



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

REGION 6

1201 ELM STREET, SUITE 500
DALLAS, TEXAS 75270-2102

October 25, 2021

Ms. Stacey Zee
Federal Aviation Administration
SpaceX PEA
c/o ICF
9300 Lee Highway
Fairfax, Virginia 22031

Dear Ms. Zee:

The Environmental Protection Agency (EPA) has reviewed the Federal Aviation Administration (FAA) Draft Programmatic Environmental Assessment (PEA) for the SpaceX Starship/Super Heavy Launch Vehicle Program at the SpaceX Boca Chica Launch Site in Cameron County, Texas. Our review is pursuant to authorities provided under the National Environmental Policy Act (NEPA), the Council on Environmental Quality (CEQ) regulations (40 CFR Parts 1500 – 1508) and Section 309 of the Clean Air Act.

The Federal Aviation Administration (FAA) is evaluating Space Exploration Technologies Corporation's (SpaceX) Starship/Super Heavy program, in particular a proposal to operate the Starship/Super Heavy launch vehicle at its *existing* Boca Chica Launch Site in Cameron County, Texas and conduct launches originating from this site. SpaceX must obtain an experimental permit and/or a vehicle operator license from the FAA to operate the Starship/Super Heavy launch vehicle. Issuing an experimental permit or a vehicle operator license is considered a major federal action under NEPA and the FAA is the lead federal agency.

EPA offers the following comments for your consideration in finalizing the NEPA process.

Wetlands/Section 404 Comments

The application of a tiered environmental review is acknowledged as not all project details may be finalized and currently ready for a decision. However, to help ensure an appropriate single and complete project evaluation, EPA recommends the documentation include all known and reasonably anticipated project information. Establishing a comprehensive project description as part of the current evaluation will help the public and commenting agencies have a better understanding of impacts associated with current and future anticipated activities associated with the Starship/Super Heavy program.

Because the Draft PEA only evaluates two alternatives, the no action alternative, and the preferred alternative, we are concerned that an appropriate and thorough evaluation of reasonably available alternatives to accomplish the stated purpose and need may be lacking.

The identified evaluation criteria appear to have been narrowly developed and limited to the selection of the existing Boca Chica project site.

EPA recommends the project analysis in the PEA evaluate other reasonable project alternatives and not be limited to one location. It should also include options for the siting and orientation of the project's related infrastructure components. For each of the alternatives, it is recommended that estimated aquatic resource, including wetland impacts be identified and considered. The expanded alternative analysis will better inform the public of the extent of the related aquatic resources impacts and allow the U.S. Army Corps of Engineers to conduct their referenced separate analysis for identifying the least environmentally damaging practicable alternative pursuant to 230.10(a) of the Clean Water Act Section 404(b)(1) Guidelines.

Indirect and Cumulative Impacts

The Draft PEA provided limited information on indirect and cumulative impacts of the proposed and reasonably anticipated project components. The documentation references potential requirements that may limit potential impacts to water quality such as Spill Prevention, Control, and Countermeasures (SPCC) Plans, Construction, and Industrial Stormwater Pollution Prevention Plans (SWPPPs), and Texas Pollutant Discharge Elimination System (TPDES) permit requirements. A thorough assessment of the indirect and cumulative impacts on functions and values of the affected environment is needed. The evaluation of impacts should take into consideration the high-quality habitat being impacted by the project such as the special aquatic sites that are unique habitats with limited distributions found within the proposed project area.

As part of the evaluation, EPA asks that FAA evaluate past site activities associated with the Falcon 9 and Falcon Heavy program at the Boca Chica site as an indicator of future impacts. The documentation references a history of launches at Cape Canaveral, Florida to support the evaluation of impacts to terrestrial habitats and wildlife. Similarly, the history of Falcon 9 and Falcon Heavy program impacts resulting from debris and anomaly recovery, impacts of existing stormwater discharges, and impacts of induced development, for the existing Boca Chica project activities should be evaluated to support the current analysis.

An evaluation of the success of existing mitigation requirements would help provide an informed understanding of net impacts of the proposed project, taking into account mitigation. A review of historic, current, and reasonably foreseeable activities associated with the entire SpaceX operation may provide a better picture of adverse impacts and other potential effects upon the project area.

Anomaly Response Plan (ARP)

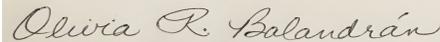
Specific to the removal of anomalies and debris, the document includes multiple references to an ARP with some details on the coordination and recovery procedures. EPA recommends the ARP be provided for review. It is unclear if anomalies are only a result of a failure or if debris requiring recovery may be generated during routine operations. Removal and restoration of anomalies/debris may result in discharges of dredged or fill

material into waters of the United States and thus would require Clean Water Act Section 404 permit authorization.

Providing the ARP details along with other proposed best management practices will help reviewers evaluate whether impacts resulting from recovery activities can adequately minimize the potential loss of biological, chemical, and physical function of impacted aquatic resources. The plan should include sufficient details related to activities to help ensure the restoration of impacted aquatic resource areas to pre-construction conditions, and it may be appropriate to include specific and meaningful success criteria monitoring requirements and adaptive management provisions.

Thank you for the opportunity to comment on the proposed action. We look forward to the receipt of the Final NEPA decision document and the responses to comments made on the Draft PEA. If you have any questions, please contact Michael Jansky of my staff at (214) 655-7451 or by e-mail at jansky.michael@epa.gov for assistance.

Sincerely,

A rectangular box containing a handwritten signature in cursive script that reads "Olivia R. Balandran".

Olivia-R Balandran
Acting Director
Office of Communities, Tribes and
Environmental Assessment