86C	D	Semi-annual	---
STSW-87B	B	Annual	Annual
STSW-87C	C	Triennial	Triennial
STSW-88A	C	Semi-annual	---
STSW-88B	C	Semi-annual	---
STSW-88C	D	Annual	---
STSW-89B	B	Triennial	Triennial
STSW-89C	C	Triennial	Annual
STSW-90B	B	Triennial	Triennial
STSW-90C	C	Triennial	Triennial
STSW-91A	B	---	Annual
STSW-91B	C	---	Annual
STSW-91C	C	---	Triennial
STSW-92A	B	---	Annual
STSW-92B	C	---	Annual
STSW-92C	C	---	Triennial
STSW-94B	C	---	Triennial
STSW-94C	C	---	Triennial
STSW-95A	B	Annual	Annual
STSW-95B	C	Annual	Annual
STSW-95C	C	Annual	Annual
STSW-98A	C	Semi-annual	---
STSW-98B	C	Semi-annual	---
STSW-98C	D	Semi-annual	---
STSW-99A	B	Annual	Annual
STSW-99B	C	Annual	Annual
STSW-99C	C	Annual	Annual
STSW-100A	B	Annual	Annual
STSW-100B	C	Annual	Annual
STSW-100C	C	Annual	Annual
STSW-101B	B	---	Triennial
STSW-101C	C	---	Triennial
STSW-102B	C	Triennial	Triennial
STSW-103A	C	Semi-annual	---
STSW-103B	D	Annual	---
STSW-103C	D	Annual	---
STSW-105A	C	Annual	Triennial
STSW-105B	C	Annual	Triennial

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Inactive Rancho Cordova Test Site
Rancho Cordova, Sacramento County

Well	HSU	Sampling Frequency	
		Perchlorate	VOCs
STSW-105C	C	Annual	Triennial
STSW-106A	C	Semi-annual	---
STSW-106B	C	Semi-annual	---
STSW-106C	D	Annual	---
STSW-107A	C	Annual	---
STSW-107B	C	Annual	---
STSW-107C	D	Triennial	---
STSW-108A	D	Annual	---
STSW-108B	D	Annual	---
STSW-108C	D	Annual	---
STSW-109A	C	Annual	Annual
STSW-109B	C	Annual	Annual
STSW-109C	D	Annual	---
STSW-110A	C	Annual	Annual
STSW-110B	C	Annual	Annual
STSW-110C	D	Triennial	---
STSW-111B	C	---	Triennial
STSW-112A	B	Annual	Annual
STSW-112B	C	Annual	Annual
STSW-112C	C	Annual	Annual
STSW-113A	B	---	Annual
STSW-114B	C	---	Annual
STSW-114C	C	---	Annual
STSW-116A	B	Triennial	Triennial
STSW-117A	C	Annual	---
STSW-117B	C	Annual	---
STSW-117C	C	Annual	---
STSW-118A	C	Annual	---
STSW-118B	D	Annual	---
STSW-118C	E	Annual	---
STSW-122A	B	Annual	Annual
STSW-122B	C	Annual	Annual
STSW-122C	C	Annual	Annual
STSW-123A	B	Annual	Annual
STSW-123B	C	---	Annual
STSW-123C	C	---	Annual
STSW-124B	C	Triennial	Triennial
STSW-125A	C	Triennial	Triennial
STSW-125B	C	Triennial	Triennial
STSW-126A	B	Annual	Annual
STSW-126B	C	Triennial	Annual

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Inactive Rancho Cordova Test Site
Rancho Cordova, Sacramento County

Well	HSU	Sampling Frequency	
		Perchlorate	VOCs
STSW-126C	C	Triennial	Annual
STSW-127A	C	Annual	Annual
STSW-128A	D	---	Triennial
STSW-129A	B	Annual	Annual
STSW-129B	C	Annual	Annual
STSW-129C	C	Triennial	Triennial
STSW-132A	B	---	Triennial
STSW-132B	C	---	Triennial
STSW-132C	D	---	Triennial
STSW-133A	B	---	Triennial
STSW-133B	C	---	Triennial
STSW-133C	D	---	Triennial
STSW-135B	C	---	Semi-annual
STSW-135C	C	---	Semi-annual
STSW-138A	B	Triennial	Triennial
STSW-138B	D	Triennial	Triennial
STSW-140C	C	Triennial	Triennial
STSW-144A	D	Triennial	Triennial
STSW-144B	D	Triennial	Triennial
STSW-147B	B	---	Triennial
STSW-147C	C	---	Annual
STSW-149A	C	---	Annual
STSW-149B	D	---	Annual
STSW-149C	D	---	Triennial
STSW-150A	D	---	Semi-annual
STSW-150B	D	---	Triennial
STSW-151A	B	---	Triennial
STSW-151B	C	---	Annual
STSW-151C	C	---	Annual
STSW-155A	C	---	Annual
STSW-155B	C	---	Annual
STSW-155C	D	---	Annual
STSW-156A	B	---	Annual
STSW-156B	C	---	Annual
STSW-156C	D	---	Annual
STSW-158A	B	Annual	---
STSW-158B	D	Annual	Annual
STSW-158C	E	Annual	Annual
STSW-159A	C	Annual	Annual
STSW-159B	D	Annual	---
STSW-159C	D	Triennial	---

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Inactive Rancho Cordova Test Site
Rancho Cordova, Sacramento County

Well	HSU	Sampling Frequency	
		Perchlorate	VOCs
STSW-163A	C	Annual	---
STSW-163B	C	Annual	---
STSW-163C	D	Annual	---
STSW-164	B	Annual	Annual
STSW-165A	C	---	Triennial
STSW-167A	C	Semi-annual	Annual
STSW-167B	C	Semi-annual	Annual
STSW-167C	D	Semi-annual	---
STSW-168A	C	Annual	---
STSW-168B	D	Annual	---
STSW-168C	E	Annual	---
STSW-169A	C	Annual	---
STSW-169B	D	Triennial	---
STSW-169C	D	Triennial	---
STSW-170A	B	Annual	Annual
STSW-170B	C	Annual	Annual
STSW-170C	C	Annual	Annual
STSW-171A	C	Annual	---
STSW-171B	C	Annual	---
STSW-171C	C	Annual	---
STSW-172A	B	Semi-annual	Semi-annual
STSW-172B	C	Semi-annual	Semi-annual
STSW-173A	B	Annual	Annual
STSW-173B	C	Annual	Annual
STSW-173C	C	Annual	Annual
STSW-174A	C	Triennial	Annual
STSW-174B	E	Triennial	Triennial
STSW-175A	C	Triennial	Annual
STSW-175B	C	Triennial	Annual
STSW-175C	D	Triennial	---
STSW-176A	C	Annual	---
STSW-176B	D	Annual	---
STSW-176C	D	Triennial	---
STSW-177A	C	Annual	---
STSW-177B	C	Annual	---
STSW-177C	D	Annual	---
STSW-178A	C	Triennial	Annual
STSW-178B	D	Annual	Triennial
STSW-178C	E	Triennial	Triennial
STSW-179A	C	Annual	Annual
STSW-179B	C	Annual	Annual

Table 1
Monitoring and Reporting Program No. R5-2023-0810
Inactive Rancho Cordova Test Site
Rancho Cordova, Sacramento County

Well	HSU	Sampling Frequency	
		Perchlorate	VOCs
STSW-179C	D	Annual	Annual
STSW-180A	C	Annual	---
STSW-180B	C	Annual	---
STSW-180C	C	Annual	---
STSW-181A	B	---	Triennial
STSW-181B	C	---	Triennial
STSW-181C	D	---	Annual
STSW-182A	B	---	Triennial
STSW-182B	C	---	Triennial
STSW-182C	D	---	Annual
STSW-183A	B	Annual	---
STSW-183B	C	Annual	Annual
STSW-183C	D	Annual	Annual
STSW-184B	C	---	Annual
STSW-184C	D	---	Triennial
STSW-185A	C	Annual	---
STSW-185B	C	Annual	---
STSW-185C	D	Triennial	---
STSW-186A	C	Triennial	---
STSW-186B	C	Triennial	---
STSW-186C	D	Triennial	---
STSW-187A	C	Annual	---
STSW-187B	C	Annual	---
STSW-187C	D	Triennial	---
STSW-188A	B	---	Annual
STSW-188B	C	---	Annual
STSW-189A	C	Semi-annual	---
STSW-189B	D	Annual	---
STSW-189C	D	Annual	---
STSW-190A	D	Annual	---
STSW-190B	D	Annual	---
STSW-191A	C	Semi-annual	---
STSW-191B	D	Semi-annual	---
STSW-191C	D	Semi-annual	---
STSW-201A	B	Annual	Annual
STSW-201B	C	Annual	Annual
STSW-201C	C	Annual	Annual
STSW-202A	B	---	Annual
STSW-202B	C	---	Annual
STSW-205A	B	Annual	---
STSW-205B	C	Triennial	Triennial

Table 1
Monitoring and Reporting Program No. R5-2023-0810
Inactive Rancho Cordova Test Site
Rancho Cordova, Sacramento County

Well	HSU	Sampling Frequency	
		Perchlorate	VOCs
STSW-205C	D	Triennial	Triennial
STSW-206A	C	Triennial	Triennial
STSW-206B	C	Triennial	Triennial
STSW-206C	D	Triennial	Triennial
STSW-207A	B	Annual	Annual
STSW-207B	C	Annual	Annual
STSW-207C	C	Annual	Annual
STSW-208A	C	Annual	---
STSW-208B	C	Annual	---
STSW-208C	D	Annual	---
STSW-209A	C	Annual	---
STSW-209B	C	Annual	---
STSW-209C	D	Triennial	---
STSW-210A	C	Annual	---
STSW-210B	C	Annual	---
STSW-210C	D	Triennial	---
STSW-211A	B	Semi-annual	Semi-annual
STSW-211B	C	Annual	Annual
STSW-211C	C	Annual	Annual
STSW-211D	D	Annual	Triennial
STSW-212A	C	Annual	Annual
STSW-212B	C	Annual	Annual
STSW-212C	D	Triennial	---
STSW-212D	D	Triennial	---
STSW-213A	B	Annual	Annual
STSW-213B	C	Annual	Annual
STSW-213C	C	Annual	Annual
STSW-214	C	---	Annual
STSW-215A	C	Annual	---
STSW-215B	D	Annual	---
STSW-216A	B	Annual	---
STSW-216B	C	Annual	---
STSW-216C	D	Annual	---
STSW-217A	C	Annual	
STSW-217B	C	Annual	
STSW-217C	D	Annual	
STSW-218A	C	---	Semi-annual
STSW-218B	C	---	Semi-annual
STSW-218C	D	---	Semi-annual
STSW-219A	C	---	Semi-annual
STSW-219B	C	---	Semi-annual

Table 1
Monitoring and Reporting Program No. R5-2023-0810
Inactive Rancho Cordova Test Site
Rancho Cordova, Sacramento County

Well	HSU	Sampling Frequency	
		Perchlorate	VOCs
STSW-219C	C	---	Semi-annual
STSW-220A	C	---	Semi-annual
STSW-220B	C	---	Semi-annual
STSW-220C	C	---	Semi-annual
MAFB-068	B	Annual	Annual
MAFB-069	B	Annual	Annual
MAFB-070	B	Annual	Annual
MAFB-071	B	Annual	Annual
MAFB-072	B	Semi-annual	Semi-annual
MBS PZ-49D	C	Annual	---
MBS PZ-50D	C	Annual	---
MBS PZ-57D	B	Annual	---
SMW-5	B	Annual	---
SMW-8	B	Annual	---
SMW-9	B	Annual	---
SMW-11	B	Semi-annual	---

Notes:

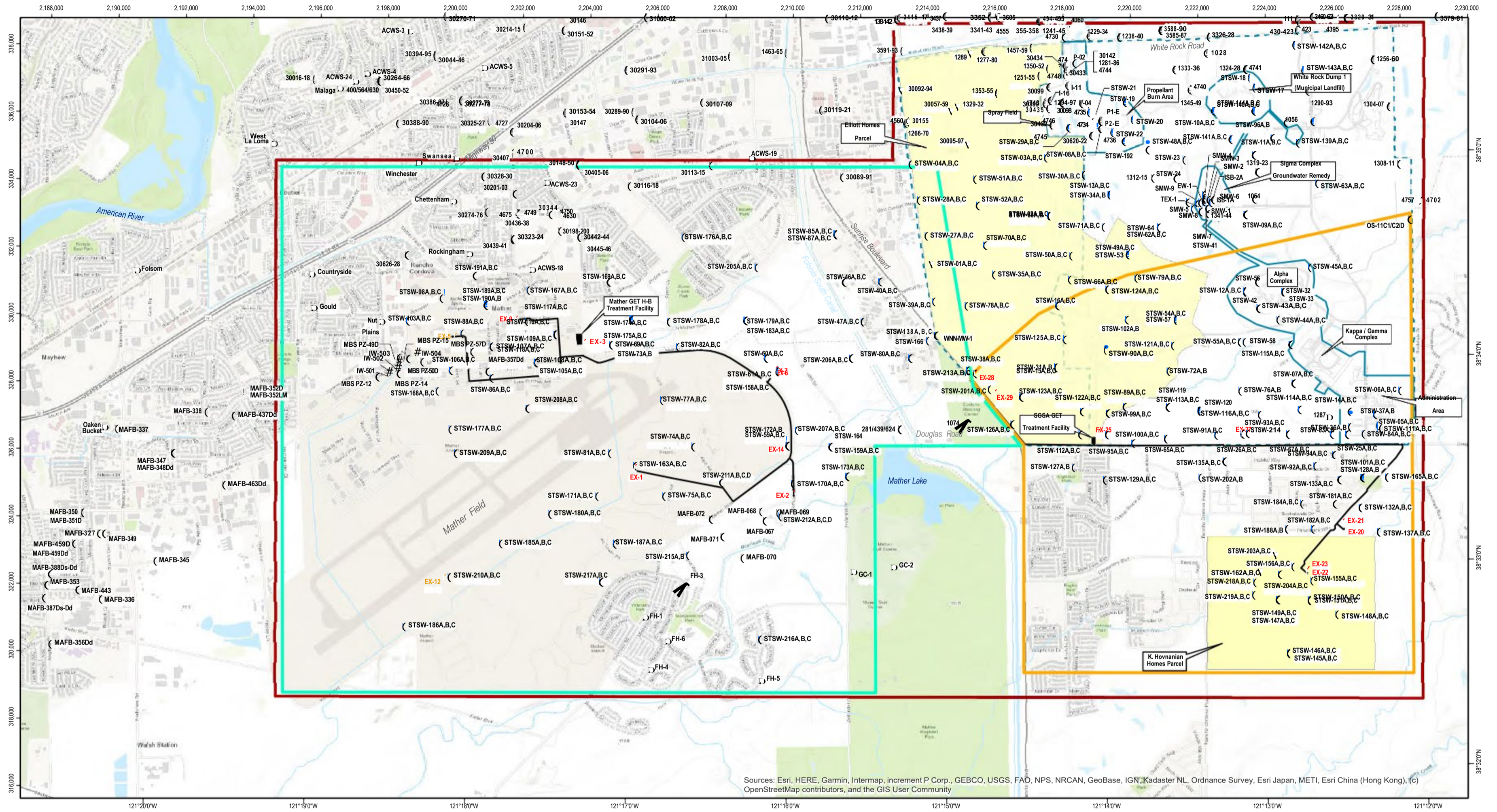
1. All accessible monitoring wells shall be monitored for water level semi-annually during the second and fourth quarters.
2. Monitoring wells scheduled for semi-annual sampling shall be sampled during the second and fourth quarters.
3. Monitoring wells scheduled for annual sampling shall be sampled during the second and third quarters.
4. Monitoring wells scheduled for triennial sampling shall be sampled during the first quarter.

HSU = Hydrostratigraphic unit

VOCs = Volatile organic compounds

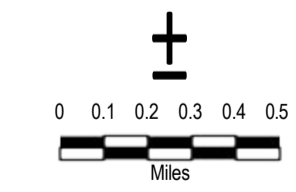
--- = None

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EXPLANATION

- () IRCCTS Monitor Well; monitored under IRCCTS MRP
- () Monitor Well; monitored under other programs (Aerojet-Rocketdyne, U.S. Air Force)
- () Active IRCCTS GET Extraction Well
- () Inactive IRCCTS GET Extraction Well
- () Aerojet Rocketdyne Extraction Well
- # U.S. Air Force Injection Well
- () Active Water Supply Well
- () Inactive Water Supply Well
- () Monitor Well; destroyed in 2020-2021
- Groundwater Extraction Pipeline
- Current Inactive Rancho Cordova Test Site Boundary
- Former Inactive Rancho Cordova Test Site Boundary
- IRCCTS Study Area Boundary
- Private Property with Active Residential Development
- SGSA Boundary
- Mather Boundary
- GET - Groundwater Extraction and Treatment
- SGSA - Southern Groundwater Study Area
- IRCTS - Inactive Rancho Cordova Test Site
- MRP - Monitoring and Reporting Program



THE BOEING COMPANY
**INACTIVE RANCHO CORDOVA
 TEST SITE**
 RANCHO CORDOVA, CALIFORNIA

SITE MAP

2022

MONTGOMERY & ASSOCIATES

FIGURE 1