

Final Environmental Impact Report (Final EIR)

[State Clearinghouse No. 2012101019]

for

Los Angeles International Airport (LAX) Runway 7L/25R Runway Safety Area (RSA) and Associated Improvements Project

(Runway Safety Area Improvements and
Pavement Reconstruction of
Portions of Runway 7L/25R, Taxiway B, and
Apron West of Air Freight Building No. 8)

Volume IV

Responses to Comments and Corrections and Additions to the Revised Draft EIR

Final Environmental Impact Report

This document (Volume IV) comprises the third and final part of the Environmental Impact Report for the Runway 7L/25R Runway Safety Area (RSA) and Associated Improvements Project and supplements the Draft EIR for the Runway 7L/25R Runway Safety Area (RSA) and Associated Improvements Project (consisting of Volumes I and II), previously circulated for public review and comment, and the Revised Draft EIR for the Runway 7L/25R Runway Safety Area (RSA) and Associated Improvements Project (consisting of Volume III), also previously circulated for public review and comment. The Runway 7L/25R Runway Safety Area (RSA) and Associated Improvements Project EIR is available for review at Los Angeles World Airports (LAWA), One World Way, Suite 218, Los Angeles, California 90045.

City of Los Angeles
Los Angeles World Airports

January 2014



This Page Intentionally Left Blank

Final Environmental Impact Report (Draft EIR)

[State Clearinghouse No. 2012101019]

for

Los Angeles International Airport (LAX) Runway 7L/25R Runway Safety Area (RSA) and Associated Improvements Project

(Runway Safety Area Improvements and
Pavement Reconstruction of
Portions of Runway 7L/25R, Taxiway B, and
Apron West of Air Freight Building No. 8)

Volume IV

Responses to Comments and Corrections and Additions to the Revised Draft EIR

Final Environmental Impact Report

This document (Volume IV) comprises the third and final part of the Environmental Impact Report for the Runway 7L/25R Runway Safety Area (RSA) and Associated Improvements Project and supplements the Draft EIR for the Runway 7L/25R Runway Safety Area (RSA) and Associated Improvements Project (consisting of Volumes I and II), previously circulated for public review and comment, and the Revised Draft EIR for the Runway 7L/25R Runway Safety Area (RSA) and Associated Improvements Project (consisting of Volume III), also previously circulated for public review and comment. The Runway 7L/25R Runway Safety Area (RSA) and Associated Improvements Project EIR is available for review at Los Angeles World Airports (LAWA), One World Way, Suite 218, Los Angeles, California 90045.

City of Los Angeles
Los Angeles World Airports

January 2014

Los Angeles World Airports (LAWA) has prepared this project-level Final Environmental Impact Report (Final EIR) for the Runway 7L/25R Runway Safety Area (RSA) and Associated Improvements Project pursuant to the California Environmental Quality Act (CEQA). The RSA improvements are being undertaken by LAWA in response to the *Transportation, Treasury, Housing and Urban Development, the Judiciary, the District of Columbia, and Independent Agencies Appropriations Act, 2006* (Public Law [P.L.] 109-115), November 30, 2005. This Act requires completion of RSA improvements by airport sponsors that hold a certificate under Title 14, Code of Federal Regulations (CFR), Part 139, *Certification and Operations: Land Airports Serving Certain Air Carriers*, to meet Federal Aviation Administration (FAA) design standards by December 31, 2015. The Runway 7L/25R Runway Safety Area (RSA) and Associated Improvements Project was the subject of an Environmental Assessment prepared in compliance with the National Environmental Policy Act (NEPA) with the FAA as the Lead Agency. The FAA issued a Finding of No Significant Impact and Record of Decision on September 5, 2013.

This Final EIR is prepared in accordance with all requirements of CEQA. This Final EIR incorporates and responds to comments received on the Draft EIR and Revised Draft EIR. LAWA, the Los Angeles Board of Airport Commissioners, and other decision-makers will use this Final EIR to inform their decisions on the Runway 7L/25R Runway Safety Area (RSA) and Associated Improvements Project, as CEQA requires. Volumes I and II of the Final EIR consist of the Draft EIR and the associated appendices, Volume III of the Final EIR consists of the Revised Draft EIR, which includes a list of the persons, organizations and agencies commenting on the Draft EIR, written responses to comments received on the Draft EIR, corrections and additions made to the Draft EIR, and a copy of comment letters received on the Draft EIR. Volume IV of the Final EIR includes a list of the persons, organizations and agencies commenting on the Draft EIR and Revised Draft EIR, written responses to comments received on the Draft EIR and Revised Draft EIR, corrections and additions made to the Revised Draft EIR, and a copy of comment letters received on the Draft EIR and Revised Draft EIR.

Table of Contents

Preface.....	1
1.0 Introduction and Executive Summary	1-1
1.1 Introduction.....	1-1
1.2 Index of Comment Letters	1-4
2.0 Comments and Responses.....	2-1
3.0 Corrections and Additions to the Runway 7L/25R Runway Safety Area (RSA) and Associated Improvements Project Revised Draft EIR.....	3-1
3.1 Introduction.....	3-1
3.2 Corrections and Additions to the Revised Draft EIR Text.....	3-1

List of Attachments

Attachment 1 Original Comment Letters on the Runway 7L/25R Runway Safety Area (RSA)
and Associated Improvements Project Draft EIR

PREFACE

This document, in conjunction with the previously prepared documents described below, constitutes the Final Environmental Impact Report (Final EIR) for the Runway 7L/25R Runway Safety Area (RSA) and Associated Improvements Project proposed at Los Angeles International Airport (LAX). As further described in the Introduction to this document, the Runway 7L/25R Runway Safety Area (RSA) and Associated Improvements Project includes: (1) Runway 7L/25R Improvements including extending the Runway 7L/25R pavement; grading and compacting the RSA; constructing a blast pad west of the Runway 7L extension; several taxiway modifications; relocating the existing Localizer Antenna and shelter to the west; replacing the existing Approach Lighting System (ALS) towers with in-pavement lights; and modifying the existing runway and taxiway lighting and markings in the newly constructed pavements; (2) Pavement Reconstruction of the eastern portions of Runway 7L/25R and Taxiway B including connecting taxiways and installation of in-pavement approach lights; and (3) Pavement reconstruction of the aircraft parking apron west of Air Freight Building No. 8, including new markings. In accordance with the California Environmental Quality Act (CEQA), the City of Los Angeles, as Lead Agency, completed an Environmental Impact Report (EIR) to address and disclose the potential environmental impacts associated with the proposed project. The City of Los Angeles circulated a Draft EIR regarding the Runway 7L/25R Runway Safety Area (RSA) and Associated Improvements Project, received public and agency comments on the Draft EIR, prepared written responses to those comments, and prepared and circulated a Revised Draft EIR for public and agency review based on those comments - all of which provides the basis for this Final EIR.

Pursuant to State *CEQA Guidelines* §15132, a final EIR consists of:

- a) The draft EIR or a revision of the draft.
- b) Comments and recommendations received on the draft EIR either verbatim or in summary.
- c) A list of persons, organizations, and public agencies commenting on the draft EIR.
- d) The responses of the Lead Agency to significant environmental points raised in the review and consultation process.
- e) Any other information added by the Lead Agency.

Accordingly, the Final EIR for the Runway 7L/25R Runway Safety Area (RSA) and Associated Improvements Project consists of three components, as follows:

Component 1: Draft EIR and Technical Appendices

Volume I - Draft EIR: Volume I of the Final EIR includes the Draft EIR-Main Document, Chapters 1 through 9, which was distributed for public review and comment from September 19, 2013 through November 4, 2013.

Preface

Volume II - Draft EIR: Volume II of the Final EIR consists of technical appendices A through F, that were developed in conjunction with the Draft EIR, which was distributed for public review and comment from September 19, 2013 through November 4, 2013.

Component 2: Revised Draft EIR

Volume III – Revised Draft EIR: The second part of the Final EIR consists of a compilation of the comments received on the Draft EIR, the written responses prepared by the City to those comments, and revised sections of the Draft EIR in response to those comments. The Revised Draft EIR document included updates to air quality (Section 4.1) and human health risk assessment (Section 4.4), indices (i.e., lists) of agencies, organizations, and individuals that commented on the Draft EIR, a copy of the comment letters on the Draft EIR, and responses to comments on the Draft EIR. The Revised Draft EIR also describes other information, such as a delineation of corrections and additions to information presented in the Draft EIR, which has been added by the City as part of the Final EIR. The information presented in the Revised Draft EIR constitutes the second component of the Final EIR.

Component 3: Responses to Comments and Corrections and Additions to the Revised Draft EIR

Volume IV – Final EIR:

The third part of the Final EIR consists of a compilation of the comments received on the Draft EIR and Revised Draft EIR, the written responses prepared by the City to those comments, indices (i.e., lists) of agencies, organizations, and individuals that commented on the Draft EIR and Revised Draft EIR, a copy of the comment letters on the Draft EIR and Revised Draft EIR in their original form (i.e., photocopies of comment letters), responses to comments on the Draft EIR and Revised Draft EIR, and corrections and additions to the Revised Draft EIR. The information presented herein constitutes the third component of the Final EIR.

All of the documents described above, comprising the Final EIR for the Runway 7L/25R Runway Safety Area (RSA) and Associated Improvements Project, are available for public review at:

LAWA Administrative Offices
One World Way, Suite 218
Los Angeles, CA 90045
Contact: Evelyn Y. Quintanilla
(424) 646-5188

The Final EIR is also available at www.ourlax.org.

1.0 INTRODUCTION AND INDEX

1.1 Introduction

In compliance with the California Environmental Quality Act (CEQA), the City of Los Angeles has completed this Environmental Impact Report (EIR) for the Runway 7L/25R Runway Safety Area (RSA) and Associated Improvements Project at Los Angeles International Airport (LAX). As described in the Preface of this document, the Final Environmental Impact Report (Final EIR) for the Bradley West Project consists of three components: Volumes I and II – Draft EIR and associated Technical Appendices for the Runway 7L/25R Runway Safety Area (RSA) and Associated Improvements Project, Volume III – Revised Draft EIR for the Runway 7L/25R Runway Safety Area (RSA) and Associated Improvements Project, and Volume IV - Responses to Comments and Corrections and Additions to the Revised Draft EIR. This document constitutes the third component of the Final EIR.

A detailed description of the Runway 7L/25R Runway Safety Area (RSA) and Associated Improvements Project is provided in Volume I of the Final EIR (see Chapter 2 in the Draft EIR-Main Document). On September 19, 2013, the City of Los Angeles published a Draft EIR for the proposed Runway 7L/25R Runway Safety Area (RSA) and Associated Improvements Project. In accordance with CEQA, the Draft EIR was circulated for public review for 45 days, with the review period closing on November 4, 2013. One public meeting was held during the comment period on October 3, 2013.

Based on comments received from the South Coast Air Quality Management District (SCAQMD) on the Draft Environmental Impact Report (EIR) for the Runway 7L/25R Runway Safety Area (RSA) and Associated Improvements Project, LAWA determined that a revised Draft EIR needed to be prepared and circulated for review prior to issuance of a Final EIR. The revised Draft EIR presented updates to the air quality (Section 4.1) and human health risk assessment (Section 4.4) analyses that were presented in the Draft EIR. On December 12, 2013, the City of Los Angeles published a Revised Draft EIR for the Runway 7L/25R Runway Safety Area (RSA) and Associated Improvements Project.

In accordance with Appendix K (Criteria for Shortened Clearinghouse Review), of the *State California Environmental Quality Act (CEQA) Guidelines*, LAWA requested a shortened Clearinghouse review period of 30 days for the Revised Draft EIR. Because the changes to the Draft EIR were in response to comments received on the Draft EIR, LAWA obtained a shortened review period in compliance with the *State CEQA Guidelines*. The Revised Draft EIR was circulated for public review for 30 days, with the review period closing on January 13, 2014.

The City of Los Angeles, through its aviation department, Los Angeles World Airports (LAWA), is proposing the Runway 7L/25R Safety Area Project and Associated Improvements at LAX. LAWA proposes to construct improvements to the Runway Safety Area (RSA) for Runway 7L/25R, and to reconstruct pavement on the eastern segments of Runway 7L/25R and Taxiway B, and the aircraft parking apron west of Air Freight Building No. 8 (collectively, the proposed Project). The RSA improvements are being undertaken by LAWA in response to the *Transportation, Treasury, Housing and Urban Development, the Judiciary, the District of Columbia, and Independent Agencies Appropriations Act, 2006* (Public Law [P.L.] 109-115),

1.0 Introduction and Index

November 30, 2005. This Act requires completion of RSA improvements by airport sponsors that hold a certificate under Title 14, Code of Federal Regulations (CFR), Part 139, *Certification and Operations: Land Airports Serving Certain Air Carriers*, to meet Federal Aviation Administration (FAA) design standards by December 31, 2015. The Runway 7L/25R Runway Safety Area (RSA) and Associated Improvements Project was the subject of an Environmental Assessment prepared in compliance with the National Environmental Policy Act (NEPA) with the FAA as the Lead Agency. The FAA issued a Finding of No Significant Impact and Record of Decision on September 5, 2013.

In accordance with State *CEQA Guidelines* §15088, the City of Los Angeles prepared responses to all comments received on the Draft EIR. As required by the State *CEQA Guidelines*, the focus of the responses to comments is on "the disposition of significant environmental issues raised." Detailed responses are not provided to comments on the merits of the proposed project or on other topics that do not relate to environmental issues.

This document, which is the third component of the Final EIR, presents the comments received during the public review period for the Draft EIR and provides written responses to those comments. A total of 3 comment letters were received during the public review period on the Draft EIR. No comment forms were submitted during the public workshop held on October 3, 2013 and no comments were received on the Revised Draft EIR. Although the comments and responses to comments on the Draft EIR were included in an appendix to the Revised Draft EIR, the comments and responses are included in this document in accordance with *CEQA Guidelines*, which state that a Final EIR consists of:

- a) The draft EIR or a revision of the draft.
- b) Comments and recommendations received on the draft EIR either verbatim or in summary.
- c) A list of persons, organizations, and public agencies commenting on the draft EIR.
- d) The responses of the Lead Agency to significant environmental points raised in the review and consultation process.
- e) Any other information added by the Lead Agency.

The index presented at the end of this chapter lists the agencies, organizations, and individuals that submitted comments on the Draft EIR. Copies of all comment letters received are provided in Attachment 1 of this document. A total of 20 individual comments resulted from such input. Chapter 2 of this document presents individual responses prepared by the City of Los Angeles relative to comments received during the review period for the Draft EIR (September 19, 2013 to November 4, 2013). As stated above, no comments were received during the review period for the Revised Draft EIR (December 12, 2013 to January 13, 2014).

The format for the responses to comments presents, on a letter-by-letter basis, each comment, which is then followed immediately by a response. The comments and responses are organized and grouped into categories based on the affiliation of the commentator. The comments are presented in the following order: State agencies and regional agencies.

An alphanumeric index system is used to identify each comment and response, and is keyed to each letter and the individual comments therein. For example, the first letter within the group of State agencies submitting comments on the Draft EIR is from the State of California Native American Heritage Commission, and the text of the letter is considered to have 3 individual comments. The subject letter was assigned the alphanumeric label "SRSA-AS00001," representing "Runway 7L-25R Runway Safety Area (RSA) Project-Agency-State-Letter No. 1."

1.0 Introduction and Index

Individual comments within the letter are labeled as SRSA-AS00001-1, SRSA-AS0001-2, etc. The same basic format and approach is used for the comment letters from regional agencies ("AR").

The following are the prefix codes used for categorizing the comment letter types:

Letter ID Prefix	Description
AS	State Agency
AR	Regional Agency

To assist the reader's review and use of the responses to comments an index is provided. The index provides the alphanumeric label number, commentor name, affiliation (i.e., name of agency or organization that the author represents), and date (if provided) of each comment letter.

Chapter 2 provides individual comments and responses, presented on a letter-by-letter basis. Each comment is typed exactly as it appears in the original comment letter. No corrections to typographical errors or other edits to the original comments were made. A copy of each original comment letter is provided in Attachment 1 of this document.

Immediately following each typed comment is a written response developed by the City of Los Angeles. In some instances, the response to a particular comment may refer to the response(s) to another comment(s) that expressed the same concern or is otherwise related. Cross-referencing of responses uses the alphanumeric index system described above. For example, a response may indicate "Please see Response to Comment BWP-AS00001-2" if that response addresses the same concern expressed in a different comment.

Together the Draft EIR, the responses to comments, and the Revised Draft EIR, along with corrections and additions to the Revised Draft EIR, constitute the Final EIR. Pursuant to CEQA, the Final EIR is not circulated for another round of comments and responses. The Final EIR is presented to the decision-makers for their use in considering the project. Interested persons may comment on the Final EIR, including these responses (which were also included in the Revised Draft EIR), in the course of the decision-making process related to the Runway 7L/25R Runway Safety Area (RSA) and Associated Improvements Project; however, the City is not required to provide responses to such comments.

1.2 Index of Comment Letters

Table 1-1

Index of Comment Letters

Letter ID	Commenter	Affiliation/Agency	Date
SRSA-AS00001	Dave Singleton	State of California, Native American Heritage Commission	September 24, 2013
SRSA-AS00002	Dianna Watson	State of California, Department of Transportation, District 7	November 1, 2013
SRSA-AR00001	Ian MacMillan	South Coast Air Quality Management District	November 8, 2013

2.0 COMMENTS AND RESPONSES

SRSA-AS00001

Singleton, Dave

State of California

9/24/2013

Native American Heritage Commission

SRSA-AS00001-1

Comment: The Native American Heritage Commission (NAHC) has reviewed the Court decision (170 Cal App 3rd 604), the court held that the NAHC has jurisdiction and special expertise, as a state agency, over affected Native American resources impacted by proposed projects, including archaeological places of religious significance to Native Americans, and to Native American burial sites.

The California Environmental Quality Act (CEQA) states that any project which includes archeological resources, is a significant effect requiring the preparation of an EIR (CEQA guidelines 15064.5(b)). To adequately comply with this provision and mitigate project-related impacts on archaeological resources, the Commission recommends the following actions be required:

Contact the appropriate Information Center for a record search to determine :If a part or all of the area of project effect (APE) has been previously surveyed for cultural places(s), The NAHC recommends that known traditional cultural resources recorded on or adjacent to the APE be listed in the draft Environmental Impact Report (DEIR).

If an additional archaeological inventory survey is required, the final stage is the preparation of a professional report detailing the findings and recommendations of the records search and field survey. We suggest that this be coordinated with the NAHC, if possible. The final report containing site forms, site significance, and mitigation measures should be submitted immediately to the planning department. All information regarding site locations, Native American human remains, and associated funerary objects should be in a separate confidential addendum, and not be made available for public disclosure pursuant to California Government Code Section 6254.10.

Response: As indicated on page 24 of Appendix E1 of the Draft EIR, a records search of the area of potential effect (APE) was received on January 20, 2012, from the SCCIC of the California Historic Resource Information System at California State University, Fullerton for the proposed Project (SCCIC File No. 12067.8789). The purpose of the record search was to ascertain whether any cultural resources had been previously identified within or adjacent to airport property and to identify any previous cultural resource investigations that may have included the current APE. The requested research included a review of ethnographic and historic

2.0 Comments and Responses

literature and maps; federal, state, and local inventories of historic properties; archaeological base maps and site records; and, survey reports on file at the SCCIC. The SCCIC also reviewed the NRHP, the California Register of Historic Resources (CRHR), the California Historic Resources Inventory (HRI), the California State Historic Landmarks, the California Points of Historical Interest, the Office of Historic Preservation Historic Property Data File, and the City of Los Angeles Historic-Cultural Monuments (LAHCM) for the records search area, which comprised the entire airport property and a quarter-mile search radius buffer.

In addition, the LAX Master Plan Final EIS/EIR (FAA and LAWA, 2005) and the Caltrans Statewide Bridge Inventory of Local Agency and State Agency Bridges for Los Angeles County were reviewed to identify any additional previously recorded cultural resources within the Airport and quarter-mile search radius not reported by the SCCIC. A quarter-mile search radius is consistent with cultural resource methods in the state, where record searches are undertaken not only to identify previously recorded resources and previous investigations in the APE, but also to attain relevant contextual and background information. In a densely developed area such as LAX, the researchers considered a quarter-mile search radius sufficient to attain the contextual and background information relevant to the identification and evaluation of cultural resources within the APE. No known traditional cultural resources have been recorded on or adjacent to the APE.

SRSA-AS00001-2

Comment: A list of appropriate Native American Contacts for consultation concerning the project site has been provided and is attached to this letter to determine if the proposed active might impinge on any cultural resources. Lack of surface evidence of archeological resources does not preclude their subsurface existence.

Response: As indicated on page 36 of Appendix E1 of the Draft EIR, consultation with the California Native American Heritage Commission (NAHC) to identify Native American Tribes that may have input or concerns that uniquely or significantly affect those Tribes related to planned and proposed airport improvements, or may have information about, or be interested in, the proposed undertaking, was coordinated by the FAA. The California NAHC responded by letter dated February 14, 2012, providing contact information for various Native American Tribes and individuals, which were subsequently contacted.

The FAA sent five letters to the following tribes and organizations: Los Angeles City/County Native American Indian Commission, Gabrielino Tongva Nation, Gabrielino Tongva Indians of California Tribal Council, Gabrielino Tongva Tribe, and the Tongva Ancestral Tribal Nation. One email indicating a response would be forthcoming was received by the FAA; however, nothing further was received.

2.0 Comments and Responses

As noted on page 3-10 of the Initial Study prepared for the Runway 7L/25R Runway Safety Area (RSA) and Associated Improvements Project (see Appendix A of the Draft EIR), LAWA recognizes that there remains potential for disturbance of unknown archaeological/cultural resources within the Project site. The Cultural Resources Evaluation Report prepared for the proposed Project (see Appendix E of the Draft EIR) did not find evidence of archaeological resources. Should disturbance or destruction of potentially significant undiscovered archaeological resources occur during excavation or grading activities, LAX Master Plan EIR commitments and mitigation measures would be implemented. These LAX Master Plan EIR commitments include:

- **LAX Master Plan Mitigation Measure MM-HA-4.** Discover: Long-term protection and proper treatment of unexpected archeological discoveries of federal, state, and/or local significance under an FAA-prepared archeological treatment plan (ATP).
- **LAX Master Plan Mitigation Measure MM-HA-5.** Monitoring: LAWA will retain a qualified project archeologist who will monitor excavation and grading activities within areas that have not been identified as containing re-deposited fill material or as having been previously disturbed. The project archeologist shall be empowered to halt construction in the immediate area if potentially significant resources are identified.
- **LAX Master Plan Mitigation Measure MM-HA-6.** Excavation and Recovery: Any excavation, testing, and recovery of identified resources shall be performed by the qualified project archeologist using techniques and requirements stipulated in the ATP.

SRSA-AS00001-3

Comment: Lead agencies should include in their mitigation plan provisions for the identification and evaluation of accidentally discovered archeological resources, pursuant to California Health & Safety Code Section 7050.5 and California Environmental Quality Act (CEQA) §15064.5(f). In areas of identified archaeological sensitivity, a certified archaeologist and a culturally affiliated Native American, with knowledge in cultural resources, should monitor all ground-disturbing activities. Also, California Public Resources Code Section 21083.2 require documentation and analysis of archaeological items that meet the standard in Section 15064.5 (a)(b)(f). Lead agencies should include in their mitigation plan provisions for the disposition of recovered artifacts, in consultation with culturally affiliated Native Americans. Lead agencies should include provisions for discovery of Native American human remains in their mitigation plan. Health and Safety Code §7050.5, CEQA §15064.5(e), and Public Resources Code §5097.98 mandates the process to be followed in the event of

2.0 Comments and Responses

an accidental discovery of any human remains in a location other than a dedicated cemetery.

Response: Please see Response to Comment SRSA-AS00001. In addition to the mitigation measures identified in Response to Comment SRSA-AS00001, as noted on page 3-10 of the Initial Study prepared for the Runway 7L/25R Runway Safety Area (RSA) and Associated Improvements Project (see Appendix A of the Draft EIR), LAWA will implement the following LAX Master Plan EIR commitments and mitigation measures.

- **LAX Master Plan Mitigation Measure MM-HA-7. Administration:** Where known resources are present, all grading and construction plans shall be clearly imprinted with all of the archeological/cultural mitigation measures. All site workers shall be informed in writing by the onsite archeologist of the restrictions regarding disturbance and removal, as well as procedures to follow, should a resource deposit be detected.
- **LAX Master Plan Mitigation Measure MM-HA 8. Archaeological/Cultural Monitor Report:** This is preparation of a report by the archeological/cultural monitor upon completion of grading and excavation activities in the vicinity of known archeological resources. The draft report will be submitted to FAA, LAWA, and City of Los Angeles Cultural Affairs Department, and a final report that addresses all comments would be issued.
- **LAX Master Plan Mitigation Measure MM-HA-9. Artifact Curation:** All artifacts, notes, photographs, and other project-related materials recovered during the monitoring program shall be curated at a facility meeting federal and state standards.
- **LAX Master Plan Mitigation Measure MM-HA-10. Archaeological Notification:** If human remains are found, all grading and activities in the vicinity would cease and the appropriate LAWA authority would be notified. LAWA would then ensure compliance with applicable procedures in the State Health and Safety Code and the Public Resources Code. In addition, steps outlined in Section 150645.5(e) of the CEQA Guidelines would be implemented.

Additionally, as noted on page 3-12 of the Initial Study prepared for the Runway 7L/25R Runway Safety Area (RSA) and Associated Improvements Project (see Appendix A of the Draft EIR), the proposed Project is not located within any known formal cemeteries and most of the proposed Project elements would not require excavation deeper than six feet. Given the settling patterns around LAX, it is unlikely that human remains would be encountered. In the event, however, that unanticipated human remains are encountered, LAWA will comply with Health and Safety Code § 7050.5 and Public Resources Code § 5097.98. Upon discovery of human remains, these statutes require LAWA to cease all excavation and disturbance of the site, to contact the coroner, to contact the Native American

2.0 Comments and Responses

Heritage Commission (NAHC), if necessary, and to provide for appropriate treatment of the remains.

SRSA-AS00002 Watson, Dianna State of California 11/1/2013
Department of Transportation, District 7

SRSA-AS00002-1

Comment: Thank you for including the California Department of Transportation (Caltrans) in the environmental review process for the above referenced project. The proposed Project would include: (1) Runway 7L/25R Improvement including extending the Runway 7L/25R pavement, grading and compacting the RSA; constructing a blast pad west of the Runway 7L extension; several taxiways modifications as necessary; relocating the existing Localizer Antenna and shelter to the west; replacing the existing Approach Lighting System (ALS) towers with in-payment lights; and modifying the existing Runway and Taxiway lighting and markings in the newly constructed pavements; (2) Pavement Reconstruction of the eastern portions of Runway 7L/25R and Taxi way B including connecting taxiways and installation of in-pavement approach lights; (3) Pavement reconstruction of the aircraft parking apron west of Air Freight Building No. 8, including new markings. The proposed Project would not result in increased or decreased aviation activity at LAX compared to existing conditions.

Response: Comment noted.

SRSA-AS00002-2

Comment: Currently, the location #71 at Imperial Highway & Sepulveda Blvd. (SR-01) is operating at Level of Service (LOS) "F" during the PM peak hours (see Table 4.7-7, Page 4.7-27 of the Draft Environmental impact Report, DEIR). On Table 4.7-2 (page 4.7-13) of the DEIR, from 15:00 to 16:00, there are estimated of 320 construction trips. Caltrans requests that construction trips be avoided during PM peak hours.

Response: In accordance with LAX Master Plan Commitments ST-12 and ST-14 described on page 4.7-31 of the Draft EIR, it is anticipated that truck delivery hours and construction employee shift hours would be scheduled to avoid the peak hours of 7:00 AM to 9:00 AM and 4:30 PM to 6:30 PM. Furthermore, as shown on Table 4.7-8 (Page 4.7-33) and Table 4.7-9 (Page 4.7-37), this intersection is not anticipated to experience any Project-related impacts during the PM construction peak hour of 3:30 PM to 4:30 PM.

2.0 Comments and Responses

SRSA-AS00002-3

Comment: Please be reminded that any work performed within the State Right-of-way will require an Encroachment Permit Caltrans. Any modifications to State facilities must meet all mandatory design standard and specifications. For information on the Permit process, please contact Caltrans District 7 Office of Permit at (213) 897-3631.

Response: Comment noted. All work associated with the Runway 7L/25R Runway Safety Area (RSA) and Associated Improvements Project would occur on LAX property. No work is anticipated within the State Right-of-way, nor are any modifications to State facilities required for the proposed Project.

SRSA-AS00002-4

Comment: Storm water run-off is a sensitive issue for Los Angeles and Ventura counties. Please be mindful that projects should be designed to discharge clean run-off water. Additionally, discharge of storm water run-off is not permitted onto State highway facilities without any storm water management plan.

Response: As noted on pages 4.5-19 and 4.5-20 of the Draft EIR, the proposed Project contains design features for the management and treatment of stormwater. The recommended treatment best management practices (BMPs) for the proposed Project include a combination of CDS units and an underground infiltration system. The recommended BMP of underground infiltration system can be installed southwest of the RSA to allow for inspection and maintenance without impacting runway operations. The existing grading is set such that there are several inlets already in place.

A CDS unit will be placed upstream of the infiltration unit. The main purpose of the CDS units will be to contain any oil spills or large debris prior to discharging to the existing outfall and prior to reaching the infiltration system and, therefore, decreasing frequency of maintenance of the infiltration system. Multiple infiltration system options are available. The proposed infiltration system options assume no percolation for maximum storage volume and conservative measures at this time until more geotechnical data is available. Final selection of a particular infiltration system requires further investigation of geotechnical conditions and stormwater quality.

In accordance with LAX Master Plan Commitments HWQ-1 described on page 4.5-21 of the Draft EIR, a detailed drainage plan for LAX was developed, which includes the area of the proposed Project.

2.0 Comments and Responses

SRSA-AS00002-5

Comment: Transportation of heavy construction equipment and/or materials, which requires the use of oversized-transport vehicles on State highways, will require a transportation permit from Caltrans. It is recommended that large size truck trips be limited to off-peak commute periods. In addition, a truck/traffic construction management plan may be needed for this project.

Response: Comment noted. In accordance with LAX Master Plan Commitment ST-12 described on page 4.7-31 of the Draft EIR, it is anticipated that truck activity will be scheduled to avoid the peak commute periods of 7:00 AM to 9:00 AM and 4:30 PM to 6:30 PM. Additionally, in accordance with LAX Master Plan Commitment ST-18, it is anticipated that a construction traffic management plan will be developed for the Project.

SRSA-AR000001

MacMillan, Ian

**South Coast Air Quality
Management District**

11/8/2013

SRSA-AR000001-1

Comment: The South Coast Air Quality Management District (SCAQMD) staff appreciates the opportunity to comment on the above-mentioned document. The Draft EIR includes quantification of air quality impacts during construction and subsequent operations of the proposed runway project. Supporting calculation and modeling files were also provided to SCAQMD staff and comments in this letter are based on a review of those files. The following comments are intended to provide guidance to the Lead Agency and should be incorporated into the Final Environmental Impact Report (Final EIR) as appropriate. We appreciate the lead agency's consideration of this late comment letter, and the willingness to discuss the project with our staff in detail.

Response: Comment noted, no response required.

SRSA-AR000001-2

Comment: The Draft EIR concludes that operational air quality impacts and potential health risks during operation of the project are less than significant. In addition, only NOx emissions were found to present a significant impact during construction, both for regional and localized impacts. However, after reviewing the supporting files it appears that not all of the emissions sources were included prior to making these impact determinations. In particular, all of the airport emissions calculated using the EDMS software were not included. Aircraft will need to be re-routed onsite during construction as one of the runways will be temporarily closed. This

2.0 Comments and Responses

re-routing activity was calculated in the supporting files provided to SCAQMD staff, but not presented in the Draft EIR. Because these emissions represent the majority of emissions from the project, they should be included prior to determining air quality impacts. The Final EIR should therefore be revised to include these emissions.

Response: As noted by the commenter, a dispersion analysis was conducted to determine the effect of re-routing aircraft during Project construction, which requires closure of Runway 7L/25R for a period of 110 days. However, these emissions were inadvertently left out of the results presented in the Draft EIR. Inclusion of these emissions results in exceedances of the CO and VOC SCAQMD thresholds in addition to the exceedance of the NO_x SCAQMD threshold reported in the Draft EIR. These exceedances are primarily caused by the rerouting of aircraft during the approximate 3-month runway closure which would result in increased taxi times. There are no feasible mitigation measures that would reduce emissions below the level of significance, thus, these temporary impacts during construction would be significant and unavoidable. See revised tables below.

Table 4.1-11

2015 Aircraft Operations Emissions (lbs/day)

Pollutant	No Project	Runway Closure	Incremental Difference
CO	16,247	17,797	1,550
VOC	2,466	2,641	174
NO _x	18,888	19,184	296
SO ₂	1,854	1,945	91
PM ₁₀	205	213	8
PM _{2.5}	205	213	8

Source: Ricondo & Associates, Inc., 2013.

2.0 Comments and Responses

Table 4.1-12

2015 Peak Construction Emissions (lbs/day)

Pollutant	Incremental Aircraft Operations	Construction Equipment	Construction Total	SCAQMD Threshold	Above Threshold?
CO	1,550	529	2,079	550	Yes
VOC	174	39	213	75	Yes
NO _x	296	190	486	100	Yes
SO ₂	91	2	93	150	No
PM ₁₀	8	52	60	150	No
PM _{2.5}	8	11	19	55	No

Source: Ricondo & Associates, Inc., 2013.

The health risks assessment also inadvertently omitted the emissions associated with the reroute of aircraft during the approximate 3-month closure of Runway 7L/25R. The updated results are presented below in Tables 4-4.5, 4-4.6, and 4-4.7. The updated results indicate an exceedance of the maximum incremental acute non-cancer hazard index for acrolein. Emissions of acrolein are related to taxiing of aircraft; the exceedance of the maximum incremental acute non-cancer hazard index for acrolein would be primarily caused by the rerouting of aircraft during the approximate 3-month runway closure. There are no feasible mitigation measures that would reduce these toxic air contaminant emissions below the level of significance; thus, these temporary impacts during construction would be significant and unavoidable.

2.0 Comments and Responses

Table 4-4.5

Comparison of CalOSHA Permissible Exposure Limits to
Maximum Estimated 8-Hour On-Site Air Concentrations

Toxic Air Contaminant ^a	Controlled Project Concentrations (mg/m ³) ^b	CalOSHA PEL TWA (mg/m ³) ^c
Acetaldehyde	0.001042	45
Acrolein	0.000000	0.25
Benzene	0.000283	0.32
1,3-Butadiene	0.000027	2.2
Ethylbenzene	0.000043	435
Formaldehyde	0.002084	0.37
Hexane, n-	0.000022	180
Methanol	0.000004	260
Methyl ethyl ketone	0.000209	590
Naphthalene	0.000012	50
Propylene	0.000368	N/A
Styrene	0.000008	215
Toluene	0.000209	37
Xylene (total)	0.000147	435
Diesel PM	0.001517	N/A
Arsenic	0.000001	0.01
Cadmium	0.000006	0.005
Chlorine	0.000052	1.5
Chromium (VI)	0.000000	0.005
Copper	0.000004	1
Lead	0.000006	0.05
Manganese	0.000006	0.2
Mercury	0.000005	0.025
Nickel	0.000003	0.5

2.0 Comments and Responses

Table 4-4.5

**Comparison of CalOSHA Permissible Exposure Limits to
Maximum Estimated 8-Hour On-Site Air Concentrations**

Selenium	0.000002	0.2
Silicon	0.000377	6
Sulfates	0.002644	N/A
Vanadium	0.000004	0.05

Notes:

^a All TACs for which PEL-TWAs are available are listed. PEL-TWAs are not available for diesel exhaust, propylene, and sulfates.

^b Maximum 1-hour concentrations at on-airport location converted to 8-hour averages by multiplying by a factor of 0.7.

^c California Occupational Safety and Health Administration. Permissible Exposure Limits for Chemical Contaminants, Table AC-1, 2008, http://www.dir.ca.gov/title8/5155table_ac1.html.

Source: Ricondo & Associates, Inc., 2013.

Table 4-4.6

**Maximum Incremental Cancer and Chronic Non-Cancer Hazards Risk
for MEIs During Construction**

Receptor Type	Incremental Cancer Risk^a (per million people)	Significance Threshold (per million people)	Significant?
Child Resident	0.003	10	No
School Child	0.001	10	No
Adult Resident	0.04	10	No
Offsite Workers	0.19	10	No

Receptor Type	Incremental Chronic Non-Cancer Hazards Risk	Significance Threshold	Significant?
Child Resident	0.002	1	No
School Child	0.0003	1	No
Adult Resident	0.002	1	No
Offsite Workers	0.006	1	No

Notes:

^a Values provided are the maximum number of cancer cases per million people exposed.

Source: Ricondo & Associates, Inc., 2013.

2.0 Comments and Responses

Table 4-4.7

Maximum Incremental Acute Non-Cancer Hazard Indices During Construction

Pollutant	Acrolein	Formaldehyde
Residential		
Maximum HI ¹	3.27 ²	0.75
Minimum HI	-0.17	-0.04
Average HI	0.58	0.13
School		
Maximum HI	1.87	0.43
Minimum HI	-0.24	-0.06
Average HI	0.69	0.16
Offsite Worker		
Maximum HI	2.02	0.47
Minimum HI	-0.90	-0.21
Average HI	0.26	0.06
Recreational		
Maximum HI	0.55	0.13
Minimum HI	-0.52	-0.12
Average HI	0.06	0.01
Overall Off-Airport		
Maximum HI	3.27	0.75
On-Site Occupational		
Maximum HI	0.79	0.23

Notes:

¹ HI = Hazard Index

² **Bold** HIs are greater than the significance threshold of 1.

Source: Ricondo & Associates, Inc., 2013.

2.0 Comments and Responses

SRSA-AR00001-3

Comment: In the event that the lead agency determines that the revised analysis results in additional air quality impacts, the Lead Agency should consider providing additional mitigation measures pursuant to Section 15126.4 of the California Environmental Quality Act (CEQA) Guidelines.

Response: LAWA, as the lead agency, is including the mitigation measures identified by the SCAQMD for this Project. Because most of the construction emissions associated with the proposed Project are directly related to the rerouting of aircraft during the approximate 3-month closure period of Runway 7L/25R, there are few feasible mitigation measures that LAWA can implement to reduce the significance of those impacts below significance thresholds. Notwithstanding, LAWA has agreed to implement all of the mitigation measures identified by the commenter. See Response to Comment SRSA-AR00001-7.

SRSA-AR00001-4

Comment: Pursuant to Public Resources Code Section 21092.5, please provide the SCAQMD with written responses to all comments contained herein prior to the adoption of the Final EIR. Further, staff is available to work with the Lead Agency to address these issues and any other questions that may arise.

Response: Written responses to SCAQMD comments are being provided as part of the revised Draft EIR.

SRSA-AR00001-5

Comment: The air quality analysis concludes that regional construction emissions for all pollutants except NO_x from the proposed project will result in less than significant air quality impacts, however, the emission calculations that support this conclusion are not clearly presented in the Draft EIR. Specifically, it appears that the regional construction emissions analysis does not include the potential increase of emissions from aircraft operations (i.e., emissions resulting from additional taxiing time) during construction of the proposed project. Based on Table 4-1 (Assumed Taxi Times During Runway Closure) the lead agency determined that the proposed project will result in additional taxiing times during project construction. However, it does not appear that the lead agency included these emissions impacts that were quantified using the Federal Aviation Administration's (FAA's) Emissions and Dispersion Modeling System (EDMS) software. Therefore, the SCAQMD staff recommends that the Lead Agency modify the air quality analysis to include any additional emissions from aircraft operations during construction of the proposed project.

2.0 Comments and Responses

Response: See Response to Comment SRSA-AR00001-2. The analysis has been modified as requested by the commenter.

SRSA-AR00001-6

Comment: The Draft EIR includes a Health Risk Assessment (HRA) that evaluates potential risks from construction activities. The HRA concludes that all health risks would be less than significant. SCAQMD staff is unable to verify if the determination of a less than significant impact may be valid. The very low non-carcinogenic results (HI <0.01) are surprising given that the recently approved Specific Plan Amendment Study determined that short term toxic impacts (primarily from jet engines) would exceed SCAQMD thresholds. The cause of this impact in the SPAS EIR was due to northward relocation of the runway and increased activity along it. Although this project does not include relocation of the northern runway, the activity level of individual runways will increase substantially during construction as a result of the closed runway. It is reasonable to infer that the health risks would therefore increase substantially with the increase in activity.

Upon review of the HRA, it appears that emissions from re-routing activity at the airport (as calculated with EDMS) were not included in the health risk assessment. The Final EIR should include the potential health risks from emissions calculated by EDMS, especially including acute toxic impacts (e.g., from acrolein and formaldehyde).

Response: See Response to Comment SRSA-AR00001-2. The Final EIR includes the updated analysis requested by the commenter.

SRSA-AR00001-7

Comment: In the event that the lead agency determines that the revised analysis results in additional air quality impacts the SCAQMD staff recommends that the Lead Agency provide additional mitigation measures pursuant to Section 15126.4 of the California Environmental Quality Act (CEQA) Guidelines. Tier 4-final construction equipment is already assumed for the majority of vehicles used for this project, however some vehicles are assumed to only use tier 4-interim engines. The lead agency should investigate if additional tier 4-final equipment is available. In addition, haul trucks are assumed to meet 2007 emission standards. 2010 truck emission standards would provide an approximately 60% reduction in NOx emissions from this source based on values presented in the Draft EIR calculation sheets. The lead agency should consider only using trucks meeting 2010 emissions standards.

Response: LAWA, as the lead agency, has agreed to implement the additional mitigation measures suggested by the commenter. LAWA will include in bid documents for this Project language specifying that contractors should use equipment on the

2.0 Comments and Responses

Project that meets the most stringent emission requirements. In the event that the contractor can demonstrate that equipment is not available within 200 miles of LAX that meets the most stringent emission requirements, they will be able to utilize equipment that meets the next lowest requirements (e.g., if Tier 4 final equipment is not available, they would be permitted to use Tier 4 interim equipment). For purposes of disclosure, LAWA will keep the equipment mix specified in the Draft EIR, but will require contractors to use equipment that meets stricter standards if available.

SRSA-AR00001-8

Comment: It is unclear how the Draft EIR treats the CEQA baseline for determining air quality impacts from this project. For example, Table 4.1-14 uses a traditional 'existing conditions' baseline, while Table 4.1-15 uses a future year 2015 baseline. While utilizing both baselines may be appropriate for this infrastructure project, the Final EIR should include additional explanation of the choice of baseline for determining impacts. This discussion should also apply to any modifications to the construction period impacts based on comments above.

Response: The proposed Project would not affect the number or type of aircraft operations at the airport, nor would it change flight paths. However, it would result in a slight increase of average taxi time per operation of 0.01 minutes. This change in taxi time was assessed against both baseline (2011) conditions and the future (2015) Without Project condition. Table 4.1-14 in the Draft EIR (Table 4.1-15 in the revised Draft EIR) compares the 2011 With Project and 2011 Without Project conditions while Table 4.1-15 in the Draft EIR (Table 4.1-16 in the revised Draft EIR) compares the 2015 With Project and the 2015 Without Project conditions. Implementation of the proposed Project would not cause any exceedance of the CAAQS, whether compared to the baseline (2011) or future (2015) Without Project conditions. The growth and number of operations at LAX are completely independent of the proposed Project; thus, a comparison of baseline (2011) with future (2015) conditions is not valid. Aircraft operations in future years will be the same regardless of whether the proposed Project is implemented or not.

Construction effects were assessed by calculating the emissions associated with construction equipment and the emissions associated with the rerouting of aircraft during the temporary closure of Runway 7L/25R during construction. The emissions associated with the rerouting of aircraft during the temporary closure of Runway 7L/25R during construction were estimated by calculating the emissions associated with the Without Project condition in 2015 and then calculating emissions for the airport assuming closure of Runway 7L/25R and rerouting of aircraft to other runways in 2015. This analysis conservatively assumed that the runway closure would occur entirely in 2015. The emissions associated with the 2015 Without Project condition were then subtracted from the

2.0 Comments and Responses

2015 runway closure scenario to determine the emissions attributable to the closure of Runway 7L/25R. These emissions should have been included in Section 4.1.6.1, *Construction Emissions*, but were inadvertently left out. See Response to Comment SRSA-AR00001-2.

SRSA-AR00001-9

Comment: The text of the Draft EIR indicates that Table 4.1-14 presents the incremental air quality impact from operating the project by comparing 2015 project emissions against 2011 emissions. However, from the raw EDMS output files provided to SCAQMD, it appears that there may be some errors in this table. For example, the table shows 1 lb/day of NO_x, yet the EDMS outputs indicate that the difference between 2011 and 2015 emissions is 1,785 pounds per day. This emission difference is above SCAQMD's significance threshold and represents a substantial increase in emissions. It is not clear however that the scenario modeled for 2011 is equivalent to the scenario modeled for 2015. The Final EIR should explain this discrepancy, and clarify the operational air quality impacts.

Response: See response to Comment SRSA-AR00001-8 above, regarding the appropriate baseline and Project impacts. Table 4.1-14 in the Draft EIR (Table 4.1-15 in the revised Draft EIR) compares the 2011 Without Project and 2011 With Project conditions. The proposed Project would not affect the number or type of aircraft operations at the airport, nor would it change flight paths. However, it would result in a slight increase of average taxi time per operation of 0.01 minutes. This change in taxi time was assessed against both baseline (2011) (Table 4.1-14 in the Draft EIR; Table 4.1-15 in the revised Draft EIR) and the future (2015) Without Project condition (Table 4.1-15 in the Draft EIR; Table 4.1-16 in the revised Draft EIR).

SRSA-AR00001-10

Comment: Similar to the comment above, Table 4.1-15 shows 1 lb/day of NO_x when comparing 2015 project and no-project emissions. The EDMS output files show a difference of approximately 12 lb/day. The 2015 project and no-project scenarios do not appear to be different in the same way that the 2011 scenario is different. This discrepancy should also be clarified in the Final EIR.

Response: The EDMS output files submitted to SCAQMD for the 2015 With Project scenario contained the emissions as a result of dynamic sequencing through the FAA's EDMS program. Dynamic sequencing is an automated function of EDMS to route aircraft around the airfield, as necessary for dispersion. As a result, these emissions vary slightly from the regional construction emissions presented in the inventory. However, the regional construction inventory values, presented in Table 4.1-11 of the Draft EIR, more accurately reflect anticipated construction

2.0 Comments and Responses

emissions and were used to compute the incremental differences for all pollutants between the 2015 With Project and the 2015 Without Project scenarios.

SRSA-AR00001-11

Comment: The dispersion modeling conducted to determine localized NO₂ impacts utilized a default in-stack NO_x ratio of 0.1. EPA recommends using a ratio of 0.5 in the absence of source-specific information.¹

Response: As SCAQMD correctly points out, EPA recommends using a default in-stack NO_x ratio of 0.5 in the absence of source-specific information. The National Aeronautics and Space Administration (NASA) has conducted a series of experiments measuring the components of aircraft exhaust including nitrogen oxide measurements. As part of these experiments, Aerodyne Research, under a grant from the University of Missouri-Rolla Center of Excellence for Aerospace Particulate Emissions Reduction Research (NASA Cooperative Agreement), compiled measurements of nitric oxide, nitrogen dioxide, and nitrous acid in aircraft engine exhausts.² The measurements were performed on a variety of engine types, power levels, and sampling distances. This research showed that at low power levels (power levels associated with idling or taxiing), approximately 80 percent of the total NO_x emissions from aircraft engines were NO₂. However, at high power levels (power levels associated with takeoff), the percentage of NO₂ emissions decreases to 7 percent.

Additional research conducted by Aerodyne Research (supported by NASA Cooperative Agreement NCC3-1084, a PARTNER³ Grant, and the California Air Resources Board via the University of Missouri-Rolla Center of Excellence), showed that the NO₂ fraction of NO_x decreases with power, from over 98 percent at the lowest power setting (4 percent rated thrust or taxi/idle) to under 10 percent at higher power settings (65 to 100 percent rated thrust or climbout and takeoff).⁴ For one specific engine type, the research found a total calculated NO_x

¹ See page 5 of the memo available at this link: http://www.epa.gov/scram001/guidance/clarification/Additional_Clarifications_AppendixW_Hourly-NO2-NAAQS_FINAL_03-01-2011.pdf

² Wormhoudt, Joda, Scott Herndon, Paul Yelvington, Richard Miake-Lye, and Changlie Wey. Nitrogen Oxide (NO/NO₂/HONO) Emissions Measurements in Aircraft Exhausts, *Journal of Propulsion and Power* 23, no. 5 (2007): 906-11.

³ The Partnership for Air Transportation Noise and Emissions Reduction (PARTNER) is an aviation cooperative research organization funded by the FAA, NASA, Transport Canada, the U.S. Department of Defense, and the U.S. Environmental Protection Agency.

⁴ Wood, Ezra, Scott Herndon, Michael Timko, Paul Yelvington, and Richard Miake-Lye. Speciation and Chemical Evolution of Nitrogen Oxides in Aircraft Exhaust Near Airports, *Environmental Science & Technology*, 2008, 42, 1884-1891.

2.0 Comments and Responses

emission of 3.3 kg per engine per landing-takeoff (LTO) cycle, of which 0.8 kg was emitted in the form of NO₂, or 24 percent per LTO cycle.

LAWA also reviewed other EIRs conducted at different airports in California to determine the stacking ratio utilized for different projects. A stacking ratio of 0.1 has been used on all projects at LAX, and on projects at San Francisco International Airport, Sacramento Mather Airport, and Oakland International Airport. A project at San Diego International Airport used a measured value of 0.2070.

For the proposed Project, the shift in runway use during the 110-day closure and the proximity of fence-line receptors to the runway ends results in a noticeable increase in NO_x emissions at northeastern and eastern portions of the airport when compared to the Without Project Scenario. The top 10 percent of receptors with the highest modeled NO_x concentrations are shown in Figure 1. At these locations, NO_x emissions associated with aircraft takeoffs (highest power settings) represent between 59 and 100 percent of the total NO_x emissions modeled (see Table 1 below). Other phases of the LTO cycle contribute between 0 and 38 percent of the total NO_x emissions.

Table 1

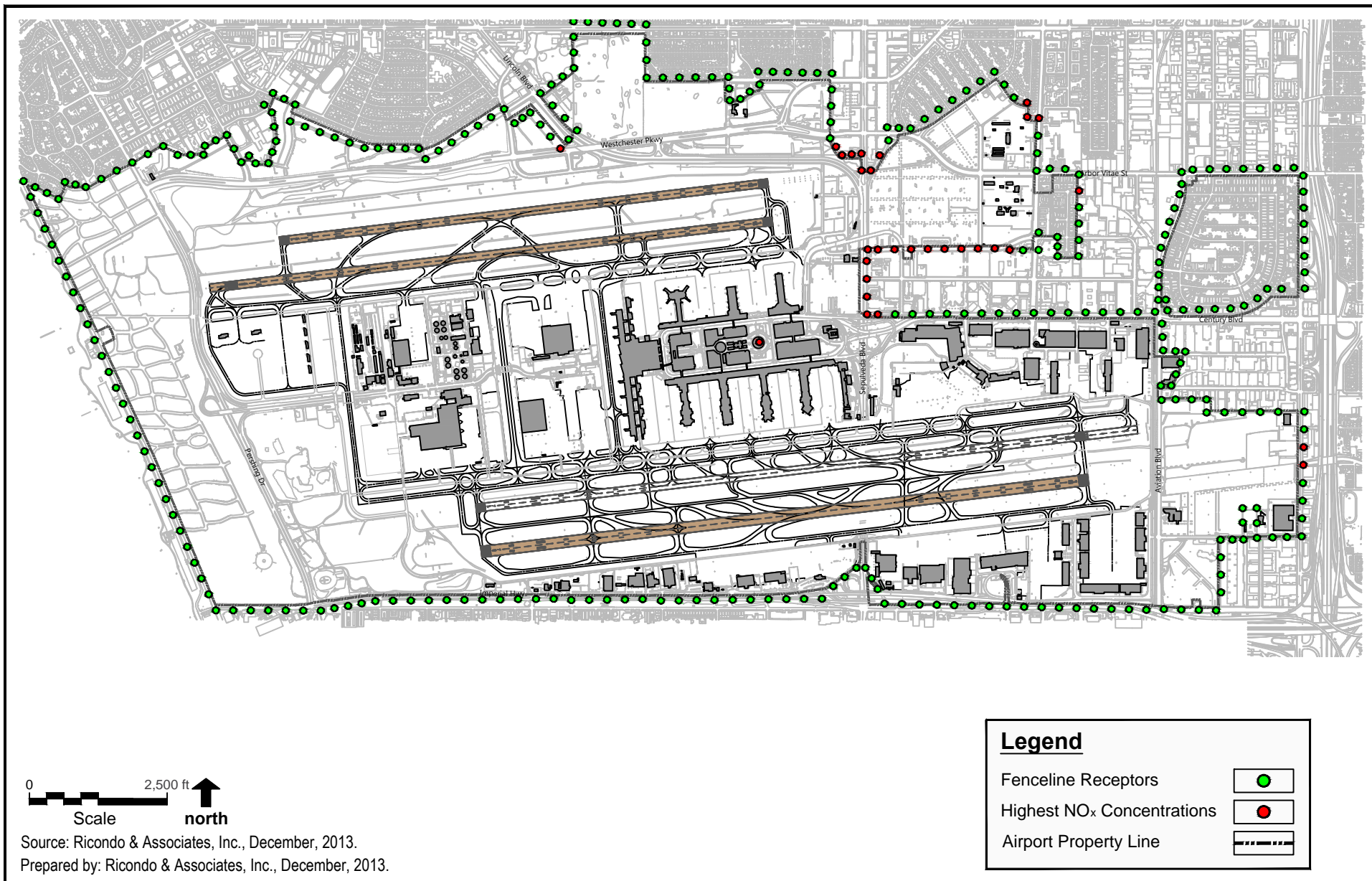
Percent NO_x Emissions by Source Type for Receptors with Highest NO_x Concentrations

	Approach	Landing	Takeoff	Taxi/Idle
Maximum	3%	6%	100%	38%
Minimum	0%	0%	59%	0%
Average	2%	2%	88%	9%

Source: Ricondo & Associates, Inc., December 2013.

In order to determine a source-specific NO_x to NO₂ stacking ratio, an aggregated weighted stacking ratio was computed using the following assumptions:

- Separate stacking ratios by LTO phase (based on research above):
 - Approach: 0.16 NO₂ to NO_x
 - Takeoff: 0.07 NO₂ to NO_x
 - Taxi/idle: 0.80 NO₂ to NO_x
- The average percent of each LTO phase (from Table 1)



**Runway 7L/25R RSA and Associated
Improvements Project Draft EIR**

Highest NO_x Emissions

Figure
1

2.0 Comments and Responses

This Page Intentionally Left Blank

2.0 Comments and Responses

An average of 88 percent of the NO_x emissions at the receptors with the highest NO₂ concentrations is associated with the aircraft takeoff portion of flight. Using the above assumptions, a weighted average stacking ratio of 0.135 was computed. Therefore, LAWA has concluded that a stack ratio of 0.135 is appropriate for aircraft operations and used this ratio in the revised analysis.

SRSA-AR00001-12

Comment: The dispersion modeling used only one year of meteorological data (met data) to determine air quality impacts. SCAQMD provides 5 years of met data on its website⁵ as this is the recommended duration based on EPA guidance. The Draft EIR indicates that a screening analysis determined the worst case year from this 5 year period. It is not clear from reading the Draft EIR how this single year was chosen. It appears that the screening analysis did not consider different averaging periods or the inclusion of ambient ozone data. The Final EIR should discuss if the screening analysis took these parameters into account. If the screening analysis does not include consideration of how the 'worst case' impacts may change based on different averaging periods or chemistries, then the full 5-year data set should be used.

Response: The screening analysis identified the worst-case year for emissions based on determining the worst-year for NO_x emissions (2005). Ambient ozone data for 2005 was then utilized in the modeling runs. Based on the comment from SCAQMD, the full 5-year data set was run and the results incorporated into the revised tables presented below.

⁵ <http://www.aqmd.gov/smog/metdata/MeteorologicalData.html>

2.0 Comments and Responses

Table 4.1-12

Peak Construction Concentrations for CO, NO₂, and SO₂ Pollutants

Pollutant	Averaging Period	Project (ppm)	Background (ppm)	Total (ppm)	Threshold (ppm)	Significant?
CO	CAAQS 1-Hour	1.4	3	4	20	No
	CAAQS/ NAAQS 8-Hour	0.33	2.19	3	9	No
NO ₂	CAAQS 1-Hour	0.115	0.098	0.213	0.18	Yes
	CAAQS Annual	0.003	0.014	0.017	0.030	No
	NAAQS 1-Hour	0.018	0.065	0.083	0.100	No
	SO ₂					
SO ₂	CAAQS 1-Hour	0.051	0.012	0.063	0.25	No
	CAAQS 24-Hour	0.004	0.006	0.01	0.04	No
	NAAQS 1-Hour	0.032	0.008	0.040	0.075	No

Source: URS Corporation and Ricondo and Associates, Inc., December 2013.

Table 4.1-13

Peak Construction Concentration of PM₁₀ and PM_{2.5}

Pollutant	Averaging Period	Project (µg/m ³)	Threshold (µg/m ³)	Significant?
PM ₁₀	24-Hour	2.3	10.4	No
	Annual	0.3	1.0	No
PM _{2.5}	24-Hour	2.3	10.4	No
	Annual	0.3	1.0	No

Source: URS Corporation and Ricondo and Associates, Inc., December 2013.

3.0 CORRECTIONS AND ADDITIONS TO THE RUNWAY 7L/25R RUNWAY SAFETY AREA (RSA) AND ASSOCIATED IMPROVEMENTS PROJECT REVISED DRAFT EIR

3.1 Introduction

As a result of clarifications to the Revised Draft Environmental Impact Report (Revised Draft EIR) for the Runway 7L/25R Runway Safety Area (RSA) and Associated Improvements Project, the following revisions are hereby made to the text of the Runway 7L/25R Runway Safety Area (RSA) and Associated Improvements Project Revised Draft EIR. Changes in text are signified by ~~strike throughs~~ where text is removed and by underline where text is added, unless otherwise noted. These changes do not add significant new information to the EIR, nor do they disclose or suggest new or more severe significant environmental impacts of the Runway 7L/25R Runway Safety Area (RSA) and Associated Improvements Project.

3.2 Corrections and Additions to the Revised Draft EIR Text

Chapter 4.1, Air Quality

Pages 4.1-41 through 4.1-43 in Section 4.1.8, *Mitigation Measures*, are revised as shown on the following pages. The following summarizes the changes to the proposed mitigation measures:

1. Modification of Equipment Search Area Radius from 200 miles to 120 miles to limit search requirements for construction equipment to U.S. states.
2. Tier 3 and Tier 4 off-road engine requirements changes at the end of 2014, which creates contracting and enforcement problems if the contractor is required to locate and swap-out equipment with Tier 4 engines “mid-stream” in the construction program.
3. Exemption for maximum number of days for equipment operations has been increased from 10 days to 20 days in order to be consistent with relevant Community Benefits Agreement requirements.
4. Added acknowledgement that the application of DECS (emission control retrofits) is subject to OSHA safety standards (i.e., cannot require a “bolt-on” DECS that hinders the visibility of equipment operator or otherwise presents a potential safety hazard).

3.0 Corrections and Additions to Revised Draft EIR

- Measure 2o: ~~Prior to January 1, 2015, a~~All off-road diesel-powered construction equipment greater than 50 horsepower shall meet at a minimum, USEPA Tier 3 off-road emission standards. ~~After December 31, 2014, all off-road diesel power construction equipment greater than 50 horsepower shall meet USEPA Tier 4(final) off-road emissions standards. Tier 4(final) equipment shall be considered based on availability at the time the construction bid is issued. In addition, all off-road diesel-powered construction equipment greater than 50 hp with engines meeting USEPA Tier 3 off-road emission standards shall be retrofitted with a CARB-verified Level 3 Diesel Emissions Control Strategies (DECS). Any emissions control device used by the Contractor shall achieve emissions reductions that are no less than what could be achieved by a Level 3 diesel emissions control strategy for a similarly sized engine as defined by CARB regulations. In the event the Contractor is using off-road diesel-powered construction equipment with engines meeting USEPA Tier 4 off-road emission standards and is already supplied with a factory-equipped diesel particulate filter, no retrofitting with DECS is required.~~ Contractor requirements to utilize Tier ~~34(final)~~ equipment or next cleanest equipment available will be subject to the provisions of LAWA Air Quality Control Measure 2p below. LAWA will encourage construction contractors to apply for SCAQMD "SOON" funds to accelerate clean-up of off-road diesel engine emissions.
- Measure 2p: The on-road haul truck and off-road construction equipment requirements set forth in Air Quality Control Measures 2n and 2o above shall apply unless any of the following circumstances exist and the Contractor provides a written finding consistent with project contract requirements that:
 - The Contractor does not have the required types of on-road haul trucks or off-road construction equipment within its current available inventory and intends to meet the requirements of the Measures 2n and 2o as to a particular vehicle or piece of equipment by leasing or short-term rental, and the Contractor has attempted in good faith and due diligence to lease the vehicle or equipment that would comply with these measures, but that vehicle or equipment is not available for lease or short-term rental within 200-120 miles of the project site, and the Contractor has submitted documentation to LAWA showing that the requirements of this exception provision (Measure 2p) apply.
 - The Contractor has been awarded funding by SCAQMD or another agency that would provide some or all of the cost to retrofit, repower, or purchase a piece of equipment or vehicle, but the funding has not yet been provided due to circumstances beyond the Contractor's control, and the Contractor has attempted in good faith and due diligence to lease or short-term rent the equipment or vehicle that would comply with Measures 2n and 2o, but that equipment or vehicle is not available for lease or short-term rental within 200-120 miles of the project site, and the Contractor has submitted documentation to LAWA showing that the requirements of this exception provision (Measure 2p) apply.
 - Contractor has ordered a piece of equipment or vehicle to be used on the construction project in compliance with Measures 2n and 2o at least 60 days before that equipment or vehicle is needed at the project site, but that equipment or vehicle has not yet arrived due to circumstances beyond the Contractor's control, and the Contractor has attempted in good faith and due diligence to lease or short-term rent a piece of equipment or vehicle to meet the requirements of Measures 2n and 2o, but that equipment or vehicle is not available for lease or short-term rental within 200-120 miles of the project, and the Contractor has

3.0 Corrections and Revisions to Revised Draft EIR

submitted documentation to LAWA showing that the requirements of this exception provision (Measure 2p) apply.

- Construction-related diesel equipment or vehicle will be used on the project site for fewer than ~~40-20~~ calendar days per calendar year. The Contractor shall not consecutively use different equipment or vehicles that perform the same or a substantially similar function in an attempt to use this exception (Measure 2p) to circumvent the intent of Measures 2n and 2o.

In any of the situations described above, the Contractor shall provide the next cleanest piece of equipment or vehicle as provided by the step down schedules in **Table 4.1-18** for Off-Road Equipment and **Table 4.1-19** for On-Road Equipment.

Table 4.1-18

Off-Road Vehicle Compliance Step-Down Schedule

Compliance Alternative	Engine Standard	CARB-verified DECS (VDECS)
1	Tier 4 interim	N/A*
2	Tier 4	N/A*
3	Tier 3	Level 3
41	Tier 2	Level 3
52	Tier 1	Level 3
63	Tier 2	Level 2
74	Tier 2	Level 1
85	Tier 2	Uncontrolled
96	Tier 1	Level 2

Notes:

Equipment less than Tier 1, Level 2 shall not be permitted.

~~* Tier 4 (interim or final) or 2007 model year equipment not already supplied with a factory-equipped diesel particulate filter shall be outfitted with Level 3 VDECS.~~

Source: CDM Smith, ~~November 2013~~ January 2014.

Table 4.1-19

On-Road Vehicle Compliance Step-Down Schedule

Compliance Alternative	Engine Model Year	CARB-verified DECS (VDECS)
------------------------	-------------------	----------------------------

3.0 Corrections and Additions to Revised Draft EIR

Table 4.1-19

On-Road Vehicle Compliance Step-Down Schedule

1	2007	N/A*
2	2004	Level 3
3	1998	Level 3
4	2004	Uncontrolled
5	1998	Uncontrolled

Notes:

Equipment with a model year earlier than model year 1998 shall not be permitted.

* ~~Tier 4 (interim or final) or~~ 2007 model year equipment not already supplied with a factory-equipped diesel particulate filter shall be outfitted with Level 3 VDECS.

Nothing in the above measures shall require an emissions control device (i.e., VDECS) that does not meet OSHA standards.

Source: CDM Smith, ~~November 2013~~ January 2014.

Attachment 1

**Original Comment Letters on the Runway 7L/25R Runway
Safety Area (RSA) and Associated Improvements Project
Draft EIR**

NATIVE AMERICAN HERITAGE COMMISSION

1550 Harbor Boulevard
West Sacramento, CA 95691
(916) 373-3715
(916) 373-5471 – FAX
e-mail: ds_nahc@pacbell.net

Data Received:

September 24, 2013

SEP 26 2013

Ms. Evelyn Quintanilla

Los Angeles World Airports**LAWA Facilities Planning Division****City of Los Angeles**

1 World Way, Suite 218B
Los Angeles, CA 90045

RE: SCH#2012101019 CEQA Notice of Completion; draft Environmental Impact Report (DEIR) for the **"LAX Runway 7L/25R Runway Safety Area (RSA) and Associated Improvements Project;** " located at Los Angeles International Airport (LAX); Los Angeles County, California

Dear Ms. Quintanilla:

The Native American Heritage Commission (NAHC) has reviewed the Court decision (170 Cal App 3rd 604), the court held that the NAHC has jurisdiction and special expertise, as a state agency, over affected Native American resources impacted by proposed projects, including archaeological places of religious significance to Native Americans, and to Native American burial sites.

The California Environmental Quality Act (CEQA) states that any project which includes archeological resources, is a significant effect requiring the preparation of an EIR (CEQA guidelines 15064.5(b). To adequately comply with this provision and mitigate project-related impacts on archaeological resources, the Commission recommends the following actions be required:

Contact the appropriate Information Center for a record search to determine :If a part or all of the area of project effect (APE) has been previously surveyed for cultural places(s), The NAHC recommends that known traditional cultural resources recorded on or adjacent to the APE be listed in the draft Environmental Impact Report (DEIR).

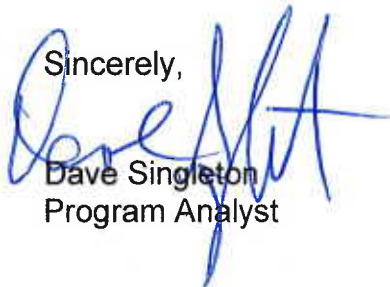
If an additional archaeological inventory survey is required, the final stage is the preparation of a professional report detailing the findings and recommendations of the records search and field survey. We suggest that this be coordinated with the NAHC, if possible. The final report containing site forms, site significance, and mitigation measurers should be submitted immediately to the planning department. All information regarding site locations, Native

American human remains, and associated funerary objects should be in a separate confidential addendum, and not be made available for public disclosure pursuant to California Government Code Section 6254.10.

A list of appropriate Native American Contacts for consultation concerning the project site has been provided and is attached to this letter to determine if the proposed active might impinge on any cultural resources. Lack of surface evidence of archeological resources does not preclude their subsurface existence.

Lead agencies should include in their mitigation plan provisions for the identification and evaluation of accidentally discovered archeological resources, pursuant to California Health & Safety Code Section 7050.5 and California Environmental Quality Act (CEQA) §15064.5(f). In areas of identified archaeological sensitivity, a certified archaeologist and a culturally affiliated Native American, with knowledge in cultural resources, should monitor all ground-disturbing activities. Also, California Public Resources Code Section 21083.2 require documentation and analysis of archaeological items that meet the standard in Section 15064.5 (a)(b)(f). Lead agencies should include in their mitigation plan provisions for the disposition of recovered artifacts, in consultation with culturally affiliated Native Americans. Lead agencies should include provisions for discovery of Native American human remains in their mitigation plan. Health and Safety Code §7050.5, CEQA §15064.5(e), and Public Resources Code §5097.98 mandates the process to be followed in the event of an accidental discovery of any human remains in a location other than a dedicated cemetery.

Sincerely,



Dave Singleton
Program Analyst

CC: State Clearinghouse

Attachment: Native American Contacts list

**Native American Contacts
Los Angeles County
September 24, 2013**

LA City/County Native American Indian Comm
Ron Andrade, Director
3175 West 6th St, Rm. 403
Los Angeles , CA 90020
randrade@css.lacounty.gov
(213) 351-5324
(213) 386-3995 FAX

Tongva Ancestral Territorial Tribal Nation
John Tommy Rosas, Tribal Admin.
Private Address Gabrielino Tongva
tattnlaw@gmail.com
310-570-6567

Gabrielino/Tongva San Gabriel Band of Mission
Anthony Morales, Chairperson
PO Box 693 Gabrielino Tongva
San Gabriel , CA 91778
GTTribalcouncil@aol.com
(626) 286-1632
(626) 286-1758 - Home
(626) 286-1262 -FAX

Gabrielino /Tongva Nation
Sandonne Goad, Chairperson
P.O. Box 86908 Gabrielino Tongva
Los Angeles , CA 90086
sgoad@gabrielino-tongva.com
951-845-0443

Gabrielino Tongva Indians of California Tribal Council
Robert F. Dorame, Tribal Chair/Cultural Resources
P.O. Box 490 Gabrielino Tongva
Bellflower , CA 90707
gtongva@verizon.net
562-761-6417 - voice
562-761-6417- fax

Gabrielino-Tongva Tribe
Bernie Acuna, Co-Chairperson
P.O. Box 180 Gabrielino
Bonsall , CA 92003
(619) 294-6660-work
(310) 428-5690 - cell
(760) 636-0854- FAX
bacuna1@gabrielinotribe.org

Gabrielino-Tongva Tribe
Linda Candelaria, Co-Chairperson
P.O. Box 180 Gabrielino
Bonsall , CA 92003
palmsprings9@yahoo.com
626-676-1184- cell
(760) 636-0854 - FAX

Gabrielino Band of Mission Indians
Andrew Salas, Chairperson
P.O. Box 393 Gabrielino
Covina , CA 91723
gabrielenoindians@yahoo.
(626) 926-4131

This list is current only as of the date of this document.

Distribution of this list does not relieve any person of the statutory responsibility as defined in Section 7050.5 of the Health and Safety Code, Section 5097.94 of the Public Resources Code and Section 5097.98 of the Public Resources Code.

his list is only applicable for contacting local Native Americans with regard to cultural resources for the proposed SCH#2012101019; CEQA Notice of Completion; draft Environmental Impact Report (DEIR) for the Los Angeles International Airport (LAX) Safety and Associated Improvements Project; located at LAX; Los Angeles County, California.

**Native American Contacts
Los Angeles County
September 24, 2013**

Gabrielino-Tongva Tribe
Conrad Acuna,
P.O. Box 180
Bonsall CA 92003
Gabrielino

760-636-0854 - FAX

Gabrielino /Tongva Nation
Sam Dunlap, Cultural Resources Director
P.O. Box 86908
Los Angeles , CA 90086
samdunlap@earthlink.net
909-262-9351
Gabrielino Tongva

This list is current only as of the date of this document.

Distribution of this list does not relieve any person of the statutory responsibility as defined in Section 7050.5 of the Health and Safety Code, Section 5097.94 of the Public Resources Code and Section 5097.98 of the Public Resources Code.

his list is only applicable for contacting local Native Americans with regard to cultural resources for the proposed SCH#2012101019; CEQA Notice of Completion; draft Environmental Impact Report (DEIR) for the Los Angeles International Airport (LAX) Safety and Associated Improvements Project; located at LAX; Los Angeles County, California.

DEPARTMENT OF TRANSPORTATION
DISTRICT 7, REGIONAL PLANNING
IGR/CEQA BRANCH
100 MAIN STREET, MS # 16
LOS ANGELES, CA 90012-3606
PHONE: (213) 897-9140
FAX: (213) 897-1337



Flex your power!
Be energy efficient!

November 1, 2013

RECEIVED

NOV 04 2013

STATE CLEARING HOUSE

Ms. Evelyn Quintanilla
Los Angeles World Airports
1 World Way, Room 218B
Los Angeles, CA 90045

IGR/CEQA No. 130943AL-MND
Runway 7L/25R RSA and Associated
Improvements Project
Vic. LA-01 / PM 25.921
SCH #: 2012101019

Dear Ms. Quintanilla:

Thank you for including the California Department of Transportation (Caltrans) in the environmental review process for the above referenced project. The proposed Project would include: (1) Runway 7L/25R Improvement including extending the Runway 7L/25R pavement, grading and compacting the RSA; constructing a blast pad west of the Runway 7L extension; several taxiways modifications as necessary; relocating the existing Localizer Antenna and shelter to the west; replacing the existing Approach Lighting System (ALS) towers with in-payment lights; and modifying the existing Runway and Taxiway lighting and markings in the newly constructed pavements; (2) Pavement Reconstruction of the eastern portions of Runway 7L/25R and Taxi way B including connecting taxiways and installation of in-pavement approach lights; (3) Pavement reconstruction of the aircraft parking apron west of Air Freight Building No. 8, including new markings. The proposed Project would not result in increased or decreased aviation activity at LAX compared to existing conditions.

Currently, the location #71 at Imperial Highway & Sepulveda Blvd. (SR-01) is operating at Level of Service (LOS) "F" during the PM peak hours (see Table 4.7-7, Page 4.7-27 of the Draft Environmental impact Report, DEIR). On Table 4.7-2 (page 4.7-13) of the DEIR, from 15:00 to 16:00, there are estimated of 320 construction trips. Caltrans requests that construction trips be avoided during PM peak hours.

Please be reminded that any work performed within the State Right-of-way will require an Encroachment Permit Caltrans. Any modifications to State facilities must meet all mandatory design standard and specifications. For information on the Permit process, please contact Caltrans District 7 Office of Permit at (213) 897-3631.

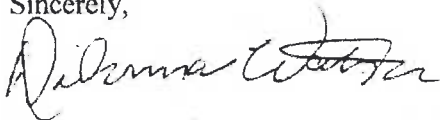
Storm water run-off is a sensitive issue for Los Angeles and Ventura counties. Please be mindful that projects should be designed to discharge clean run-off water. Additionally, discharge of storm water run-off is not permitted onto State highway facilities without any storm water management plan.

Ms. Evelyn Quintanilla
November 1, 2013
Page 2 of 2

Transportation of heavy construction equipment and/or materials, which requires the use of oversized-transport vehicles on State highways, will require a transportation permit from Caltrans. It is recommended that large size truck trips be limited to off-peak commute periods. In addition, a truck/traffic construction management plan may be needed for this project.

If you have any questions, please feel free to contact Alan Lin the project coordinator at (213) 897-8391 and refer to IGR/CEQA No. 130943AL.

Sincerely,



DIANNA WATSON
IGR/CEQA Branch Chief

cc: Scott Morgan, State Clearinghouse



South Coast Air Quality Management District

21865 Copley Drive, Diamond Bar, CA 91765-4178

(909) 396-2000 • www.aqmd.gov

E-Mailed: November 8, 2013

EQuintanilla@lawa.org

November 8, 2013

Ms. Evelyn Quintanilla
Los Angeles World Airports
Capital Programming and Planning
1 World Way, Suite 218
Los Angeles, CA 90009-2216

Review of the Draft Environmental Impact Report (Draft EIR) for the Runway 7L/25 R RSA and Associated Improvements Project

The South Coast Air Quality Management District (SCAQMD) staff appreciates the opportunity to comment on the above-mentioned document. The Draft EIR includes quantification of air quality impacts during construction and subsequent operations of the proposed runway project. Supporting calculation and modeling files were also provided to SCAQMD staff and comments in this letter are based on a review of those files. The following comments are intended to provide guidance to the Lead Agency and should be incorporated into the Final Environmental Impact Report (Final EIR) as appropriate. We appreciate the lead agency's consideration of this late comment letter, and the willingness to discuss the project with our staff in detail.

The Draft EIR concludes that operational air quality impacts and potential health risks during operation of the project are less than significant. In addition, only NO_x emissions were found to present a significant impact during construction, both for regional and localized impacts. However, after reviewing the supporting files it appears that not all of the emissions sources were included prior to making these impact determinations. In particular, all of the airport emissions calculated using the EDMS software were not included. Aircraft will need to be re-routed onsite during construction as one of the runways will be temporarily closed. This re-routing activity was calculated in the supporting files provided to SCAQMD staff, but not presented in the Draft EIR. Because these emissions represent the majority of emissions from the project, they should be included prior to determining air quality impacts. The Final EIR should therefore be revised to include these emissions. In the event that the lead agency determines that the revised analysis results in additional air quality impacts, the Lead Agency should consider providing additional mitigation measures pursuant to Section 15126.4 of the California Environmental Quality Act (CEQA) Guidelines. Details regarding these comments are attached to this letter.

Pursuant to Public Resources Code Section 21092.5, please provide the SCAQMD with written responses to all comments contained herein prior to the adoption of the Final EIR. Further, staff is available to work with the Lead Agency to address these issues and any other questions that may arise. Please contact Dan Garcia, Air Quality Specialist CEQA Section, at (909) 396-3304, if you have any questions regarding the enclosed comments.

Sincerely,



Ian MacMillan

Program Supervisor, Inter-Governmental Review
Planning, Rule Development & Area Sources

Attachment

IM:DG

LAC130919-06
Control Number

Construction Emissions Quantification

1. The air quality analysis concludes that regional construction emissions for all pollutants except NO_x from the proposed project will result in less than significant air quality impacts, however, the emission calculations that support this conclusion are not clearly presented in the Draft EIR. Specifically, it appears that the regional construction emissions analysis does not include the potential increase of emissions from aircraft operations (i.e., emissions resulting from additional taxiing time) during construction of the proposed project. Based on Table 4-1 (Assumed Taxi Times During Runway Closure) the lead agency determined that the proposed project will result in additional taxiing times during project construction. However, it does not appear that the lead agency included these emissions impacts that were quantified using the Federal Aviation Administration's (FAA's) Emissions and Dispersion Modeling System (EDMS) software. Therefore, the SCAQMD staff recommends that the Lead Agency modify the air quality analysis to include any additional emissions from aircraft operations during construction of the proposed project.

Health Risk Assessment

2. The Draft EIR includes a Health Risk Assessment (HRA) that evaluates potential risks from construction activities. The HRA concludes that all health risks would be less than significant. SCAQMD staff is unable to verify if the determination of a less than significant impact may be valid. The very low non-carcinogenic results (HI <0.01) are surprising given that the recently approved Specific Plan Amendment Study determined that short term toxic impacts (primarily from jet engines) would exceed SCAQMD thresholds. The cause of this impact in the SPAS EIR was due to northward relocation of the runway and increased activity along it. Although this project does not include relocation of the northern runway, the activity level of individual runways will increase substantially during construction as a result of the closed runway. It is reasonable to infer that the health risks would therefore increase substantially with the increase in activity.

Upon review of the HRA, it appears that emissions from re-routing activity at the airport (as calculated with EDMS) were not included in the health risk assessment. The Final EIR should include the potential health risks from emissions calculated by EDMS, especially including acute toxic impacts (e.g., from acrolein and formaldehyde).

Mitigation

3. In the event that the lead agency determines that the revised analysis results in additional air quality impacts the SCAQMD staff recommends that the Lead Agency provide additional mitigation measures pursuant to Section 15126.4 of the California Environmental Quality Act (CEQA) Guidelines. Tier 4-final construction equipment is already assumed for the majority of vehicles used for this project, however some vehicles are assumed to only use tier 4-interim engines. The lead agency should investigate if additional tier 4-final equipment is available. In addition, haul trucks are assumed to meet 2007 emission standards. 2010 truck emission standards would provide an approximately 60% reduction in NO_x emissions from

this source based on values presented in the Draft EIR calculation sheets. The lead agency should consider only using trucks meeting 2010 emissions standards.

Baseline

4. It is unclear how the Draft EIR treats the CEQA baseline for determining air quality impacts from this project. For example, Table 4.1-14 uses a traditional 'existing conditions' baseline, while Table 4.1-15 uses a future year 2015 baseline. While utilizing both baselines may be appropriate for this infrastructure project, the Final EIR should include additional explanation of the choice of baseline for determining impacts. This discussion should also apply to any modifications to the construction period impacts based on comments above.

Operational Impacts

5. The text of the Draft EIR indicates that Table 4.1-14 presents the incremental air quality impact from operating the project by comparing 2015 project emissions against 2011 emissions. However, from the raw EDMS output files provided to SCAQMD, it appears that there may be some errors in this table. For example, the table shows 1 lb/day of NO_x, yet the EDMS outputs indicate that the difference between 2011 and 2015 emissions is 1,785 pounds per day. This emission difference is above SCAQMD's significance threshold and represents a substantial increase in emissions. It is not clear however that the scenario modeled for 2011 is equivalent to the scenario modeled for 2015. The Final EIR should explain this discrepancy, and clarify the operational air quality impacts.

Similar to the comment above, Table 4.1-15 shows 1 lb/day of NO_x when comparing 2015 project and no-project emissions. The EDMS output files show a difference of approximately 12 lb/day. The 2015 project and no-project scenarios do not appear to be different in the same way that the 2011 scenario is different. This discrepancy should also be clarified in the Final EIR.

Dispersion Modeling Inputs

6. Some of the assumptions used to conduct the air dispersion modeling should be reviewed and revised as necessary based on the comments below.
 - a. The dispersion modeling conducted to determine localized NO₂ impacts utilized a default in-stack NO_x ratio of 0.1. EPA recommends using a ratio of 0.5 in the absence of source-specific information.¹
 - b. The dispersion modeling used only one year of meteorological data (met data) to determine air quality impacts. SCAQMD provides 5 years of met data on its website² as this is the recommended duration based on EPA guidance. The Draft EIR indicates that a screening analysis determined the worst case year from this 5 year period. It is not clear from reading the Draft EIR how this single year was chosen. It appears that the screening analysis did not consider different averaging

¹ See page 5 of the memo available at this link:

http://www.epa.gov/scram001/guidance/clarification/Additional_Clarifications_AppendixW_Hourly-NO2-NAAQS_FINAL_03-01-2011.pdf

² <http://www.aqmd.gov/smog/metdata/MeteorologicalData.html>

periods or the inclusion of ambient ozone data. The Final EIR should discuss if the screening analysis took these parameters into account. If the screening analysis does not include consideration of how the 'worst case' impacts may change based on different averaging periods or chemistries, then the full 5-year data set should be used.

