

CALIFORNIA REGIONAL WATER QUALITY CONTROL BOARD
CENTRAL VALLEY REGION

TIME SCHEDULE ORDER R5-2026-0022

REQUIRING
THE AEROJET ROCKETDYNE, INC.
GROUNDWATER EXTRACTION AND TREATMENT SYSTEMS, ARGET, GET EF,
GET HA, GET J, GET KA, GET LA, GET LB, GET AB, WRND GET, SAILOR BAR
PARK GET, COOLING TOWER 20019, GOLDEN STATE WATER WELLS AND LOW
THREAT DISCHARGES
SACRAMENTO COUNTY

TO COMPLY WITH WASTE DISCHARGE REQUIREMENTS PRESCRIBED IN
ORDER R5-2026-0019
NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM (NPDES)
PERMIT CA0083861

FINDINGS

The California Regional Water Quality Control Board, Central Valley Region, (hereafter Central Valley Water Board) finds that:

1. Aerojet Rocketdyne, Inc. (Discharger) operates multiple groundwater extraction and treatment (GET) systems as part of its Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA) response actions at the Aerojet Superfund Site located in eastern Sacramento County, California. The Discharger owns and operates the Groundwater Extraction and Treatment Systems ARGET, GET EF, GET HA, GET J, GET KA, GET LA, GET LB, GET AB, WRND GET, Sailor Bar Park GET, Cooling Tower 20019, Golden State Water Wells and Low Threat Discharges (Facility). The Facility discharges treated groundwater to Alder Creek, American River, Buffalo Creek, Morrison Creek, and Sailor Bar Park Pond, waters of the United States.
2. On 17 April 2026, the Central Valley Water Board adopted Waste Discharge Requirements (WDR) Order R5-2026-0019, NPDES Permit CA0083861, which included final effluent limitations, in part for N-Nitrosodimethylamine (NDMA), a component or by-product of liquid rocket fuel.
3. Order R5-2026-0019 Waste Discharge Requirements section IV.A.2 includes Final Effluent Limitations for NDMA at Discharge Point 001 for the ARGET facility, Discharge Point 002 for the GET EF facility, Discharge Point 007 for the GET KA facility, Discharge Point 009 for the GET LB facility, Discharge Point 012 for Low Threat Discharges, Discharge Point 016 for the GET AB facility as shown in part as follows:

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GET FACILITIES, GOLDEN STATE DISCHARGES AND LOW THREAT DISCHARGES
SACRAMENTO COUNTY**Table 1. Effluent Limitations**

Discharge Point	Facility	Parameter	Units	Average Monthly Effluent Limitations	Maximum Daily Effluent Limitations
001	ARGET	NDMA	micrograms per liter (µg/L)	0.00069	0.0024
002	GET EF	NDMA	µg/L	0.00069	0.0024
007	GET KA	NDMA	µg/L	0.00069	0.0024
009	GET LB	NDMA	µg/L	0.00069	0.0024
012	Low Threat Discharges	NDMA	µg/L	0.00069	0.0024
016	GET AB	NDMA	µg/L	0.00069	0.0024

NEED FOR TIME SCHEDULE AND LEGAL BASIS

4. On 13 November 2025, the Discharger submitted an infeasibility analysis requesting additional time to comply with the existing final effluent limitations for NDMA in Order R5-2026-0019. For compliance with the final effluent limitations for NDMA, the Discharger has requested time to investigate compliance methods, such as evaluating updated laboratory analytical methods, evaluating alternative discharge and/or treatment options, researching potential for a water quality standards variance, conducting an antidegradation analysis, performing a dilution/mixing zone study, developing an alternatives analysis, and modifying the treatment system if needed. The Discharger treats groundwater contaminated from Aerojet's previous rocket manufacturing and testing and utilizes the best available treatment technology to treat NDMA, so a pollutant prevention plan is not applicable.
5. The Discharger cannot consistently comply with the NDMA effluent limitations in Order R5-2026-0019 and must implement additional actions to reach compliance. This Order contains a time schedule for compliance with final effluent limitations, sets interim limitations for NDMA, and is intended to provide protection from mandatory minimum penalties (MMPs) for NDMA.

MANDATORY MINIMUM PENALTIES

6. California Water Code (CWC) section 13385, subdivisions (h) and (i), requires the Central Valley Water Board to impose MMPs upon dischargers that violate certain effluent limitations. CWC section 13385(j)(3) exempts discharges from these MMPs:

... where the waste discharge is in compliance with either a cease and desist order issued pursuant to Section 13301 or a time schedule order issued pursuant to Section 13300 or 13308, if all the [specified] requirements are met...for the

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purposes of this subdivision, the time schedule may not exceed five years in length...

7. Per the requirements of CWC section 13385(j)(3), the Central Valley Water Board finds that:
 - a. This Order specifies the actions that the Discharger is required to take in order to correct the violations that would otherwise be subject to CWC section 13385(h) and (i).
 - b. To comply with final effluent limitations, the Discharger proposed that 3.5 to 4.5 years for NDMA is necessary to allow for evaluate alternatives to comply with final effluent limits and design/construct treatment system upgrades, if needed.
 - c. The final effluent limitations for NDMA are new, more stringent, or modified regulatory requirements that became applicable to the waste discharge after the effective date of Order R5-2026-0019 and after 1 July 2000. New or modified control measures are necessary in order to comply with the final effluent limitations for NDMA. The new or modified control measures cannot be designed, installed, and put into operation within 30 calendar days.
 - d. This Order establishes a time schedule to bring the waste discharge into compliance with the effluent limitations that is as short as possible, taking into account the technological, operational, and economic factors that affect the design, development, and implementation of the control measures that are necessary to comply with the effluent limitations.
8. By statute, a Cease and Desist Order or Time Schedule Order may provide protection from MMPs for no more than five years.
9. Compliance with this Order exempts the Discharger from mandatory minimum penalties for violations of the final effluent limitations for NDMA found in Order R5-2026-0019 from **1 June 2026** (the date of this Order) until **31 May 2031**. The Discharger has not previously been protected from mandatory minimum penalties for violations of the NDMA effluent limitations.
10. In accordance with CWC section 13385(j)(3)(C), the total length of protection from mandatory minimum penalties for the final effluent limitations for NDMA does not exceed five years.
11. This Order provides a time schedule for completing the actions necessary to ensure compliance with the final effluent limitations for NDMA contained in Order R5-2026-0019. Since the time schedule for completion of actions necessary to bring the waste discharge into compliance exceeds one year, this Order includes interim effluent limitations and interim requirements and dates for their achievement.

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12. This Order includes new performance-based interim effluent limitations for NDMA.

The Central Valley Water Board calculated an interim average monthly effluent limitation (AMEL) for NDMA based on the current treatment plant performance. With 10 or more sampling data points, sampling and laboratory variability is accounted for by establishing interim effluent limitations that are based on normally distributed data where 99.9% of the data points will lie within 3.34 standard deviations of the mean (Basic Statistical Methods for Engineers and Scientists, Kennedy and Neville, Harper and Row). Therefore, an interim AMEL for NDMA was calculated using the mean plus 3.3 standard deviations.

The interim maximum daily effluent limitations (MDELs) were calculated using the MDEL/AMEL multipliers per Table 2 of the Policy for Implementation of Toxics Standards for Inland Surface Waters, Enclosed Bays, and Estuaries of California. In calculating interim effluent limitations for NDMA, effluent data between April 2022 and March 2025 was used. The following table summarizes the calculation of the interim effluent limitations for NDMA:

Table 2. Interim Effluent Limitations

Discharge Point	Facility	Parameter	Units	Interim AMEL	Interim MDEL
001	ARGET	NDMA	µg/L	0.009	0.018
002	GET EF	NDMA	µg/L	0.009	0.018
007	GET KA	NDMA	µg/L	0.009	0.018
009	GET LB	NDMA	µg/L	0.009	0.018
012	Low Threat Discharges	NDMA	µg/L	0.009	0.018
016	GET AB	NDMA	µg/L	0.009	0.018

13. The Central Valley Water Board finds that the Discharger can maintain compliance with the interim effluent limitations included in this Order. Interim effluent limitations are established when compliance with the final effluent limitations cannot be achieved by the existing Facility. Discharge of constituents in concentrations in excess of the final effluent limitations, but in compliance with the interim effluent limitations, can significantly degrade water quality and adversely affect the beneficial uses of the receiving stream on a long-term basis. However, the interim effluent limitations establish an enforceable ceiling concentration until compliance with the final effluent limitation can be achieved.

14. The Central Valley Water Board expects the Discharger to maintain NDMA treatment performance to meet the effluent targets below, consistent with the treatment performance levels achieved under previous Order R5-2020-0051-003. When piloting new treatment technologies or methodologies to comply with final NDMA effluent limits, effluent concentrations may exceed these targets only to the

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extent that concentrations do not exceed the interim effluent limits in Table 2 of this Order.

Table 3. Effluent Performance Expectations

Discharge Point	Facility	Parameter	Units	Average Monthly Effluent Target	Maximum Daily Effluent Target
001	ARGET	NDMA	µg/L	0.002	0.010
002	GET EF	NDMA	µg/L	0.002	0.010
007	GET KA	NDMA	µg/L	0.007	0.010
009	GET LB	NDMA	µg/L	0.007	0.010
012	Low Threat Discharges	NDMA	µg/L	-	0.020 (see table note 1)
016	GET AB	NDMA	µg/L	0.003	0.010

Table 3 Note:

1. As a total maximum effluent target.

15. If an interim effluent limit contained in this Order is exceeded, then the Discharger is subject to MMPs for that particular exceedance as it will no longer meet the exemption in CWC 13385(j)(3). It is the intent of the Board that a violation of an interim monthly effluent limitation subjects the Discharger to only one MMP for that monthly averaging period. In addition, a violation of an interim daily maximum effluent limit subjects the Discharger to one MMP for the day in which the sample was collected.

OTHER REGULATORY REQUIREMENTS

16. CWC section 13300 states, in part:

“Whenever a regional board finds that a discharge of waste is taking place or threatening to take place that violates or will violate requirements prescribed by the regional board, or the state board, or that the waste collection, treatment, or disposal facilities of a discharger are approaching capacity, the board may require the discharger to submit for approval of the board, with such modifications as it may deem necessary, a detailed time schedule of specific actions the discharger shall take in order to correct or prevent a violation of requirements.”

17. CWC section 13383 states, in part:

“[A] regional board may establish monitoring, inspection, entry, reporting, and recordkeeping requirements . . . for any person who discharges, or proposes to discharge, to navigable waters, any person who introduces pollutants into a publicly owned treatment works, any person who owns or operates, or proposes

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to own or operate, a publicly owned treatment works or other treatment works treating domestic sewage, or any person who uses or disposes, or proposes to use or dispose, of sewage sludge.”

18. The technical and monitoring reports required by this Order are necessary to determine compliance with the requirements in this Order, Order R5-2026-0019, and subsequent WDRs.
19. Issuance of this Order is exempt from the provisions of the California Environmental Quality Act (Pub. Resources Code, § 21000 et seq.) (“CEQA”) pursuant to Water Code section 13389, since the adoption or modification of a NPDES permit for an existing source is statutorily exempt and this Order only serves to implement a NPDES permit. (Pacific Water Conditioning Ass’n, Inc. v. City Council of City of Riverside (1977) 73 Cal.App.3d 546, 555-556.).
20. On 17 April 2026, in Clovis, California, after due notice to the Discharger and all other affected persons, the Central Valley Water Board conducted a public hearing at which evidence was received to consider this Time Schedule Order under Water Code section 13301 to establish a time schedule to achieve compliance with waste discharge requirements.

IT IS HEREBY ORDERED THAT:

1. Pursuant to California Water Code Sections 13300 and 13383, the Discharger shall comply with the following time schedule to submit reports and ensure completion of the compliance project described in Finding 7.b, above:

Table 4. Time Schedule Tasks and Compliance Dates

Task	Compliance Date
Alternatives Analysis. Submit an Alternatives Analysis for compliance with final NDMA effluent limitations which shall include what alternative or combination of alternatives were selected for compliance.	31 May 2028
Submit Annual Progress Reports. The annual progress reports shall detail what steps have been implemented towards achieving compliance with final NDMA effluent limitations including dates and durations of any pilot testing of treatment technologies and/or methodologies.	31 December 2029 31 December 2030

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Task	Compliance Date
Compliance with NDMA Effluent Limitations. The Discharger shall submit documentation that the Facility complies with the final effluent limitations for NDMA contained in Order R5-2026-0019, including documentation of selected alternative(s), any final reports, permits, design or construction completion certifications, and/or compliance sampling performed.	31 May 2031

2. The following interim effluent limitations for NDMA shall be effective 1 June 2026. The Discharger shall comply with the following interim effluent limitations through 31 May 2031, or when the Discharger is able to come into compliance with the final effluent limitations, whichever is sooner.

Table 5. Interim Effluent Limitations

Discharge Point	Facility	Parameter	Units	Interim AMEL	Interim MDEL
001	ARGET	NDMA	µg/L	0.009	0.018
002	GET EF	NDMA	µg/L	0.009	0.018
007	GET KA	NDMA	µg/L	0.009	0.018
009	GET LB	NDMA	µg/L	0.009	0.018
012	Low Threat Discharges	NDMA	µg/L	0.009	0.018
016	GET AB	NDMA	µg/L	0.009	0.018

- 3 Any person signing a document submitted under this TSO shall make the following certification:

“I certify under penalty of law that I have personally examined and am familiar with the information submitted in this document and all attachments and that, based on my knowledge and on my inquiry of those individuals immediately responsible for obtaining the information, I believe that the information is true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment.”

4. In accordance with California Business and Professions Code sections 6735, 7835, and 7835.1, engineering and geologic evaluations and judgments shall be performed by or under the direction of registered professionals competent and proficient in the fields pertinent to the required activities. All technical reports specified herein that contain work plans for, that describe the conduct of investigations and studies, or that contain technical conclusions and recommendations concerning engineering and geology shall be prepared by or under the direction of appropriately qualified

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professional(s), even if not explicitly stated. Each technical report submitted by the Discharger shall contain the professional's signature and/or stamp of the seal.

If, in the opinion of the Executive Officer, the Discharger fails to comply with the provisions of this Order, the Executive Officer may refer this matter to the Attorney General for judicial enforcement, may issue a complaint for administrative civil liability, or may take other enforcement actions. Failure to comply with this Order or with the WDR Order may result in the assessment of Administrative Civil Liability of up to \$10,000 per violation, per day, depending on the violation, pursuant to the Water Code, including sections 13350 and 13385. The Central Valley Water Board reserves its right to take any enforcement actions authorized by law.

Any person aggrieved by this action of the Central Valley Water Board may petition the State Water Board to review the action in accordance with Water Code section 13320 and California Code of Regulations, title 23, sections 2050 and following. The State Water Board must receive the petition by 5:00 p.m., 30 days after the date of this Order, except that if the thirtieth day following the date of this Order falls on a Saturday, Sunday, or state holiday, the petition must be received by the State Water Board by 5:00 p.m. on the next business day. Links to the laws and regulations applicable to filing petitions may be found on the [Water Quality Petitions Page](http://www.waterboards.ca.gov/public_notices/petitions/water_quality) (http://www.waterboards.ca.gov/public_notices/petitions/water_quality) or will be provided upon request.

I, Patrick Pulupa, Executive Officer, do hereby certify that this Order with all attachments is a full, true, and correct copy of the Order adopted by the California Regional Water Quality Control Board, Central Valley Region, on **17 April 2026**.

PATRICK PULUPA, Executive Officer