



DEPARTMENT OF THE ARMY
U.S. ARMY CORPS OF ENGINEERS, GALVESTON DISTRICT
P. O. BOX 1229
GALVESTON, TEXAS 77553-1229

March 7, 2022

Policy Analysis Branch

SUBJECT: Permit Application No. SWG-2012-00381

Matthew Dodge
Space Exploration Technologies
1 Rocket Road
Hawthorne, California 90250

Dear Mr. Dodge:

The Corps of Engineers (Corps) published a notice on March 4, 2021 to advise the public of your proposed activity. By letter dated May 21, 2021, the Corps provided the substantive comments received during the public notice including responses we received from the U.S. Environmental Protection Agency, U.S. Fish and Wildlife Service, Texas Commission on Environmental Quality, and Texas Parks and Wildlife Department. Included in that letter were substantive issues raised by the Corps.

The Corps also notified SpaceX in the May 2021 letter that in order for the Corps to complete our evaluation of your proposed project, SpaceX must submit a thorough alternatives analysis in accordance with the 404(b)(1) Guidelines for Specification of Disposal Sites for Dredged or Fill Material (40 CFR 230), a thorough public interest review (33 CFR 320.4) and a Compensatory Mitigation Plan in accordance with Compensatory Mitigation for Losses of Aquatic Resources (33 CFR 332).

As of the date of this letter the Corps has not received the public interest review or a compensatory mitigation plan. The Corps did receive a response to comments and an alternatives analysis on October 7, 2021, and have concluded that the overall project purpose and siting criteria are so restrictive as to constrain the range of alternatives that must be considered under the 404(b)(1) Guidelines. **Therefore, your Department of Army Permit application is withdrawn.** This permit application process can be re-initiated by submitting a response addressing all of the comments/concerns specified in our May 21, 2021.

To assist you in re-developing your alternative analysis, the Corps has developed an overall project purpose for the proposed modification of the SpaceX permit to develop an alternative analysis commensurate with 17.16 acres of impacts to special aquatic sites designated by the Environmental Protection Agency as an Aquatic Resource of National Importance (ARNI) and by the U.S. Fish Wildlife Service as critical habitat for federally listed species. Based on information provided in the Corp permit application, and the Federal Aviation Administration – Office of Commercial Space Transportation’s (FAA) Draft Programmatic Environmental Assessment (DPEA), the following overall project purpose addresses the needs of the applicant based on information provided by them to the Corps and FAA, but is not so restrictive as to constrain the

range of alternatives outside of the existing Boca Chica site. Based on this information, the Corps overall purpose statement is:

To construct a redundant launch pad, redundant landing pad and other launch-related appurtenances to support SpaceX's existing reusable launch vehicle operations.

The Corps understands that siting criteria such as latitude, trajectory, safety, available air space, and size are appropriate criteria for the overall purpose, but several deficiencies in other siting criteria were noted:

1. The siting criteria requiring use of the existing infrastructure (Criteria 9) eliminates, without any additional considerations, all alternatives not located in Boca Chica. SpaceX has indicated in the DPEA it is considering additional launch (which includes landing for suborbital missions) and reentry locations for the Starship/Super Heavy program beyond the Boca Chica Launch Site.
2. The siting criteria definition requiring proximity to SpaceX's existing Starship/Super Heavy production facilities in Boca Chica (Criteria 14) clearly states the Vandenburg and Cape Canaveral alternatives are not considered under this criterion but the document shows that Criteria 14 only eliminates one offsite alternative.
3. The geographic diversity (Criteria 13) states the launch site must be in a different place in order to diversify risk and operations. The criterion conflicts with the previous two criteria mentioned above and it eliminates from further consideration all on-site alternatives that would be co-located with the existing launch facility at Boca Chica, including the preferred alternative.
4. The definition of the environmental siting criteria is too broad and undefined. The May 21, 2021 letter required SpaceX to provide more information on waters of the U.S, federally listed species, and cultural resources located at the off-site alternatives. The broad approach is not commensurate with the impacts to a designated ARNI.

In addition to updating the siting criteria, the October 7, 2021 submission lacked sufficient detail for Corps to properly analyze the alternatives. SpaceX shall provide the information requested in our May 21, 2021 letter for each the off-site alternatives. The information requested:

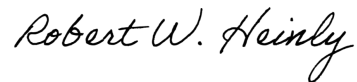
1. specific parcel information including, but not limited to; parcel ID numbers, aerial photos, location maps, and GPS coordinates for each alternative;
2. the presence, quantity and quality or function of wetlands and/or other waters of the United States (if demonstrating that a site has more impact than other options, including the applicant's preferred, include potential direct and indirect impacts associated with these improvements in lieu of practicability information) for each alternative;

3. the presence of any federally-listed threatened or endangered species or their critical habitat, state listed species, or other natural or regionally important ecosystem resource factors that may be significantly impacted for each alternative.
4. the current knowledge of the presence or absence of historic properties eligible for inclusion in the National Register of Historic Places and the effects of the undertaking upon these properties for each alternative.

The Corps also recommends that SpaceX re-address the No Action Alternative in its analysis. Specifically, SpaceX needs to describe impacts to ongoing operations if the permit is denied. For instance, in a February 10, 2022 announcement, SpaceX stated they will shift operations to Kennedy Space Center if the FAA requires an Environmental Impact Statement. This alternative was eliminated from analysis in your October 2021 submission but seems to represent either the No Action alternative or a practicable off-site alternative requiring detailed analysis.

In order to reinitiate your permit application process, all information outlined in this letter, and the letter dated May 21, 2021, must be submitted to the Corps. Please reference our file number in any future correspondence pertaining to this project. We are ready to assist you in whatever way possible. If you have any questions, please call Jayson M Hudson at 409-766-3108. You may also email him at jayson.m.hudson@usace.army.mil if you prefer.

Sincerely,



Robert W. Heinly
Chief, Policy Analysis Section

cc (be email) w/Encl.

Ms. Stacey M. Zee, Office of Commercial Space Transportation,

Mr. Paul Kaspar, Permitting & Water Quality Branch, Environmental Protection Agency,

Ms. Jenna R. Lueg, Texas Commission on Environmental Quality, Water Quality