



April 5, 2021

Policy Analysis Branch
Regulatory Division, CESWG-RDP
U.S. Army Corps of Engineers
P.O. Box 1229
Galveston, Texas 77553-1229
409-766-3869 Phone
409-766-3931 Fax
swg_public_notice@usace.army.mil

Transmitted via electronic mail to swg_public_notice@usace.army.mil

RE: Public comment on File No. SWG-2012-00381 (Proposed modification of existing permit for SpaceX Vertical Launch Facility)

Dear Chief Heinly,

On behalf of the Surfrider Foundation ("Surfrider") and Defenders of Wildlife ("Defenders"), please accept these comments on the application by Space Exploration Technologies, INC ("SpaceX") to the U.S. Army Corps of Engineers ("USACE"), proposing to modify the existing permit for the continued development of the SpaceX vertical launch area ("VLA") with the expansion and addition of test, orbital, and landing pads, integration towers, associated infrastructure, stormwater management features and vehicle parking.



Surfrider is an environmental nonprofit dedicated to the protection and enjoyment of our coasts. Founded in 1984, Surfrider now maintains more than one million supporters and members, with more than 170 volunteer-led chapters and clubs in the U.S., including the Surfrider Foundation South Texas Chapter. Surfrider is concerned about beaches and nearshore waters in the Gulf of Mexico and upholding coastal public access provisions for the benefit of all people.

Boca Chica Beach and Isla Blanca Park, which are impacted by the operation and expansion of the VLA, are regularly visited by Surfrider Foundation members for a variety of activities including surfing, wildlife viewing, camping, fishing, boating, beachgoing, beach walking, and aesthetic enjoyment. Additionally, Boca Chica State Park, the Lower Rio Grande Valley NWR (Boca Chica Tract), the South Bay Coastal Preserve, the Las Palomas Wildlife Management Area (Boca Chica Unit), and Brazos Island State Park encompass sensitive coastal habitats which support threatened and endangered species, the preservation of which supports healthy coastal ecosystems and wildlife enjoyment.

Defenders is national non-profit environmental conservation organization headquartered in Washington, DC, with more than 2.2 million members and supporters nationwide. Defenders is dedicated to the preservation of all native wild animals and plants in their natural communities. Defenders has developed programs for combating species extinction, the loss of biological diversity, and habitat alteration and destruction. Defenders has a particular interest in the preservation of National Wildlife Refuges and the many species that depend on these areas. Defenders members enjoy recreating and wildlife watching in Boca Chica State Park, the Lower Rio Grande Valley NWR (Boca Chica Tract), the South Bay Coastal Preserve, the Las Palomas Wildlife Management Area (Boca Chica Unit), and Brazos Island State Park.

As a result of this permit modification and subsequent expansion in the scope and operation of the project, Surfrider and Defenders members will be negatively impacted



through diminished aesthetics, restriction of recreational opportunities, environmental quality, and public safety. Surfrider and Defenders have a considerable interest in the protection of the coastal resources that may be affected by this project. Accordingly, Surfrider Foundation and Defenders of Wildlife have a direct and substantial interest in the outcome of this permit modification request.

Surfrider and Defenders appreciate the opportunity to provide comment on the proposal to modify this existing permit so that potentially significant environmental effects may be identified and appropriately analyzed prior to issuance of any permit modifications.

I. Standards of Review

As identified in the public notice, USACE will be evaluating this proposed project application within the context of Clean Water Act ("CWA") Section 404, and that evaluation of the permit modification request will also follow the guidelines published by the U.S. Environmental Protection Agency pursuant to Section 404 (b)(1) of the CWA. The Clean Water Act Section 404(b)(1) Guidelines ("Guidelines") require that discharges of dredged or fill material into waters of the United States, including wetlands, should not occur unless it can be demonstrated that such discharges, either individually or cumulatively, will not result in unacceptable adverse effects on the aquatic ecosystem (40 CFR 230.1(c)). The Guidelines also require that USACE comply with environmental review requirements under various federal laws prior to issuing (or in this case, modifying) a permit. This applies to laws such as the National Environmental Policy Act ("NEPA"), the Endangered Species Act, the National Historic Preservation Act, and the Coastal Zone Management Act. To comply with the Coastal Zone Management Act, the project will also need to comply with the State of Texas Coastal Management Plan.

Additionally, USACE will be evaluating this proposed project application within the context of Section 10 of the Rivers and Harbors Act of 1899. 33 CFR 322.3(a) cites that, for purposes of a Section 10 permit, a structure or work in or affecting a navigable water



of the United States is considered to have an impact on the navigable capacity of the waterbody.

II. Concerns of Potential Significant Environmental Effects which Warrant Analysis Prior to Permit Issuance

- a. 40 CFR 230.5(c) requires that practicable alternatives to the proposed discharge, or in this case fill, must be examined. There is no indication that any alternatives to the proposed fill locations have been examined.

- b. Locating a proposed parking lot across the highway from the main operations area of the SpaceX property may reasonably be expected to impact public use of Boca Chica Boulevard/ State Highway 4. At present, the public use of the highway has already been restricted beyond the 300 hours of closure per year as permitted by USACE in the "Addendum to the 2019 Written Re-Evaluation of the 2014 Final Environmental Impact Statement for the SpaceX Texas Launch Site."¹ In 2020, it is Surfrider's understanding that State Highway 4 was closed 1,133 hours. Altering traffic patterns could further exacerbate the public's ability to access the beach.

- c. Portions of the "Current Pad Limits" as defined in the project plans² extend beyond the SpaceX property line as delineated on the project plan maps into the State of Texas' property owned in fee title for State Highway 4. Property owned by the State of Texas is held in public trust for the benefit of Texans, not for the private use and benefit of a private corporation, and thus any

1

https://www.faa.gov/about/office_org/headquarters_offices/ast/environmental/nepa_docs/review/launch/spacex_texas_launch_site_environmental_impact_statement/media/WR_for_Increased_Closure_Hours_5_08.pdf

² https://www.swg.usace.army.mil/Portals/26/docs/regulatory/PN%20March/Plans_201200381.pdf



project activities occurring in such spaces, including fill of wetlands or destruction of salt flats, represents a significant environmental impact.

d. The development of a compensatory mitigation plan is “in progress.” Not including details of this mitigation plan in the scope of the public interest review period deprives the public of meaningful consideration as to whether or not the significant environmental effects of wetland fill have been/will be adequately mitigated.

e. In addition to the direct impacts of the proposed permit modification, given SpaceX’s history of repeated launch failures (explosions) at this site, it is reasonably foreseeable that operations and facilities expansion could facilitate further environmental degradation as a result of launch failures. Such degradation could include release of propellant in vaporized or liquid form and propelled debris, any of which could negatively impact waters of the U.S.

f. The permit must also fully comply with the Endangered Species Act and take into account potential impacts to federally listed species. The U.S. Fish and Wildlife Service (“FWS”) remains concerned about the effects of SpaceX activities on threatened and endangered species. Recent launch failures have resulted in significant spread of debris in and around refuge lands, and it is entirely possible that these activities have harmed or killed various migratory birds and other species protected under the ESA. According to the FWS, “there is documented evidence that the debris and its removal has impacted and scarred various habitats in the area, including tidal flats which are foraging habitat for the threatened piping plover and red knot.” Other species that may have been impacted, and may continue to be impacted by SpaceX activities include the ocelot, jaguarundi, and northern aplomado falcon. These concerns are magnified by the Service’s inability to access these areas and



survey any damage in a timely manner due to access restrictions. See Letter from Manuel “Sonny” Perez III and Charles Ardizzone (FWS) to Daniel P. Murray (FAA), Jan. 22, 2021.

III. Further Environmental Review Warranted

40 CFR 1502.9(d)(1) outlines the conditions under which a supplemental EIS shall be prepared. In particular, 40 CFR 1502.9(d)(1)(ii) requires a supplemental EIS when “there are significant new circumstances or information relevant to environmental concerns and bearing on the proposed action or its impacts.”

40 CFR 1502.4(a) affirmatively prohibits the practice of segmenting projects, and states that “Agencies shall evaluate in a single environmental impact statement proposals or parts of proposals that are related to each other closely enough to be, in effect, a single course of action.”

Taken on its own, this proposal to modify the existing permit would seem to warrant a supplemental EIS, as additional wetlands are proposed to be filled, and permitting such fill would facilitate expansion of SpaceX’s operating capacity, which would result in additional environmental impacts that heretofore have not been adequately analyzed and considered.

However, as an additional separate action from this requested permit modification, SpaceX has proposed to the Federal Aviation Administration (“FAA”) to construct and operate new launch facilities and conduct new launch and launch-related activities as associated with its Starship / Super Heavy Project, and has applied for a permit to do so. As outlined on the FAA project webpage, SpaceX's proposed new launch-related construction activity in the Project consists of expanding the solar farm, adding infrastructure and facilities at the VLA, a liquid natural gas pretreatment system and a



liquefier. At the VLA, SpaceX is proposing to construct a redundant launch pad and commodities, a redundant landing pad, two integration towers, tank structural test stands, and a desalination plant. The FAA conducted a scoping period on the Starship / Super Heavy Project proposal, which concluded on January 22, 2021. Surfrider submitted comments during this scoping process, which we would like to be incorporated here by reference.

Concurrently, it would seem, SpaceX is applying to USACE to modify its existing permit to accommodate facilities expansion at the VLA. Due to the lack of available information, it is unclear whether and to what extent there is redundancy between the USACE permit modification request and the Starship / Super Heavy project. Notwithstanding, it is clear that SpaceX intends to expand its operations and facilities. To avoid impermissible segmentation of the project, the entire scope of expanded operations and facilities warrants full analysis through a new Environmental Impact Statement.

In summary, due to the scope of the intended expansion plans and the potential for significant environmental effects, **Surfrider and Defenders strongly believe this proposed permit modification must be considered in the context of the proposed SpaceX Starship / Super Heavy project, for which we believe a comprehensive EIS is required** to consider the breadth of potential negative environmental impacts associated with modifying the existing permit and expanding the operations of the Vertical Launch Area. Accordingly, Surfrider and Defenders request a public hearing so that the public may better understand the scope of all proposed operations and facilities expansions being proposed by SpaceX.

Thank you again for the opportunity to comment.



Sincerely,

Stuart Diamond, Chair

Rob Nixon, Vice Chair

Surfrider Foundation South Texas Chapter

Sharon Wilcox, PhD, Texas Representative

Defenders of Wildlife Texas