

UNITED STATES SPACE FORCE
AMENDED FINDING OF NO SIGNIFICANT IMPACT

Falcon 9 Launch Cadence Increase at Vandenberg Space Force Base, California

CEQ Unique Identification Number: EAXX-007-57-USF-1724161195

Pursuant to provisions of the National Environmental Policy Act (NEPA), Title 42 United States Code (U.S.C.) Section 4321 *et seq.*, as amended by the Fiscal Responsibility Act of 2023 (Public Law 118-5), and implemented by 32 Code of Federal Regulations (CFR) Part 989, Environmental Impact Analysis Process, the Department of the Air Force (DAF), as the Lead Agency, prepared the attached Final Environmental Assessment (EA) to address the potential environmental impacts on the human environment associated with proposed Falcon 9 Launch Cadence Increase at Vandenberg Space Force Base (VSFB). The current launch capacity is insufficient to meet critical Department of Defense (DOD) and commercial launch missions. The EA supports the proposal to provide greater mission capability to the DOD, National Aeronautics and Space Administration, and commercial customers by increasing Falcon 9’s flight opportunities in furtherance of United States policy, as discussed in the EA, page 1-2, § 1.2.

This Amended Finding of No Significant Impact (FONSI) incorporates by reference and attaches hereto the *Final Environmental Assessment, Falcon 9 Cadence Increase at Vandenberg Space Force Base, California*. The EA considered the potential environmental impacts of Alternative 1 (Proposed Action) Increase Launch Cadence (EA, page 2-1, § 2.1), Alternative 2 (a modified version of Alternative 1), and the No Action Alternative, and identified mitigations to be implemented prior to taking an impact-inducing action (EA Appendix L).

In a separate Environmental Impact Statement (EIS), the DAF is analyzing a proposal to modify Space Launch Complex (SLC)-6 at VSFB to accommodate Falcon 9 and Falcon Heavy launches and increase cumulative launch cadence of Falcon 9 and Falcon Heavy on VSFB to 100 launches per year. The Proposed Action covered by this FONSI will be included in the upcoming EIS as a past action in the cumulative impacts analysis.

The DAF is issuing this FONSI per 32 CFR 989.15, “Finding of no significant impact.” The DAF is aware that the President of the United States has issued Executive Order (E.O.) 14154, *Unleashing American Energy*, which revoked E.O. 11991, which amended E.O. 11514. The Council on Environmental Quality (CEQ) has provided notice that it intends to rescind the CEQ NEPA regulations.

DESCRIPTION OF PROPOSED ACTION AND ALTERNATIVES

Alternative 1 (Proposed Action), Increase Launch Cadence

The Proposed Action (Alternative 1) (EA, page 2-1, § 2.1) is to increase the Falcon 9 annual launch cadence from 36 to 50 launches per year at SLC-4 on VSFB, increase Falcon 9 first stage and fairing recovery activities, and expand the recovery area in the Pacific Ocean. Up to 12 first stages per year would continue to land at SLC-4.

The Proposed Action, Alternative 1, would result in Nitrogen Oxides (NO_x, an ozone precursor) emissions that exceed the Ozone General Conformity Rule (GCR) *de minimis* threshold value within the Los Angeles-South Coast Air Basin. That area is designated as “extreme

nonattainment” for Ozone, and is under the management of the South Coast Air Quality Management District (SCAQMD).

Due to that exceedance, the DAF prepared a General Conformity Determination (GCD), and coordinated with SCAQMD, requesting the NOx emissions be accommodated within SCAQMD’s available NOx emissions budget.

On September 26, 2024, the SCAQMD responded that it had “determined the NOx emissions (31.26 tons per year [tpy]) exceeding the *de minimis* thresholds can be accommodated within the general conformity budgets established in the 2016 AQMP [Air Quality Management Plan].” The SCAQMD concluded that the Proposed Action “will conform to the latest EPA approved AQMP as the project’s emissions are accommodated within the AQMP’s emissions budgets, and the proposed project is not expected to result in any new or additional violations of the NAAQS [National Ambient Air Quality Standards] or impede the project attainment of the NAAQS in the years 2025 through 2030.” Therefore, the SCAQMD determined and documented the Proposed Action’s emissions within the Los Angeles-South Coast Air Basin conform with the applicable State Implementation Plan, as defined in 40 CFR 51.852, in the years 2025 through 2030.

On February 12, 2025, the Deputy Assistant Secretary of the Air Force for Infrastructure, Energy, and Environment signed the GCD. That document concludes, based on the allowances provided by SCAQMD for 2025 through 2030 and accommodated within the 2016 AQMP budget and the 2016 AQMP’s attainment year of 2031, and the results of the analyses provided in the Air Quality and Greenhouse Gas Emissions Technical Report for the Falcon Program Expansion at VSFB, the Proposed Action will not result in any new or additional violations of NAAQS. Therefore, the Proposed Action is in compliance with 42 U.S.C. § 7506(c) and the applicable implementing rules and regulations in the Los Angeles non-attainment area.

The final GCD and the September 26, 2024 SCAQMD letter have been added to the appendices to the EA.

To ensure that the project emissions are accounted for accurately in the SCAQMD’s general conformity budget, established in the 2016 AQMP, the DAF will prepare an annual report to track project activities within the Basin, quantify the associated emissions, and submit to the SCAQMD by March 30th of each year.

Alternative 2 (Modified Proposed Action) (EA, page 2-6, § 2.4), Increase Launch Cadence While Maintaining Operations In Compliance With GCR Requirements

Alternative 2, which was previously implemented under the original FONSI (signed November 1, 2024) is an alternative that modified the Proposed Action’s (Alternative 1) operations within the SCAQMD to keep the annual net change in emissions below the 10 tpy Clean Air Act GCR *de minimis* value for NOx. This was accomplished through fewer operating hours and/or different boat routes to reduce emissions within nonattainment areas. The DAF determined that emissions of NOx from operations at the intensity of the Proposed Action would exceed the 10 tpy allowable limit (*de minimis* value) within the Los Angeles-South Coast Air Basin Ozone Extreme Nonattainment Area which falls within SCAQMD. A nonattainment area is a geographical area that exceeds one or more NAAQS. To remedy this situation, activities were restricted within the Los Angeles-South Coast Air Basin Ozone Extreme Nonattainment Area to remain at *de minimis* levels (i.e., less than 10 tpy). The DAF calculated the reasonably foreseeable scenario of restricted

operations to demonstrate NOx emissions associated with this action's operations can be maintained below 10 tpy *de minimis* value for the near future. To ensure activities were maintained below the *de minimis* value, SpaceX calculated and kept weekly running totals of NOx emissions associated with operations within the SCAQMD. The NOx emission during Calendar Year 2024 were calculated at 3.36 tpy, which is well below the 10 tpy permissible limit.

As a result of the modified operations, Alternative 2 posed an insignificant impact on air quality and therefore no GCD was required.

No Action Alternative

The No Action alternative provides baseline conditions for each resource area for comparing the potential environmental effects of the action alternatives. As analyzed the No Action Alternative (EA, page 2-7, § 2.4.2) would not increase the annual cadence for Falcon 9 operations from SLC-4 on VSFB, increase Falcon 9 first stage and fairing recovery activities, or expand the recovery area and rocket launch mission would continue at current levels.

MITIGATION

The EA considered the environmental consequences of the proposed action (EA page 3-1, Chapter 3) and results of required consultations with the relevant agencies (EA page 3-25, § 3.3.1 and Appendices A through D and L). The consultations resulted in prescribed mitigation to be applied to support making a finding of no significant impact. In addition, mitigation is required for emissions within the Los Angeles-South Coast Air Basin Extreme Ozone Nonattainment Area under the authority of the SCAQMD. For identified impacts, the following measures are being taken. SLD 30 is responsible for:

- Ensuring compliance with the actions required by United States Fish and Wildlife's Biological Opinion to monitor and mitigate potential adverse effects to listed species (EA, page 3-29, § 3.3.2 and Appendix A).
- Ensuring compliance with the actions required by National Marine Fisheries Service Letter of Authorization (EA page 3-40, § 3.4.2 and Appendix B).
- Carrying out the actions agreed to during negotiations with the California Coastal Commission during Coastal Zone Management Act federal consistency proceedings (EA page 3-51, § 3.7.2 and Appendix D).
- Submitting annual emission reports to SCAQMD to demonstrate compliance with the 31.26 tpy of NOx emissions.

To track mitigations, SLD 30 will develop a Mitigation Plan that identifies oversight and execution of specific mitigations. SLD 30 will not implement any impact-inducing action before the applicable mitigation measure described in the EA and FONSI are put in place.

PUBLIC REVIEW AND COMMENT

The Draft EA and FONSI were made available for public review and comment for 30 days following the publication of the Notice of Availability (NOA) in the Lompoc, Santa Maria, and Santa Barbara Public Libraries, the VSFB Library, Ojai Public Library, Avenue Library (Ventura), E.P. Foster Library (Ventura), and South Oxnard Branch Library. In addition, it was posted on the VSFB website at <https://www.vandenberg.spaceforce.mil/about-us/environmental/EAS>. The Draft EA and FONSI were also distributed per the current SLD 30 NEPA Distribution List,

including the California State Clearinghouse. Appendix K (Notice of Availability for Public Review, Proof of Delivery/Publication, Public Comments Received on Final Draft, and Responses) includes a copy of the NOA, proofs of publication, proof of library delivery, NEPA distribution list, public comments, and SLD 30 responses.

The Draft GCD was made available for public review and comment from 6 December 2024 through 24 January 2025. The Public Notice for the Draft GCD was published in the Los Angeles Times and was mailed to the Environmental Protection Agency Region 9, the California Air Resources Board, and the SCAQMD. In addition, it was posted on the VSFB website. No public comments were received for the Draft GCD.

FINDING OF NO SIGNIFICANT IMPACT

Based on my review of the facts and analyses contained in the attached EA and the GCD, and after considering input from all relevant stakeholders and the public, I conclude that implementing the Proposed Action (Alternative 1) and the associated mitigations as described in the EA, its supporting Appendices, and as will be defined more specifically in the Mitigation Plan, will not have a significant impact on the quality of the human environment. Additionally, as explained above, use of Alternative 2 will result in *de minimis* emissions per the GCR (40 CFR 93.153(c)(1)). Therefore, no Environmental Impact Statement is required.

ROBERT E. MORIARTY, P.E., SES Deputy Assistant Secretary of the Air Force (Installations)	Date
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Attachment:
Final Environmental Assessment Falcon 9 Cadence Increase at Vandenberg Space Force Base, California