



**California Environmental Protection Agency
Department of Toxic Substances Control**

HAZARDOUS WASTE POST CLOSURE FACILITY PERMIT

Facility Name: Aerojet-General Corporation
US Highway 50 and Aerojet Road
Rancho Cordova, California 95670

Owner Name: Aerojet-General Corporation
US Highway 50 and Aerojet Road
Rancho Cordova, California 95670

Operator Name: Aerojet-General Corporation
US Highway 50 and Aerojet Road
Rancho Cordova, California 95670

Facility EPA ID Number:
CAD000030494

Effective Date:

Expiration Date:

Pursuant to California Health and Safety Code section 25200, this Resource Conservation and Recovery Act (RCRA)-equivalent Hazardous Waste Facility Permit is hereby issued to: Aerojet-General Corporation. The Issuance of this Permit is subject to the terms and conditions set forth in Attachment A and the Part "B" Application (Operation Plan) dated August 19, 2008. Attachment A consists of 11 pages.

Peter Bailey, P.G.
Team Leader
Permit Renewal Team
Department of Toxic Substances Control
Date:

AEROJET-GENERAL CORPORATION

**SOUTH OF HIGHWAY 50 AND AEROJET ROAD
SACRAMENTO, CALIFORNIA 95670**

HAZARDOUS WASTE POST CLOSURE FACILITY PERMIT

TABLE OF CONTENTS

PART I. DEFINITIONS	1
PART II. DESCRIPTION OF THE FACILITY AND OWNERSHIP.....	2
1. OWNER OF FACILITY.....	2
2. OWNER OF REAL PROPERTY.....	2
3. OPERATOR OF FACILITY.....	2
4. LOCATION	2
5. DESCRIPTION OF FACILITY OPERATIONS	2
6. FACILITY HISTORY	3
7. FACILITY SIZE AND TYPE FOR FEE PURPOSES	3
PART III. GENERAL CONDITIONS	5
1. PERMIT APPLICATION DOCUMENTS	5
2. EFFECT OF PERMIT	5
3. COMPLIANCE WITH CALIFORNIA ENVIRONMENTAL QUALITY ACT (CEQA)	6
4. ENVIRONMENTAL MONITORING	6
5. ANNUAL HAZARDOUS WASTE REDUCTION AND MINIMIZATION CERTIFICATION	6
6. ACCESS	7
PART IV. PERMITTED UNITS AND ACTIVITIES	9
PART V. CORRECTIVE ACTION	11

PART I. DEFINITIONS

All terms used in this Permit shall have the same meaning as those terms have in the California Health and Safety Code, division 20, chapter 6.5 and California Code of Regulations, title 22, division 4.5, unless expressly provided otherwise by this Permit.

1. **“DTSC”** as used in this Permit means the California Department of Toxic Substances Control.
2. **“Facility”** as used in this Permit means all contiguous land and structures, other appurtenances, and improvements on the land used for the treatment, transfer, storage resource recovery, disposal or recycling of hazardous waste. A hazardous waste facility may consist of one or more treatment, transfer, storage, resource recovery, disposal or recycling operational units or combinations of these units.

For the purpose of implementing corrective action under California Code of Regulations, title 22, division 4.5, a hazardous waste facility includes all contiguous property under the control of the owner or operator required to implement corrective action.

3. **“Permittee”** as used in this Permit means the Owner and Operator.
4. **“RCRA”** as used in this Permit means the Resource Conservation and Recovery Act (42 U.S.C. §6901 et seq.).

PART II. DESCRIPTION OF THE FACILITY AND OWNERSHIP

1. Owner of Facility

The owner of the facility is Aerojet-General Corporation. Aerojet-General Corporation is a wholly owned subsidiary of GenCorp Incorporated (GenCorp Inc.).

2. Owner of Real Property

Aerojet-General Corporation, a wholly owned subsidiary of GenCorp Inc.
U.S. Highway 50 and Aerojet Road
Rancho Cordova, California 95670

3. Operator of Facility

Aerojet-General Corporation.
U.S. Highway 50 and Aerojet Road
Rancho Cordova, California 95670

4. Location

Aerojet-General Corporation's (Aerojet) Sacramento facility is located in eastern Sacramento County in Rancho Cordova, California, approximately 15 miles east of the City of Sacramento, near the intersection of U.S. Highway 50 and Aerojet Road (Facility).

5. Description of Facility Operations

Aerojet occupies approximately 5,900 acres of land in a suburban region of Sacramento County. A substantial portion of the Aerojet property and its immediate vicinity are covered with mine tailings.

Liquid propellant rocket engines and solid propellant fuel rocket motors are fabricated, assembled, tested and refurbished at the Facility. These activities include the manufacture of metal parts, including casting, deep-drawing, and other methods of forming. Aerojet also performs engineering research and development at its Facility. The chemicals used at the Facility include explosives, oxidizers, acids, light metal hydrides, plastics, resins, solvents and other products. In the process of operations, Aerojet generates hazardous wastes that are either treated on site or disposed of at an authorized off-site

hazardous waste facility. Treatment processes at the Facility include evaporation and pH adjustment of aqueous wastewater. Aerojet also stores hazardous waste in drums at the Facility, in the permitted container storage building and/or container areas, and in tanks.

There were two deep injection wells used for the disposal of wastewater from 1963 to 1968 and from 1975 to 1985. The wells were decommissioned in 1994 in accordance with the approved closure plan. There are five, deep multiple-completion monitoring wells, that will continue to provide data to determine the direction, rate and quality of the groundwater surrounding the injection wells. Additionally, the five monitoring wells will provide data to evaluate the leakage of the wastewater into the upper water bearing zone. Please see Attachment B for the diagrams of the Permitted Units.

6. Facility History

The owner of the Facility is Aerojet. Aerojet is a wholly owned subsidiary of GenCorp Inc. Aerojet used the two deep injection wells from 1963 to 1968 and from 1975 to 1985 for the disposal of hazardous wastewater from Aerojet's Chemical Plant 1 and Chemical Plant 2. The wastewater was injected into the ground at depths greater than 970 feet below ground surface. The wells were decommissioned in 1994 in accordance with the approved closure plan.

7. Facility Size and Type for Fee Purposes

The Facility is categorized as a large post-closure facility pursuant to Health and Safety Code section 25205.7(d)(5). For purpose of Health and Safety Code section 25205.4, the post-closure period for the Facility shall be deemed to have started on June 30, 1994, when DTSC approved the Closure Plan.

PART III. GENERAL CONDITIONS

1. PERMIT APPLICATION DOCUMENTS

The Part "A" Application and the Part "B" Application (Operation Plan) dated August 19, 2008 are hereby made a part of this Permit by reference. The Operation Plan was originally submitted on August 15, 2006 and revised on September 27, 2007, October 30, 2007 and August 19, 2008.

2. EFFECT OF PERMIT

- (a) The Permittee shall comply with the terms and conditions of this Permit and the provisions of the Health and Safety Code and California Code of Regulations (Cal. Code Regs.), title 22, division 4.5. The issuance of this Permit by DTSC does not release the Permittee from any liability or duty imposed by federal or state statutes or regulations or local ordinances, except the obligation to obtain this Permit. The Permittee shall obtain the permits required by other governmental agencies, including but not limited to, those required by the applicable land use planning, zoning, hazardous waste, air quality, water quality, and solid waste management laws for the construction and/or operation of the Facility.
- (b) The Permittee is permitted to operate, monitor and maintain this Facility for post closure activities in accordance with the terms and conditions of this Permit and the Approved Application. Any management of hazardous wastes not specifically authorized in this Permit is strictly prohibited.
- (c) Compliance with the terms and conditions of this Permit does not constitute a defense to any action brought under any other law governing protection of public health or the environment, including, but not limited to, one brought for any imminent and substantial endangerment to human health or the environment.
- (d) DTSC's issuance of this Permit does not prevent DTSC from adopting or amending regulations that impose additional or more stringent requirements than those in existence at the time this Permit is issued and does not prevent the enforcement of these requirements against the Permittee.

- (e) Failure to comply with any term or condition set forth in the Permit in the time or manner specified herein will subject the Permittee to possible enforcement action including but not limited to penalties pursuant to Health and Safety Code section 25187.
- (f) Failure to submit any information required in connection with the Permit, or falsification and/or misrepresentation of any submitted information, is grounds for revocation of this Permit (Cal. Code Regs., tit. 22, §66270.43).
- (g) In case of conflicts between the Approved Application and the Permit, the Permit conditions take precedence.
- (h) This Permit includes and incorporates by reference any conditions of waste discharge requirements issued to the Facility by the State Water Resources Control Board or any of the California Regional Water Quality Control Boards and any conditions imposed pursuant to section 13227 of the Water Code.

3. COMPLIANCE WITH CALIFORNIA ENVIRONMENTAL QUALITY ACT (CEQA)

A Notice of Exemption has been prepared in accordance with the requirements of Public Resources Code section 21000 et seq. and the CEQA Guidelines, California Code of Regulations, title 14, section 15061(b)(3).

4. ENVIRONMENTAL MONITORING

The Permittee shall comply with the applicable environmental monitoring and response program requirements of California Code of Regulations, title 22, division 4.5, chapter 14, articles 6 and 17.

5. ANNUAL HAZARDOUS WASTE REDUCTION AND MINIMIZATION CERTIFICATION

The Permittee shall certify annually that it has a hazardous waste reduction and minimization program and method in place and shall keep the annual certification as part of its Operating Record in accordance with Health and Safety Code section 25202.9 and California Code of Regulations, title 22, section 66264.73(b)(9).

6. ACCESS

- (a) DTSC, its contractors, employees, agents, and/or any United States Environmental Protection Agency representatives are authorized to enter and freely move about the Facility for the purposes of interviewing Facility personnel and contractors; inspecting records, operating logs, and contracts relating to the Facility; reviewing progress of the Permittee in carrying out the terms of Part VI of the Permit; conducting such testing, sampling, or monitoring as DTSC deems necessary; using a camera, sound recording, or other documentary-type equipment; verifying the reports and data submitted to DTSC by the Permittee; or confirming any other aspect of compliance with this Permit, Health and Safety Code, division 20, chapter 6.5, and California Code of Regulations, title 22, division 4.5. The Permittee shall provide DTSC and its representatives access at all reasonable times to the Facility and any other property to which access is required for implementation of any provision of this Permit, Health and Safety Code, division 20, chapter 6.5, and California Code of Regulations, title 22, division 4.5, and shall allow such persons to inspect and copy all records, files, photographs, documents, including all sampling and monitoring data, that pertain to work undertaken pursuant to the entire Permit or undertake any other activity necessary to determine compliance with applicable requirements.
- (b) Nothing in this Permit shall limit or otherwise affect DTSC's right to access and entry pursuant to any applicable State or federal laws and regulations.

PART IV. PERMITTED UNITS AND ACTIVITIES

This Permit authorizes the operation, monitoring and maintenance only of the facility units and activities listed below. The Permittee shall not treat, store or otherwise manage hazardous waste in any unit other than those specified in this Part IV or any other DTSC authorization. Any modifications to a unit or activity authorized by this Permit require the written approval of DTSC in accordance with the permit modification procedures set forth in California Code of Regulations, title 22, division 4.5.

For the purpose of California Code of Regulations, title 22, section 66270.1(c) and other similar, unit specific regulatory requirements, this Facility has one Hazardous Waste Management Unit. This unit is described in detail in the Approved Closure Application of June 30, 1994 and is as follows:

Unit 1

Underground Deep Injection Wells 1 and 2

LOCATION:

East of White Rock Road. The location of the Injection Well 1 and Injection Well 2 are shown in Map number 30 in the Part B Map Binder and are described in the Land Use Covenant recorded April 17, 1995 in the Official Records of Sacramento County in Book 95- 04-17 at Page 0934. Please see Attachment B for the location diagrams.

ACTIVITY TYPE AND DESCRIPTION:

The post-closure activities include monitoring the vicinity groundwater and performing groundwater analysis.

PHYSICAL DESCRIPTION:

Well 1 has a total depth of 1,564 feet. The production casing is 8 and 5/8 inches in diameter and extends from the ground surface to 1,400 feet. Well 1 received hazardous wastes from 1963 through 1968, and from 1974 through May 3, 1985. Well 2 has a total depth of 1,691 feet. The production casing is 8 and 5/8 inches in diameter and extends from ground surface to 1,684 feet. Well 2 began receiving hazardous waste in 1978 and ceased on September 27, 1985. Closure of the wells was done to isolate the injectate within the injection zone from the shallower fresh water. To provide isolation of the

injectate, three cement plugs were installed in each well. The first plug was installed in the lower three quarters of the slotted casing. The second plug was installed in the remaining slotted casing after perforating the casing at the bottom of the blank casing. The third plug was installed throughout the blank casing.

MAXIMUM CAPACITY:

Approximately 85 million gallons.

WASTE TYPES:

Wastewater containing organics, inorganic, alkaline, acids, halogenated solvents and solid wastes.

SPECIAL CONDITION

The Permittee shall not manage any hazardous waste other than the hazardous waste described in this permit, or as otherwise authorized by DTSC.

Within 120 days of the effective date of this Permit, the Permittee shall submit a Sampling and Analysis Plan (SAP) to DTSC for approval that is consistent with Appendix B (Suggested Content for Water Quality Sampling and Analysis Plans) of DTSC's *Guidance Document on Monitoring Requirements for Permitted hazardous Waste Facilities* dated July 2001. The SAP should include a monitoring program which consists of data quality objectives and, for each well, an updated list of analytical parameters and description of the specific basis for constituent tested and for the frequency of sampling for each parameter.

The Permittee shall submit the monitoring reports of the five monitoring wells to DTSC annually starting within 180 days of the effective date of this Permit.

PART V - CORRECTIVE ACTION

1. In the event the Permittee identifies an immediate or potential threat to human health and/or the environment, discovers new releases of hazardous waste and/or hazardous constituents, or discovers new Solid Waste Management Units (SWMUs) not previously identified, the Permittee shall notify DTSC orally within 24 hours of discovery and notify DTSC in writing within 10 days of such discovery summarizing the findings including the immediacy and magnitude of any potential threat to human health and/or the environment.
2. DTSC may require the Permittee to investigate, mitigate and/or take other applicable action to address any immediate or potential threats to human health and/or the environment and newly identified SWMUs or releases of hazardous waste and/or hazardous constituents. If and when corrective action is required at the Facility, the Permittee shall conduct corrective action under either a Corrective Action Consent Agreement or an Enforcement Order for Corrective Action issued by DTSC pursuant to Health and Safety Code sections 25187 and 25200.10.
3. To the extent that work being performed pursuant to Part VI of the Permit must be done on property not owned or controlled by the Permittee, the Permittee shall use its best efforts to obtain access agreements necessary to complete work required by this Part of the Permit from the present owner(s) of such property within 30 days of approval of any workplan for which access is required. "Best efforts" as used in this paragraph shall include, at a minimum, a certified letter from the Permittee to the present owner(s) of such property requesting access agreement(s) to allow the Permittee and DTSC and its authorized representatives access to such property and the payment of reasonable sums of money in consideration of granting access. The Permittee shall provide DTSC with a copy of any access agreement(s). In the event that agreements for the access are not obtained within 30 days of approval of any workplan for which access is required, or of the date that the need for access becomes known to the Permittee, the Permittee shall notify DTSC in writing within 14 days thereafter regarding both efforts undertaken to obtain access and its failure to obtain such agreements. In the event DTSC obtains access, the Permittee shall undertake approved work on such property. If there is any conflict between this permit condition on access and the access requirements in any agreement entered into between DTSC and the Permittee, this permit condition on access shall govern.

4. Nothing in Part VI of the Permit shall be construed to limit or otherwise affect the Permittee's liability and obligation to perform corrective action including corrective action beyond the facility boundary, notwithstanding the lack of access. DTSC may determine that additional on-site measures must be taken to address releases beyond the Facility boundary if access to off-site areas cannot be obtained.

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