

**INITIAL STUDY/~~PROPOSED~~ MITIGATED NEGATIVE DECLARATION
OAKLAND INTERNATIONAL AIRPORT RUNWAY SAFETY AREA IMPROVEMENT PROJECT**

This Initial Study/~~Proposed~~ Mitigated Negative Declaration has been prepared pursuant to the California Environmental Quality Act (CEQA) (Public Resource Code, Section 21000 et seq.) and the CEQA Guidelines found in Chapter 14 of the California Code of Regulations.

ENVIRONMENTAL CHECKLIST FORM

Project Title: Oakland International Airport (OAK, or Airport) Runway Safety Area (RSA) Improvement Project

Lead Agency Name and Address: Port of Oakland (Port)
Environmental Programs and Planning Division
530 Water Street
Oakland, California 94607

Contact Person and Phone Number: Diane Heinze
(510) 627-1759

Responsible Agencies: San Francisco Bay Regional Water Quality Control Board, California Department of Transportation, and San Francisco Bay Conservation and Development Commission

Project Location: OAK is in the City of Oakland, with a small portion located in the City of Alameda in Alameda County, California. OAK is 2 miles west of Interstate 880 and is adjacent to San Francisco Bay. The Airport is primarily bounded by Doolittle Drive on the northeast and north, Harbor Bay Parkway on the northwest, the San Francisco Bay on the southwest, and the San Leandro Bay on the northeast.

Project Sponsor's Name and Address: Port of Oakland
Environmental Programs and Planning Division
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General Plan Designation: The project site is designated by the City of Oakland General Plan for airport uses and located within the Seaport and Airport/Gateway Showcase District, as defined by the City of Oakland General Plan.

Zoning: Port Jurisdiction – Transportation

Description of Project:

The Port is proposing to implement the OAK RSA Improvement Project which involves improving the RSAs of Runways 15-33, 9R-27L, 9L-27R, and 11-29 to enhance safety to comply with the RSA standards included in the Federal Aviation Administration Advisory Circular 150/5300-13, Airport Design, as required by PL 109-115.

Surrounding Land Uses and Settings:

The Airport is surrounded by three cities, with a mix of land uses, and San Francisco Bay waters. To the northwest, Alameda has recreational, residential, office, and light industrial uses. To the northeast, Oakland has public, recreational, office, commercial, and light industrial uses. To the southeast, San Leandro has public open space, commercial, and light and heavy industrial uses. The San Leandro and San Francisco bays surround the Airport to the north, south, and southwest.

1.0 INTRODUCTION

1.1 Purpose of this Initial Study/~~Proposed~~-Mitigated Negative Declaration

This Initial Study (IS)/~~Proposed~~-Mitigated Negative Declaration is prepared pursuant to the California Environmental Quality Act (CEQA). As provided in Section 15063 of the CEQA Guidelines, a Lead Agency shall conduct an IS to determine whether a project may have a significant effect on the environment. CEQA is a public disclosure law. The CEQA process is intended to inform the public of the potential environmental effects of government decisions, and to encourage informed decision-making by public agencies. CEQA is a statute that requires state and local agencies to identify the significant environmental impacts of their actions, and to avoid or mitigate those impacts, if feasible. The Port of Oakland (Port) is the Lead Agency, as defined under CEQA Guidelines Section 15050.

The purpose of an IS is to provide the Lead Agency with information to use as the basis for deciding whether to prepare an Environmental Impact Report (EIR) or a Negative Declaration for the Proposed Project. A Negative Declaration is a written statement by the Lead Agency that briefly describes the reason that a proposed project would not result in a significant effect on the environment, and the basis of the decision not to prepare an EIR.

This IS was prepared in accordance with CEQA, Public Resources Code Section 2100 *et seq.* and associated CEQA Guidelines, Public Resources Code Section 15000 *et seq.* The IS is an evaluation of the potential impacts associated with the Proposed Project, and describes the Port's efforts to ensure that all resource impacts are reduced to a less-than-significant level with mitigation incorporated, qualifying for a ~~Proposed~~-Mitigated Negative Declaration.

This IS provides the Port, its Board of Port Commissioners (Board), and the public with an understanding of the potential environmental impacts associated with the proposed Runway Safety Area (RSA) Improvement Project (Proposed Project).

1.2 Overview of the Proposed Project

The Proposed Project is being undertaken by the Port in response to the requirements of *The Transportation Treasury, Housing and Urban Development, the Judiciary, The District of Columbia and Independent Agencies Appropriations Act, 2006* (Public Law [PL] 109-115), November 30, 2005. PL 109-115 requires completion of RSA improvements by OAK to comply with Federal Aviation Administration (FAA) design standards by December 31, 2015. The Proposed Project includes the following improvements to enhance the level of safety provided by RSAs at the Airport to comply with PL 109-115.

Runway 15-33:

- Shift Runway 15-33 by 75 feet to the southeast, or toward the terminal complex, by repainting threshold markings on existing pavement.

Runways 9R-27L and 9L-27R:

- Relocate the vehicle service road west of both runways westward to a location adjacent to the Airport perimeter fence and Harbor Bay Parkway;
- Relocate the vehicle service road east of the runways eastward to a location adjacent to the Airport perimeter fence and Airport Drive;
- Reduce the Accelerate-Stop Distance Available (ASDA) and Landing Distance Available (LDA) from 5,454 feet to 5,336 feet by establishing declared distances. The Takeoff Run Available and Takeoff Distance Available for both Runways 9L and 27R would remain 5,454 feet, as depicted on **Figure 6**¹. Also, the ASDA and LDA for Runway 27R would be 5,454 feet;
- Fill portions of non-tidal waters of the U.S. located at the western end of the Runway 9R-27L RSA beyond the Runway 9R end to comply with FAA standards for RSAs;
- Fill and grade non-tidal wetland areas in the RSAs beyond the ends of Runways 27L and 27R to comply with FAA standards for RSAs;
- Install an Engineered Materials Arresting System² measuring approximately 250 feet long by 170 feet wide, with a setback of approximately 580 feet west of the approach end of Runway 9R³;
- Correct various non-compliant conditions regarding surface grades, soil conditions, and frangibility of signs and Navigational Aid Systems (NAVAIDS)⁴ in the lateral RSAs and the RSAs beyond the runway ends; and
- Remove unused pavement between runways. The removal of this pavement is needed to allow the placement of soil fill. The soil fill is excess material that would be cut from other parts of the North Field RSAs as part of the overall plan to achieve compliant grades throughout the RSAs; and

¹ Declared distances are defined in Chapter 1 of FAA AC 150/5300-13. They involve the designation of specific lengths of runway pavement that are available for use by pilots in planning takeoffs or landings using that runway. Declared distance designations consider the capabilities of the aircraft for safe operations; the Operations Specifications of the aircraft operator, approved by the FAA under 14 Code of Federal Regulations Part 119; or the operational standards of the aircraft operator. These designations allow remaining portions of the runway pavement to be designated as part of the RSA. See Appendix A for additional detail regarding declared distances.

² An Engineered Materials Arresting System (EMAS) is a specialized system installed in the RSA beyond the runway end, made of high-energy-absorbing materials such as crushable concrete. EMAS is designed to stop an overrunning aircraft by exerting predictable deceleration forces on its landing gear as the EMAS material crushes. It must be designed to minimize the potential for structural damage to aircraft, because such damage could result in injuries to passengers and/or affect the predictability of deceleration forces. The EMAS must have the ability to decelerate the design aircraft exiting the end of the runway at 70 knots. The runway must also provide either instrument or visual vertical guidance for approaches to the runway in the opposite direction (i.e., the direction where the EMAS installation would be at the approach end of the runway).

³ Per FAA AC 150/5220-22A, EMAS for Aircraft Operations, paragraph 7.b. and Figure A.1-1, the RSA for Runway 9R is considered standard because an EMAS installation such as for Runway 9R, which provides at least 600 feet between the runway threshold and the far end of the EMAS bed, is considered to meet FAA RSA standards if the approach end of the runway has vertical guidance.

⁴ The term Navigational Aid Systems (NAVAIDS) includes the following systems: Approach Lighting System with Sequenced Flashing Configuration 2 (ALSF-2); medium-intensity approach lighting system with runway alignment indicator lights (MALSR); Instrument Landing System (ILS) (which consists of a Localizer and Glideslope); Runway visual range (RVR); Localizer; Inner Marker; and Precision Approach Path Indicator (PAPI). The NAVAIDS systems that would not have any impacts as a result of this project are not discussed further in this document.

- Install improvements to the stormwater collection and convergence systems to ensure proper drainage of the RSAs.

Runway 11-29:

- Relocate the Runway 11 approach threshold 520 feet to the northwest;
- Displace the Runway 29 landing threshold 115 feet to the northwest;
- Extend Taxiway W to the northwest to the relocated Runway 11 approach threshold;
- Construct new connector Taxiway W1 between the extended Taxiway W and relocated Runway 11 threshold;
- Construct new connector Taxiway W4 between Taxiway W and displaced Runway 29 threshold;
- Construct new connector Taxiway W3 approximately 2,000 feet southeast of the existing threshold of Runway 11;
- Establish a declared distance of 10,000 feet for both takeoffs and landings on Runway 11-29. After construction of the RSA improvements, the future physical length of Runway 11-29 would be 10,520 feet. However, with the application of declared distances, the usable runway length for takeoffs and landings on Runway 11-29 would remain at the current length of 10,000 feet. The declared distances would designate a portion of Runway 11-29 pavement as providing standard RSAs meeting FAA design standards, while designating the remaining 10,000 feet of pavement as available for takeoff and landing operations. (Declared distances are illustrated and explained further in **Appendix A.**);
- Relocate the Runway 11 glide slope antenna,⁵ including the glide slope antenna critical area, from the northeastern side of the runway to the southwestern side, and shift it 520 feet to the northwest, in accordance with FAA design standards contained in FAA AC 150/5300-13, *Airport Design*;
- Shift the glide slope antenna for Runway 29, including the glide slope antenna critical area, by 115 feet to the northwest (no grading required);
- Fill portions of non-tidal wetlands and waters of the U.S.⁶ within the lateral and runway-end RSAs and new Runway 11 glide slope antenna critical area;
- Replace and shift the Runway 11 Medium-Intensity Approach Lighting System with runway alignment indicator lights 520 feet to the northwest;
- Relocate portions of the Runway 29 Approach Lighting System with Sequenced Flashing Configuration 2 on the existing trestle structure; and

⁵ The glide slope antenna provides vertical guidance to arriving aircraft.

⁶ "Wetlands and waters of the U.S." refers to wetlands and waters within Clean Water Act jurisdiction.

- Correct various non-compliant conditions regarding surface grades, soil conditions, and frangibility of signs and NAVAIDS within the RSA.

1.3 Document Organization

The document is divided into five sections:

- **Section 1, Introduction**, describes the purpose of this environmental document, and includes an overview of the Proposed Project and the document organization.
- **Section 2, Project Objective, Description, and Background**, provides a description of the Proposed Project, including project construction best management practices (i.e., measures that are incorporated into the project description that would reduce or avoid potential adverse impacts).
- **Section 3, Environmental Factors Potentially Affected**, evaluates the potential environmental impacts that may result from the Proposed Project.
- **Section 4, References**, lists material used in the preparation of this IS.
- **Section 5, List of Preparers**, identifies the authors of and contributors to this document.
- **Section 6, List of Acronyms and Abbreviations**, presents definitions for acronyms and abbreviations used in this IS.