



# Lahontan Regional Water Quality Control Board

December 16, 2021 File: Environmental Doc Review Kern County

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Governor's Office of Planning & Research

Dec 16 2021

#### STATE CLEARING HOUSE

Comments on the Initial Environmental Assessment for Landing and Recovery of the Boeing Starliner Spacecraft at Edwards Air Force Base Project SCH: 2021120005

Lahontan Regional Water Quality Control Board (Water Board) staff received an Initial Environmental Assessment (IEA) for the above-referenced Project (Project) on December 2, 2021. The IEA was prepared by the United States Air Force (USAF) and submitted in compliance with provisions of the California Environmental Quality Act (CEQA). Water Board staff, acting as a responsible agency, is providing these comments to specify the scope and content of the environmental information for our statutory responsibilities pursuant to CEQA Guidelines, California Code of Regulations, title 14, section 15096. We thank USAF for providing Water Board staff the opportunity to review and comment on the IEA and for taking the initiative to develop the IEA with considerations to potential effects on water quality. The USAF asserts that the proposed project would not result in significant impacts to water resources. Water Board staff concurs with this assessment provided an emergency landing does not become catastrophic. Water Board staff notes that the IEA does not go into specifics in case of a catastrophic event. Our comments on the proposed Project, primarily related to a catastrophic event, are outlined below.

### **Project Description**

The purpose of the Project is to allow for the landing and recovery of the Boeing Starliner spacecraft and flight crew at Edwards Air Force Base (EAFB) (Rodgers Dry Lakebed) solely for emergency landing scenarios beginning in early 2022. Four other landing sites, located in Utah (1), Arizona (1), and New Mexico (2) may also be available as potential emergency landing sites. Evaluation of these additional four emergency landing sites are covered under separate IEAs.

In the event of an emergency landing at EAFB, recovery operations would occur as follows: (1) secure the spacecraft until arrival of the Boeing recovery forces; (2)

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recovering the spacecraft and jettisoned parts for shipment back to the Kennedy Space Center (KSC); and (3) repairing any damage to the lakebed if required. The landing and crew recovery would take a few hours, recovery of the spacecraft would take approximately three to four days; preparation for configuring the recovered spacecraft for shipment back to KSC would take approximately seven days; and any necessary repairs would take as long as needed.

Previous testing of the successful landings of the Starliner spacecraft proved to leave only small divots and depressions up to 3 inches deep at the White Sands Missile Range in New Mexico. Additionally, recovery operations would only leave tire tracks on the lakebed. The USAF anticipates that these features would disappear when the lakebed floods, however, USAF notes that the EAFB repair process would be utilized should repairs still be needed. All power and water, as well as sanitation capability would be brought to the site by the EAFB recovery team and removed at the end of the recovery operations. An emergency landing would not be planned should there be standing water present on the lakebed.

## Water Board's Authority

All groundwater and surface waters are considered waters of the State. All waters of the State are protected under California law. State law assigns responsibility for protection of water quality in the Lahontan Region to the Lahontan Water Board. Some waters of the State are also waters of the United States. The Federal Clean Water Act (CWA) provides additional protection for those waters of the State that are also waters of the United States.

The Water Quality Control Plan for the Lahontan Region (Basin Plan) contains policies that the Water Board uses with other laws and regulations to protect the quality of waters of the State within the Lahontan Region. The Basin Plan sets forth water quality standards for surface water and groundwater of the Region, which include designated beneficial uses as well as narrative and numerical objectives which must be maintained or attained to protect those uses. The Basin Plan can be accessed via the Water Board's web site at:

http://www.waterboards.ca.gov/lahontan/water\_issues/programs/basin\_plan/references.shtml.

#### COMMENTS ON THE ENVIRONMENTAL REVIEW

1. Although a safely executed emergency landing is unlikely to impact water quality, the IEA does not discuss an emergency landing that experiences a catastrophic event. Such an occurrence would most likely lead to a spill or spills and clean-up efforts that may impact water quality significantly (i.e., use of firefighting extinguishing foam containing poly- and perfluoroalkyl substances, fuels and other liquids contained within the space vehicle, etc.). Water Board staff requests that the USAF revise the IEA to discuss a landing that would result in a release of liquids to the environment and identify any plan(s) or standard

operating procedures the USAF would follow to facilitate recovery and clean-up. In the case of catastrophic event, Water Board staff requests that the USAF enact these plan(s) and report any spills to the Office of Emergency Services, as soon as reasonably possible, following the emergency.

2. The Project is located within the Antelope Hydrologic Unit (Hydrologic Unit No. 626.00). The beneficial uses of these waters are listed either by watershed (for surface waters) and by groundwater basin (for groundwater) in Chapter 2 of the Basin Plan. The proposed Project should identify and list the beneficial uses of all water resources within the Project area.

Thank you for the opportunity to comment on the IEA. If you have any questions regarding this letter, please contact me at (760) 241-7413, <a href="mailto:christopher.avalos@waterboards.ca.gov">christopher.avalos@waterboards.ca.gov</a> or Bill Muir, Senior Engineering Geologist, at (760) 241-3523, <a href="mailto:william.muir@waterboards.ca.gov">william.muir@waterboards.ca.gov</a> or Bill Muir, Senior Engineering Geologist, at (760) 241-3523, <a href="william.muir@waterboards.ca.gov">william.muir@waterboards.ca.gov</a> or Bill Muir, Senior Engineering Geologist, at (760) 241-3523, <a href="william.muir@waterboards.ca.gov">william.muir@waterboards.ca.gov</a> or Bill Muir, Senior Engineering Geologist, at (760) 241-3523, <a href="william.muir@waterboards.ca.gov">william.muir@waterboards.ca.gov</a> or Bill Muir, Senior Engineering Geologist, at (760) 241-3523, <a href="william.muir@waterboards.ca.gov">william.muir@waterboards.ca.gov</a>. Please send all future correspondence regarding this Project to the Water Board's email address at <a href="mailto:Lahontan@waterboards.ca.gov">Lahontan@waterboards.ca.gov</a> and be sure to include the State Clearinghouse Number and Project name in the subject line.

Christopher Avalos, P.G. Engineering Geologist

cc: State Clearinghouse: (SCH 2021120005) (state.clearinghouse@opr.ca.gov) California Department of Fish and Wildlife: (Reg4assistant@wildlife.ca.gov)