



February 15, 2018

REGULAR MEETING CANCELLATION NOTICE  
AND  
CALL AND NOTICE OF A SPECIAL MEETING OF THE  
BURBANK-GLENDALE-PASADENA AIRPORT AUTHORITY

The Airport Authority administrative offices will be closed on Monday, February 19, 2018, in observance of Presidents' Day. Therefore, the regular meeting of the Burbank-Glendale-Pasadena Airport Authority scheduled for Monday, February 19, 2018, at 9:00 a.m., in the Airport Skyroom of Hollywood Burbank Airport has been cancelled.

NOTICE is hereby given that a special meeting of the Burbank-Glendale-Pasadena Airport Authority will be held Tuesday, February 20, 2018, at 9:00 a.m., in the Airport Skyroom of Hollywood Burbank Airport, 2627 Hollywood Way, Burbank, California 91505.

Terri Williams, Board Secretary  
Burbank-Glendale-Pasadena Airport Authority



# **SPECIAL COMMISSION MEETING**

## **AGENDA**

**FEBRUARY 20, 2018**

BURBANK-GLENDALE-PASADENA AIRPORT AUTHORITY

Special Meeting of Tuesday, February 20, 2018

9.00 A.M.

***NOTE TO THE PUBLIC:*** *The Commission invites public comments on airport-related non-agenda matters during the Public Comment period. The Commission will receive public comments on agenda items as each item is reached. Members of the public are requested to observe the following decorum when attending or participating in meetings of the Commission:*

- *Turn off cellular telephones and pagers.*
- *Refrain from disorderly or boisterous conduct, including loud, threatening, profane, or abusive language, clapping, whistling, stamping, or other acts that disrupt or otherwise render unfeasible the orderly conduct of the meeting.*
- *If you desire to address the Commission during the Public Comment period, fill out a speaker request card and present it to the Commission's secretary.*
- *Limit public comments to five minutes, or such other period of time as may be specified by the presiding officer, and confine remarks to matters that are on the Commission's agenda for consideration or are otherwise within the subject matter jurisdiction of the Commission.*

*Any disclosable public records related to an open session item on a regular meeting agenda and distributed by the Authority to the Commission less than 72 hours prior to that meeting are available for public inspection at Hollywood Burbank Airport (2627 Hollywood Way, Burbank) in the administrative office during normal business hours.*

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*In accordance with the Americans with Disabilities Act of 1990, if you require a disability-related modification or accommodation to attend or participate in this meeting, including auxiliary aids or services, please call the Board Secretary at (818) 840-8840 at least 48 hours prior to the meeting.*

1. ROLL CALL
2. PLEDGE OF ALLEGIANCE
3. APPROVAL OF AGENDA
4. PUBLIC COMMENT
5. CONSENT CALENDAR
  - a. Committee Minutes  
(For Note and File)
    - 1) Operations and Development Committee
    - (i) January 16, 2018

***[See page 1]***

- 2) Finance and Administration Committee ***[See page 8]***
  - (i) January 16, 2018
- 3) Legal, Government and Environmental Affairs Committee ***[See page 10]***
  - (i) October 16, 2017
- b. Commission Minutes  
(For Approval)
  - 1) February 5, 2018 ***[See page 13]***
- c. Resolution No. 477 Adopting the  
2018 Authority Investment Policy ***[See page 17]***
- 6. ITEMS FOR COMMISSION APPROVAL
  - a. Award of Contract – Project Number E17-19  
Airfield Lighting Vault Area Paving Project ***[See page 25]***
  - b. Acceptance of L.A. Regional Water Quality  
Control Board Approval of Replacement Passenger  
Terminal Project Human Health Risk Assessment;  
Supplemental Authorization for Associated Expenses ***[See page 31]***
- 7. ITEMS FOR COMMISSION DISCUSSION
  - a. Joint Letter with the City of Burbank Regarding  
Federal Aviation Administration NextGen Concerns ***[See page 58]***
- 8. COMMISSIONER COMMENTS  
(Updates and information items, if any)
- 9. CLOSED SESSION
  - a. Existing CONFERENCE WITH LEGAL COUNSEL – EXISTING LITIGATION  
(California Government Code Section 54956.9(d)(1))  
Name of Case: Maricelli v. Burbank-Glendale-Pasadena Airport Authority et al.  
(Case No. BC664537)
  - b. CONFERENCE WITH LEGAL COUNSEL – ANTICIPATED LITIGATION  
Initiation of Litigation (California Government Code Section 54956.9(d)(4)):  
1 potential case: Noise Variance Application to California Department of  
Transportation, Division of Aeronautics
- 10. ADJOURNMENT

COMMISSION NEWSLETTER  
February 20, 2018

*[Regarding agenda items]*

5. CONSENT CALENDAR

*(Consent Calendar items may be enacted by one motion. There will be no separate discussion on these items unless a Commissioner so requests, in which event the item will be removed from the Consent Calendar and considered in its normal sequence on the agenda.)*

- a. COMMITTEE MINUTES. Approved minutes of the January 16, 2018, Operations and Development Committee, approved minutes of the January 16, 2018, Finance and Administration Committee, and approved minutes of the October 16, 2017, Legal, Government and Environmental Affairs Committee are included in the agenda packet for information purposes.
- b. COMMISSION MINUTES. Draft minutes of the February 5, 2018, meeting are attached for the Commission's review and approval.
- c. RESOLUTION NO. 477 ADOPTING THE 2018 AUTHORITY INVESTMENT POLICY – A staff report is included in the agenda packet. Formerly mandated by State law and now currently recommended under Sections 53646(a)(2) and 53646(h) of the California Government Code ("Code"), the Commission annually reviews and approves an investment policy to identify policies and procedures for the prudent and systematic investment to be followed by the Authority Treasurer in the exercise of the investment authority delegated to him/her.

6. ITEMS FOR COMMISSION APPROVAL

- a. AWARD OF CONTRACT – PROJECT NUMBER E17-19 – AIRFIELD LIGHTING VAULT AREA PAVING PROJECT – A staff report is included in the agenda packet. At the February 5, 2018, meeting of the Operations and Development Committee ("Committee"), the Committee recommended that the Commission approve the following actions for the asphaltic concrete rehabilitation of the area adjacent to the Airfield Lighting Vault: (1) Award construction contract in the amount of \$69,872 to Excel Paving, dba PALP, Inc.; (2) authorize use of in-house construction management service, field observation and security, for the not-to-exceed amount of \$10,000; and (3) establish a project contingency in the amount of \$4,000 which is approximately 5% of the project construction cost.
- b. ACCEPTANCE OF L.A. REGIONAL WATER QUALITY CONTROL BOARD APPROVAL OF REPLACEMENT PASSENGER TERMINAL PROJECT HUMAN HEALTH RISK ASSESSMENT; SUPPLEMENTAL AUTHORIZATION FOR ASSOCIATED EXPENSES – A staff report is included in the agenda packet. Staff seeks Commission acceptance of the Los Angeles Regional Water Quality Control Board ("LARWQCB") approval of the Human Health Risk Assessment ("HHRA") for the Adjacent Property, which is the preferred site for the Replacement Passenger Terminal project. LARWQCB has concluded: "the Regional Board considers the Adjacent Property compatible for the construction of and operation of an airport

replacement passenger terminal and associated facilities (replacement terminal complex)."

Additionally, Staff seeks Commission authorization of a supplemental appropriation in the amount of \$60,000 for: (i) unbilled oversight costs by the State Office of Environmental Health Hazard Assessment and LARWQCB; (ii) unbilled work by Geosyntec on the HHRA and new work in connection with the negotiation of a land use covenant required by LARWQCB; and (iii) unbilled work by Ring Bender on the HHRA and new work negotiating and drafting the land use covenant required by LARWQCB.

## 7. ITEMS FOR COMMISSION DISCUSSION

- a. JOINT LETTER WITH THE CITY OF BURBANK REGARDING FEDERAL AVIATION ADMINISTRATION NEXTGEN CONCERNS. A staff report is included in the agenda packet. Staff seeks Commission approval of a joint letter with the City of Burbank regarding Federal Aviation Administration NextGen concerns.

*Approved February 5, 2018*

**MINUTES OF THE SPECIAL MEETING OF THE  
OPERATIONS AND DEVELOPMENT COMMITTEE  
BURBANK-GLENDALE-PASADENA AIRPORT AUTHORITY**

**TUESDAY, JANUARY 16, 2018**

A special meeting of the Operations and Development Committee was called to order on this date in the Airport Skyroom of the Burbank-Glendale-Pasadena Airport Authority, 2627 Hollywood Way, Burbank, California, at 8:18 a.m., by Chairman Brown.

**ROLL CALL**

**Present:** Commissioners Brown, Tornek and Devine.

**Absent:** None

**Also Present:** Staff: Frank Miller, Executive Director; John Hatanaka, Senior Deputy Executive Director; Denis Carvill, Deputy Executive Director, Operations and Airline Relations; Scott Kimball, Director of Operations and Maintenance; Paul Chang, Manager, Engineering; Patrick Lammerding, Deputy Executive Director of Planning and Development

Airport Authority Counsel: Terrence R. Boga, of Richards, Watson and Gershon

**1. Approval of Agenda** Commissioner Tornek moved approval of the agenda. The agenda was approved unanimously (3-0).

**2. Public Comment** There were no public speakers.

**3. Approval of Minutes**  
**December 4, 2017** Commissioner Devine moved approval of the minutes of the December 4, 2017, meeting, seconded by Commissioner Tornek. The minutes were approved unanimously (3-0).

**4. Contracts and Leases**

**a. Award of Professional Services Agreement for Additional Design Services for Baggage Recapitalization System Modification Project** Staff seeks the Committee's recommendation to the Commission for award of a Professional Services Agreement ("PSA") to Swanson Rink, Inc. ("Swanson Rink") in the amount of \$25,000 for

additional design services for the Baggage Recapitalization System Modification Project.

Staff reported that in the last three years they have been working with TSA to recapitalize and replace the CTX machines in Terminal A. The replacement of those machines has been an ongoing Project that's funded by the TSA through an Other Transaction Agreement ("OTA").

On June 14, 2013, the Commission awarded Swanson Rink \$288,771 to develop the design for the Project. This work was completed and approved by TSA, and the Request for Bids for construction issued shortly thereafter in 2016.

On June 19, 2017, the Commission awarded G and S Mechanical USA, Inc. an agreement in the amount of \$998,600 to prepare areas for the installation and connection of new baggage screening equipment. Concurrently, the Commission awarded Swanson Rink a new PSA in the amount of \$78,200 to provide construction administration services for that work. These contract awards were part of the TSA's multi-year OTA financial support in the amount of \$1,870,130 to enhance the baggage inspection system at the Airport.

Subsequent to these contract awards, TSA asked staff to modify the baggage handling system further for additional upgrades to support the new CTX machines. These modifications require new permits and, consequently, require design documents that were not a part of Swanson Rink's original scope of design services.

Due to a change in requirements, TSA requested modifications to the design of the replacement baggage system. After reviewing TSA's request, Swanson Rink determined that it is able to complete the requested changes. TSA has reviewed and approved the additional design fee increase.

TSA has authorized the increase in design costs funding through the current OTA of \$1,870,130, less the amounts awarded for construction (\$998,600) and construction administration (\$78,200). Further, due to the uncertainties with the federal budget, Staff reconfirmed with the TSA that funding for the Project and OTA are in place



and is not affected by future federal appropriation actions.

## **Motion**

Commissioner Devine moved approval of Staff's recommendation, seconded by Commissioner Tornek.

## **Motion Approved**

The motion was approved unanimously (3-0).

### **b. Award of Professional Services Agreement for Concept Validation, Planning, and Cost Estimating for Replacement Passenger Terminal and Support Projects**

Staff seeks the Committee's recommendation to the Commission for award of a PSA to Buro Happold in the amount of \$604,500 for concept validation, planning, and cost estimating consulting services for the replacement passenger terminal ("RPT") and related support Projects (collectively, the "Project").

Staff reported that the existing terminal building ("ETB") is an aged facility and does not meet current Federal Aviation Administration ("FAA") standards for lateral separation from the adjacent runways. Correction of this situation necessitates construction of a RPT and demolition of the ETB, which creates the opportunity to also correct the functional deficiencies and low levels of service associated with the ETB relative to more modern airport terminal facilities. Additionally, there is an opportunity to incorporate more conveniences, amenities, and diverse features into the RPT, as well as to have the RPT more fully reflect the unique character of Burbank. The Project also includes other development elements needed to provide for a fully functional RPT. The components of the Project were listed in detail in the Committee agenda packet for review.

Staff reported that the development agreement and entitlements for the Project incorporate initial development review plans. Those plans were based on an extensive analysis of individual facility physical and operational requirements, and they sought to create a balance of all Project elements within the available acreage. However, some aspects of the Project are in need of additional definition prior to the commencement of any design effort, including the design charrette workshop series that will obtain public input on qualitative features, functionality, appearance and aesthetics of the RPT and parking structures. Thus, Staff has identified a need for a consultant to perform the critical tasks involved in implementing the Project.

Staff publicly solicited responses to a Request for Qualifications for concept validation, planning, and cost estimating consulting services on the Authority's PlanetBids e-procurement website. Additionally, Staff advertised the competitive opportunity in several local newspapers, as well as in public postings on the Internet and in the Burbank, Glendale, and Pasadena City Halls. Five engineering firms submitted a Statement of Qualifications ("SOQ"). Staff instituted a three – step process consisting of an evaluation committee review of the SOQ's to determine which three firms were most qualified based on the selection criteria specified in the RFQ and interview. Based on interview scoring, the evaluation committee ranked Buro Happold as the most qualified firm.

Staff negotiated a detailed scope of work and fee schedule with Buro Happold and presented information on how the concept validation, planning, and cost estimating deliverables will provide Staff with the necessary information to move the Project forward. Staff noted that the deliverables will provide a validation that the concept for the Project is viable and will inform the design and funding strategy.

The negotiated fee is a lump sum of \$604,500. The original budget for this work was \$450,000 with a \$50,000 contingency. The higher negotiated amount is due to a refinement and clarification of what is necessary from the deliverables, as well as cost escalations in the industry since the budget item was created.

The Fiscal Year 2018 budget carried a line item for this contract at \$450,000 with an additional \$50,000 contingency. The additional funds to reach the negotiated fee amount will come from the Facility Development Reserve Account.

Following Staff's presentation, which included various questions from the Committee, Staff recommended that the Committee recommend to the Commission that this item be placed on the Commission's agenda for approval at its meeting immediately following the Committee's meeting

## **Motion**

Commissioner Tornek moved approval of Staff's recommendation, seconded by Commissioner Devine.

## **Motion Approved**

The motion was approved unanimously (3-0).

### **c. Award of Professional Services Agreement for Safety Management System Consulting Services**

Staff seeks the Committee's recommendation to the Commission for award of a Professional Services Agreement to Garver, LLC ("Garver") in a not-to-exceed amount of \$398,139.63 for safety management system ("SMS") consulting services for fiscal years ("FY") 2018 through FY 2020.

Staff reported that the International Civil Aviation Organization ("ICAO") provides a global forum for 191 member states, including the United States, to adopt aviation standards. One of ICAO's aviation standards involves implementation of an SMS. The purposes of an SMS include: infusion of safety into all parts of the system; provide system insight and awareness of incident precursors; validate existing safety controls; identify gaps in safety systems; improve resource allocation toward root causes; verify effectiveness of safety culture; and provide specific methods to predict hazards from employee reports and data collection.

The Federal Aviation Administration ("FAA") has been addressing ICAO's SMS aviation standard incrementally through a process with extended public comment opportunities. First, the FAA conducted pilot studies from 2007- 2009. Next, from 2010-2011, the FAA issued internal order and SMS procedures. From 2011-2016, the FAA undertook a Notice of Proposed Rulemaking and a Supplemental Notice of Proposed Rulemaking. The FAA is expected to adopt a final SMS rule in April 2018. The final SMS rule will require airports to:

- Implement an SMS for movement and non-movement areas
- Submit an implementation plan within 12 month of the final rule
- Submit and implement an SMS Manual and/or Airport Certification Manual update within 24 months of the final rule

On September 13, 2017, through the PlanetBids system, Staff issued a request for proposals ("RFP") for SMS consulting services. The specific

services to be performed by the consultant are: preparation of an action plan; planning and related services to develop and implement an SMS that satisfies the FAA's final SMS rule; and coordination between the Authority and the FAA to accomplish the scope of services. The PlanetBids system provided an outreach to potential proposers and the Authority received proposals from three firms. Upon review, the three proposals were deemed to be responsive to the RFP requirements. The proposal evaluation criteria were as follows, with a potential 100 points total availability:

- Experience/Past Performance (25 pts)
- Firm Capabilities/Suitability for Project (25 pts)
- Technical approach (20 pts)
- PSA Language Acceptance (15 pts)
- Not To Exceed Full, Fixed Price (15 pts)

An evaluation team reviewed the proposals based on the available points by each scoring category. The evaluators scores were tallied and averaged, and the results from the three responding firms proposals are ranked and (priced) as follows:

- 1) Garver, LLC (Garver), scored 86.75 points at a cost of \$398,139.63.
- 2) Airport Safety Management Consultants, scored 81.25 points at a cost of \$285,000.00.
- 3) RS&H, scored 76.50 points at a cost of \$468,486.00.

While Garver's proposed price is higher than ASMC, Garver's level of experience with implementing a successful SMS program, beginning with its participation in the FAA's SMS pilot program, significantly exceeded that of the other two proposers. This experience level placed Garver at the top of the evaluation. Based on these results, Staff is recommending that Garver be awarded the contract to assist with the soon to be mandated SMS program

## **Motion**

Following the presentation Commissioner Tornek moved approval of Staff's recommendation, seconded by Commissioner Devine.

**Motion approved**

The motion was approved unanimously (3-0).

Staff noted that this item is included in the Commission's agenda for its January 16, 2018, meeting immediately following the Committee's meeting.

**5. Items for Discussion**

**a. October and November 2017  
Parking Revenue Statistics**

Staff presented a report to the Committee on the October and November 2017 parking revenue results.

**Staff requested that item 5.b. be deferred to the full Commission meeting following the Committee meeting and item 5.c. be presented with item 5.a. The Committee concurred with Staff's request.**

**c. October and November 2017  
Hollywood Burbank Airport and  
Regional Airport Passenger  
Statistics**

Staff presented the Airport statistics and a comparison report on the other Southern California airport passenger statistics, for the month of October and November of 2017.

**6. Adjournment**

There being no further business, the meeting adjourned at 9:04 a.m.

*Approved February 5, 2018*

**MINUTES OF THE SPECIAL MEETING OF THE  
FINANCE AND ADMINISTRATION COMMITTEE  
BURBANK-GLENDALE-PASADENA AIRPORT AUTHORITY**

**TUESDAY, JANUARY 16, 2018**

A special meeting of the Finance and Administration Committee was called to order this date in the Airport Skyroom, 2627 Hollywood Way, Burbank, California, 91505, at 10:41 a.m., by Chairman Gharpetian.

AB 23 Disclosure: The Senior Deputy Executive Director announced that, as a result of the convening of this meeting of the Finance and Administration Committee, each Committee member is entitled to receive and shall be provided \$200.

**ROLL CALL**

**Present:** Commissioners Gharpetian, Adams and Selvidge

**Absent:** None

**Also Present** Staff: John Hatanaka, Senior Deputy Executive Director; Kathy David, Deputy Executive Director, Finance and Administration

**1. Approval of Agenda** There were no adjustments to the agenda.

**2. Public Comment** There were no public speakers.

**3. Approval of Minutes**

**a. December 4, 2017** Draft minutes of the December 4, 2017, Finance and Administration Committee were presented for review and approval.

**Motion** Commissioner Adams moved approval of the minutes, seconded by Commissioner Selvidge.

**Motion Approved** The motion was approved unanimously (3-0).

**4. Treasurer's Report**

**a. November 2017** The November 2017 and October 2017 Treasurer's Reports were included in the agenda packet.

**b. October 2017** The Committee accepted the Treasurer's Report and recommended it be forwarded to the Commission for its review.

<b>Motion</b>	Commissioner Adams moved to recommend to the Commission that it note and file the Treasurer's Reports for November 2017 and October 2017, seconded by Commissioner Selvidge.
<b>Motion Approved</b>	The motion was approved unanimously (3-0).
<b>5. Items for Discussion</b>	Staff updated the Committee and answered questions regarding one lease and several purchase orders for professional services.
<b>a. Minor Lease and Purchase Order Update</b>	
<b>6. Items for Information</b>	
<b>a. Pending Items</b>	There was no discussion of future pending items.
<b>7. Other Contracts and Leases</b>	There were no other contracts and leases discussed.
<b>8. Adjournment</b>	There being no further business, the meeting was adjourned at 10:55 a.m.

*Approved February 5, 2018*

**MINUTES OF THE REGULAR MEETING OF THE  
LEGAL, GOVERNMENT AND ENVIRONMENTAL AFFAIRS COMMITTEE  
BURBANK-GLENDALE-PASADENA AIRPORT AUTHORITY**

**MONDAY, OCTOBER 16, 2017**

A regular meeting of the Legal, Government and Environmental Affairs Committee was called to order on this date in the Burbank Room of the Airport Authority, 2627 Hollywood Way, Burbank, California, at 10:10 a.m., by Chairman Wiggins.

AB 23 Disclosure: The Assistant Board Secretary announced that, as a result of the convening of this meeting of the Legal, Government and Environmental Affairs Committee, each Committee member is entitled to receive and shall be provided \$200.

**ROLL CALL**

**Present:** Commissioners Wiggins and Sinanyan

**Absent:** Commissioner Madison

**Also Present:** Staff: Frank Miller, Executive Director;  
Mark Hardymont, Director, Transportation and  
Environmental Programs; Sarah Paulson Sheehy,  
Senior Director, Government and Public Affairs;  
Lucy Burghdorf, Director of Public Affairs and  
Communications

Airport Authority Counsel: Terence R. Boga of  
Richards, Watson and Gershon

**1. Approval of Agenda** There were no adjustments to the agenda.

**2. Public Comment** There were no public speakers.

**3. Approval of Minutes**

**a. August 21, 2017** Draft minutes for the August 21, 2017, Legal,  
Government and Environmental Affairs Committee  
meeting were presented for approval.

**Motion** Commissioner Wiggins moved approval of the  
minutes, seconded by Commissioner Sinanyan.

**Motion Approved** The minutes were approved (2-0; one absent).



#### **4. Contracts and Leases**

##### **a. Approval of Access Agreement: Honeywell International, Inc.**

Staff seeks the Committee's recommendation to the Commission for approval of an Access Agreement ("Agreement") with Honeywell International, Inc. ("Honeywell"). The Agreement will allow Honeywell to have limited access to Hollywood Burbank Airport ("Airport") to monitor and maintain three groundwater monitoring wells.

Staff reported that it had negotiated an Access Agreement with Honeywell for limited access to the Airports airfield to monitor and maintain three groundwater monitoring wells. In exchange, the Authority will receive from Honeywell an annual \$5,000 access fee, as well as an indemnity defense commitment. The Authority will also receive Honeywell's commitment to close the wells once they are no longer needed and to provide documentation of proper closure. The Agreement provides a termination clause for convenience on 30 days' notice.

##### **Motion**

Commissioner Sinanyan moved approval of Staff's recommendation, Commissioner Wiggins seconded the motion.

##### **Motion Approved**

The motion was approved (2-0; one absent).

#### **5. Items for Information**

##### **a. Mobile Source Emission Reduction Effect at Airports**

Staff updated the Committee regarding recent amendments to a mobile source emissions reduction measure ("MOB-04") for commercial airports approved in the 2016 Air Quality Management Plan ("AQMP") from South Coast Air Quality Management District ("SCAQMD").

Staff reported that the SCAQMD is required to produce an AQMP every four years. Once a plan is approved, it becomes new area baseline for future emissions reduction. The 2016 AQMP included a MOB-04, to review emission reduction opportunities at commercial airports. The measure seeks to quantify actions and identify additional actions that can lead to additional emission reductions. Quantified emission reductions must be "real, surplus, permanent, and enforceable" to qualify for SIP credit. The measure was vetted, and set for a final vote in

December/ January of 2017 by SCAQMD Board as part of 2016 AQMP.

Following the informational report, Staff answered various questions related to the AQMP timeline and preempted Airport opportunities by FAA regulations.

## **6. Adjournment**

There being no further business, the meeting was adjourned at 10:43 a.m.

Subject to Approval

**MINUTES OF THE REGULAR MEETING OF THE  
BURBANK-GLENDALE-PASADENA AIRPORT AUTHORITY**

**MONDAY, FEBRUARY 5, 2018**

A regular meeting of the Burbank-Glendale-Pasadena Airport Authority was called to order this date in the Airport Skyroom, 2627 Hollywood Way, Burbank, California, at 9:00 a.m., by President Tornek.

**1. ROLL CALL**

**Present:** Commissioners Tornek, Brown, Adams, Gharpetian, Sinanyan, Devine, Madison (arr. 9:02 a.m.), Wiggins and Selvidge

**Absent:** None

**Also Present:** Staff: John Hatanaka, Senior Deputy Executive Director; Denis Carvill, Deputy Executive Director, Operations and Airline Relations; Lucy Burghdorf, Director of Public Affairs and Communications; Nerissa Sugars, Manager, Air Service Development; Mike Duong, Senior Manager, Business and Compliance; Sharon Haserjian, Manager, Human Resources; Michael Crane, Asst. Manager, Operations

Also present:

Michael Hastings, Co-chair, Burbank Committee, Providence Saint Joseph Minutes Matter Emergency Services Campaign

Michael Maine, Sr. Development Officer, Providence Saint Joseph Foundation

Markella Santana, Development Officer, Providence Saint Joseph Medical Center

**2. PLEDGE OF ALLEGIANCE**

Commissioner Wiggins led the assembly in the recitation of the Pledge of Allegiance to the Flag.

**3. APPROVAL OF AGENDA**

The agenda was approved as presented.

**4. PUBLIC COMMENT**

There were no public speakers.

## **5. CONSENT CALENDAR**

### **a. Committee Reports (For Noting and filing)**

#### **1) Operations and Development Committee**

Approved minutes of the Operations and Development Committee for December 4, 2017, were included in the agenda packet for information purposes.

**(i) December 4, 2017**

#### **2) Finance and Administration Committee**

Approved minutes of the Finance and Administration Committee for December 4, 2017, were included in the agenda packet for information purposes.

**(i) December 4, 2017**

### **b. Commission Minutes (For Approval)**

Minutes of the January 16, 2018, special Commission meeting were included in the agenda packet for review and approval.

**1) January 16, 2018**

### **c. Treasurer's Report**

**1) November 2017**

**2) December 2017**

At the January 16, 2018, special meeting of the Finance and Administration Committee ("Committee"), the Committee voted unanimously (3-0) to recommend that the November 2017 and December 2017 Treasurer's reports be noted and filed by the Commission.

### **MOTION**

Commissioner Sinanyan moved approval of the Consent Calendar; seconded by Commissioner Wiggins. Commissioner Wiggins abstained from voting due to his absence.

### **MOTION APPROVED**

There being no objection, the motion was approved (8-0, one abstention).

**AYES:** Commissioners Adams, Brown  
Gharpetian, Tornek, Sinanyan,  
Devine, Madison and Selvidge

**NOES:** None

**ABSENT:** None

**ABSTAINED:** Commissioner Wiggins

## **6. ITEMS FOR COMMISSION DISCUSSION**

### **a. Federal Aviation Administration ("FAA") Part 139 Inspection/ Announcement of the FAA Required Triennial Airport Emergency Plan Full-Scale Exercise**

Staff presented to the Commission the results of the Federal Aviation Administration ("FAA") Part 139 Inspection which was held on November 15 and 16, 2017. Each year, Part 139 airports must undergo an inspection and review by the FAA covering over 120. The Hollywood Burbank Airport passed the inspection with complimentary remarks made by the FAA inspector.

Staff also presented information regarding the upcoming FAA Required Triennial Airport Emergency Plan Full-Scale Exercise to take place on March 14, 2018, in which a simulated aircraft disaster will be staged. This triennial exercise will test the first responders' skills as they manage the incident with the assistance of local agencies and organizations from the cities of Burbank and Los Angeles County. City officials from the cities of Burbank, Glendale, Pasadena, Los Angeles and elected officials from the State of California have been invited to observe the exercise.

### **b. 2017 Community Fundraising Campaign Results**

Staff presented the results of the 2017 Community Fundraising Campaign. This year's recipient was Providence St. Joseph Foundation. A check in the amount of \$5,500 was presented to the Foundation representatives for Providence St. Joseph Minutes Matter Emergency Services Campaign. The funds raised came from the support of the Airport community which included tenants and staff.

### **c. Hollywood Burbank Airport – Inauguration of Airport Academy**

The Hollywood Burbank Airport – Airport Academy began on January 17, 2018. This five-month, one session per month program was initially open to high school students of the Burbank Unified School District. The goal of the program is to provide students a deeper understanding of how an airport operates by introducing them to possible careers in the aviation industry. The first group of 25 students were enrolled with a graduation date scheduled for May 16, 2018.

Commissioners expressed the desire to see the Academy opened to students in unified school districts of Glendale and Pasadena in the future.

## **7. ITEMS FOR COMMISSION DISCUSSION**

- |  |  |
|--|--|
| <b>a. December 2017<br/>Passenger/Cargo and<br/>Regional Airport<br/>Passenger Statistics</b>    | Staff presented an update on the December 2017 passenger/cargo and regional airport passenger statistics.      |
| <b>b. December 2017 Parking<br/>Revenue Statistics</b>   | Staff presented an update on the December 2017 parking revenue statistics.                                     |
| <b>c. December 2017<br/>Transportation Network<br/>Company ("TNC")<br/>Summary of Activities</b> | Staff updated the Commission on Transportation Network Company ("TNC") activities for the month December 2017. |

## **8. COMMISSIONER COMMENTS**

Commissioner Tornek advised the Commission of discussions that occurred at the special Operations and Development Committee meeting held on February 1, 2018. The meeting was held at the request of members of the Burbank community to meet with members of the Authority Commission regarding the impacts of NextGen.

## **9. ADJOURNMENT**

There being no further business, the meeting was adjourned at 9:40 a.m.

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Terry Tornek, President

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Date

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Ray Adams, Secretary

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Date

**STAFF REPORT PRESENTED TO THE  
BURBANK-GLENDALE-PASADENA AIRPORT AUTHORITY  
FEBRUARY 20, 2018**

**RESOLUTION NO. 477 ADOPTING  
THE 2018 AUTHORITY INVESTMENT POLICY**

**SUMMARY**

Formerly mandated by State law and now currently recommended under Sections 53646(a)(2) and 53646(h) of the California Government Code ("Code"), the Commission annually reviews and approves an investment policy to identify policies and procedures for the prudent and systematic investment to be followed by the Authority Treasurer in the exercise of the investment authority delegated to him/her.

The Authority's Investment Manager, Columbia Management Investment Advisors LLC ("CMIA"), has opined that the 2017 Authority Investment Policy, with overall investment criteria of capital preservation (safety) and liquidity, is still appropriate and conservative, and does not need revisions at this time. Staff concurs with the CMIA recommendation and seeks a Finance and Administration Committee recommendation to the Commission that it adopt the attached proposed Resolution approving the 2018 Investment Policy (Attachment 1), which reaffirms the current 2017 Investment Policy with no changes.

At the February 5, 2018, meeting of the Finance and Administration Committee ("Committee"), the Committee voted unanimously (3-0) to recommend the Commission adopt the attached proposed Resolution approving the 2018 Investment Policy (Attachment 1).

**DISCUSSION**

The Authority was previously required by Section 53646 of the Code to annually review and adopt an investment policy for its restricted and non-restricted cash portfolios. The Legislature amended this statute to make annual investment policy review optional for local agencies and to declare that no liability is incurred for failure to annually adopt an investment policy. However, the Legislature strongly recommends and the Authority believes it is prudent to continue to annually review and adopt an investment policy. The Authority further requires that CMIA abide by that policy as it makes decisions regarding changes to the Authority's investments. The Authority's investment policy dictates the type of investment vehicles that are permitted, and maximum allowable percentage of individual sectors that the Authority can invest in.

For local governments, including the Authority, State law (Code Section 53600 et seq.) sets forth the types of allowable investments, maximum maturities, maximum concentration of investments by type of investment and issuer, minimum ratings for certain types of investments, and how the investments may be held.

The Authority's investment policy further limits all investments to be more restrictive than the Code. The restrictions in the Code and the additional limitations in the Authority's investment policy mitigate the Authority's interest rate risk, credit risk, concentration of credit

risk, and custodial credit risk related to its various investments.

CMIA continues to diligently review and report on the Authority's investments in this challenging economic environment. The Authority has historically favored holding its investments until they mature. CMIA will continue to bring recommendations to the Commission on individual investments and/or the policy as conditions warrant throughout the year.

Staff and CMIA discussed the proposed 2018 Investment Policy with the Committee.

#### RECOMMENDATION

At the Finance and Administration Committee meeting held on February 5, 2018, the Committee voted unanimously (3–0) to recommend the Commission adopt the attached Resolution approving the 2018 Investment Policy.



**RESOLUTION NO. 477**

**A RESOLUTION OF THE  
BURBANK-GLENDALE-PASADENA AIRPORT AUTHORITY COMMISSION  
ADOPTING THE 2018 AUTHORITY INVESTMENT POLICY**

The Burbank-Glendale-Pasadena Airport Authority Commission finds, resolves and determines as follows:

Section 1. Recitals.

A. Government Code Section 53646 authorizes, but no longer requires, local agencies to review and approve an investment policy on an annual basis.

B. The Burbank-Glendale-Pasadena Airport Authority ("Authority") has a fiduciary responsibility to maximize the use of public funds entrusted to its care, manage those funds wisely and prudently, and protect those funds from financial catastrophes.

C. The objective and purpose of the Authority's investment program is to maintain a level of investment as near 100% as possible, with due consideration given to such factors as safety, liquidity, yield, and cash flow requirements.

D. The Commission desires to continue its existing policy to review and approve an investment policy on an annual basis.

E. The Commission desires to continue its existing investment policy with no changes.

Section 2. 2018 Investment Policy. The Commission hereby adopts the 2018 Investment Policy attached hereto as Exhibit A. Such policy supersedes all prior investment policies adopted by the Commission.

Section 3. Effective Date. This Resolution shall be effective upon adoption.

Adopted this \_\_\_\_ day of \_\_\_\_\_, 2018.

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Terry Tornek, President

Attest:

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Ray Adams, Secretary

## EXHIBIT A

### 2018 INVESTMENT POLICY

#### BURBANK-GLENDALE-PASADENA AIRPORT AUTHORITY

This document identifies policies and procedures for the prudent and systematic investment policy to be followed by the Burbank-Glendale-Pasadena Airport Authority Treasurer in the exercise of the investment authority delegated to him/her. All of these policies and procedures are within the statutory guidelines provided for in State law.

The Investment Policy must be renewed annually. The Treasurer must present it in draft form to the Finance and Administration Committee for its review and approval prior to presentation to the Authority for its approval.

#### INVESTMENT MANAGER

The Treasurer may utilize an Investment Manager in the investment management of the Authority's portfolio(s). The Investment Manager shall comply with the investment restrictions contained in Sections 53601, 53601.1, 53601.5 and 53601.6 of the California Government Code ("Government Code Provisions") and this Investment Policy. In the event the Investment Policy is more restrictive than the Government Code Provisions, the Investment Policy shall control. Further, the Investment Manager shall periodically, but no less than annually, advise the Treasurer and the Authority on recommended changes to the Investment Policy, including any required to bring the policy into compliance with the Government Code Provisions.

#### BASIC POLICY AND OBJECTIVES

Three fundamental criteria shall be followed in the investment program (all investments and deposits). In order of importance they are:

1. SAFETY. Investments shall be made in a manner that seeks to ensure the preservation of principal and interest. The Treasurer will evaluate, or have evaluated each investment, seeking quality in issuer and in the underlying security or collateral. He/she will also diversify the portfolio to reduce loss exposure. In the investment of idle cash, the prudent man rule shall be followed. This rule states in essence, that when investing property for the benefit of another, a trustee shall exercise the judgment and care, under the circumstances then prevailing, which persons of prudence, discretion and intelligence exercise in the management of their own affairs, not for speculation, but for investment, considering the probable safety of their capital as well as the probable income to be derived. The Treasurer will remain within the policy maximums regarding asset allocation and maturity guidelines identified on Exhibit A.
2. LIQUIDITY. To the extent possible, investments will be made whose maturities are compatible with cash flow and will allow for easy and rapid conversion into cash without any loss of value. The Treasurer's monthly report to the Authority is to include a comparison of the actual portfolio to the policy maximums shown on Exhibit A.
3. YIELD. An acceptable rate of return on investments is desirable but only after first considering safety of principal and liquidity.

## TYPES OF INVESTMENTS

1. U. S. Treasuries. These are investments in direct obligations of the U. S. Treasury.
2. U. S. Agencies. These are obligations of the Federal Home Loan Bank, Federal National Mortgage Association, Federal Farm Credit Bank, etc.
3. Time Deposits. Time deposits are to be placed in accordance with the California Government Code, in those banks and savings and loan associations which meet the requirements. Deposits must be either insured or secured by Government securities with a market value of at least 10% in excess of the total amount deposited or real estate mortgages with a value of at least 150% of the total amount deposited. The latest available quarterly financial statements will be evaluated to determine whether an institution meets all the capital levels required by the Financial Institutions Reform, Recovery and Enforcement Act of 1989 (FIRREA), which are also required by the Investment Manager prior to placing deposits.
4. Local Agency Investment Funds. This is a pool of funds managed by the State Treasurer's Office and includes only investments that meet the legal requirements.
5. Bankers Acceptances. Only those bankers acceptances eligible for purchase by the Federal Reserve System meet eligibility requirements.
6. Commercial Paper. Only commercial paper of prime quality of the highest ranking or of the highest letter and numerical rating as provided by Moody's Investors Service or Standard and Poor's may be purchased (A-1/P-1). To be eligible for purchase, commercial paper may not exceed 270 days maturity nor represent more than 10% of the outstanding paper of an issuing corporation. Purchases of commercial paper may not exceed 15% of each agency's surplus money which may be invested.
7. Repurchase Agreements. These are a purchase of securities (any of the investments authorized under the Government Code) pursuant to an agreement by which the seller will repurchase such securities on or before a specified date, or on demand of either party, and for a specified amount.
8. Money Market Funds. Funds will consist of U.S. Treasury securities only.
9. Corporate Medium Term Notes. The Corporate Notes must be issued by corporations organized and operating within the United States or by depository institutions licensed by the United States or any state and operating within the United States that are rated A or better by a nationally recognized rating service (Government Code Section 53601(j)). Purchase requires approval of the Authority Director of Financial Services and the Treasurer.
10. Negotiable Certificates of Deposit. These are negotiable investments evidencing a time deposit made with a bank at a fixed rate of interest for a fixed period of time. These investments are liquid and are traded in the market place. The long term rating of the issuing institution must be A or higher.

In the event a security is downgraded below the minimum authorized rating, the Investment Manager will notify the Airport Authority of the downgrade with a recommendation on the disposition of the security. The Airport Authority will provide written instructions to the Investment Manager regarding the disposition of a security that is below the minimum acceptable rating.

## MATURITY LIMITATIONS

The Authority's weighted average maturity goal during any calendar year will be established based on the recommendations of the Investment Manager and may be reviewed and adjusted at any time based on the recommendations of the Investment Manager.

For purposes of this policy, the "A" category will include Standard & Poor's ratings of "A+", "A" and "A-"; Moody's Investor Services ratings of "A1", "A2" and "A3"; and Fitch Ratings of "A+", "A" and "A-".

## PURCHASE OF SECURITIES/DEPOSITS

Transactions shall be made with reputable banks and brokers who are experienced, knowledgeable and offer service. Before placing deposits, comparisons of at least three eligible financial institutions shall be obtained. The brokers approved by the Investment Manager (Columbia Management Investment Advisors LLC) will be utilized.

## PAYMENT FOR SECURITIES AND SAFEKEEPING

All securities purchased shall be delivered against payment (DVP), and held in safekeeping as evidenced by safekeeping receipts.

## PORTFOLIO DIVERSIFICATION

To maintain a diversified portfolio, a maximum percentage limitation has been set for each type of investment. If an investment percentage-of-portfolio limitation were to be exceeded due to an incident, such as fluctuation in portfolio size, the affected investments may be held to maturity to avoid losses or if no loss is indicated, the Treasurer may reconstruct the portfolio if in his/her judgment it appears prudent, taking into consideration the expected length of time to bring the portfolio back into balance.

## INVESTMENT RESOURCES

Information concerning investment opportunities and market developments will be gained by maintaining contact with the financial community and the media.

## CASH MANAGEMENT

Cash will be invested as close to 100% of collected funds as possible taking into consideration cash flow information given to the Treasurer.

## REPORTING REQUIREMENTS

The Treasurer shall annually submit to the Airport Authority a statement of investment policy.

The Treasurer shall submit a monthly report, that meets all Government Code requirements, to the Airport Authority showing the type of all investments, including any made and maturing between monthly reports, showing institution, date of maturity, amount of deposit or cost of security, current market value of all securities with a maturity of more than 12 months, rate of interest, statement relating the report to the Statement of Investment Policy, statement that there are sufficient funds to meet the next six months obligations, and such data as may be required by the Airport Authority.

### INTERNAL CONTROLS

A system of internal controls shall be established and documented in writing. The controls shall be designed to prevent losses of public funds arising from fraud, employee error, misrepresentation of third parties, unanticipated changes in financial markets, or imprudent actions by employees and officers of the Government Agency.

**EXHIBIT A  
PORTFOLIO GUIDELINES**

<b>INVESTMENTS</b>	<b>MAXIMUM AMOUNT</b>	<b>MAXIMUM MATURITY</b>
U.S. Agency Securities	70%	5 YEARS
Corporate Term Notes	30% (note 1)	5 YEARS
Local Agency Investment Fund	\$20 MILLION	N/A
Bankers Acceptances	15% (note 1)	6 MONTHS
Non-Negotiable Certificates Of Deposit	15% (note 1)	5 YEARS
Negotiable Certificates Of Deposit	15% (note 1)	5 YEARS
Commercial Paper	15% (note 1)	9 MONTHS
Repurchase Agreements	10%	1 YEAR
Money Market Funds (note 2)	15%	N/A
U.S. Treasury Securities	NO LIMIT	5 YEARS

Footnotes:

(1) Maximum amount of any one issuer is 5%.

(2) U.S. Treasury obligations only.

**STAFF REPORT PRESENTED TO THE  
BURBANK-GLENDALE-PASADENA AIRPORT AUTHORITY  
FEBRUARY 20, 2018**

**AWARD OF CONTRACT  
PROJECT NUMBER E17-19  
AIRFIELD LIGHTING VAULT AREA PAVING PROJECT**

**SUMMARY**

At the February 5, 2018, meeting of the Operations and Development Committee ("Committee"), the Committee recommended that the Commission approve the following actions for the asphaltic concrete ("AC") rehabilitation of the area adjacent to the Airfield Lighting Vault ("ALV"):

- Award a construction contract in the amount of \$69,872 to Excel Paving, dba PALP, Inc.;
- Authorize use of in-house construction management service, field observation and security, for the not-to-exceed amount of \$10,000; and,
- Establish a project contingency in the amount of \$4,000 which is approximately 5% of the project construction cost.

**BACKGROUND**

The pavement surfaces within the Airfield Operations Area are monitored regularly to determine the condition of the pavement and whether it requires maintenance work or if it has reached a point of end of useful life. Pavement areas deemed impracticable to continue maintenance work on are recommended for rehabilitation. The pavement area around the ALV is over 20 years old and appropriations are included in the adopted FY2018 budget to address this rehabilitation project.

**PROJECT DETAILS**

Approximately 18,000 square feet of asphalt has exceeded its useful life. Staff pays particular attention to pavements on the airfield because of the potential to cause Foreign Object Debris ("FOD") hazards. The scope of work is for the removal and replacement of 4" of asphalt and also includes the removal of 30 gate posts that were previously paved over from an old fence alignment.

**BID PROCESS**

Staff solicited sealed bids by using PlanetBids, advertising in the Dodge Construction News and local and minority newspapers, reaching out to local construction companies, and providing public postings on the internet and in the Burbank, Glendale and Pasadena City Halls. Bids received were opened via PlanetBids on December 13, 2017, with three contractors responding to the Request for Bids. The results are:

CONTRACTOR	BID
Excel Paving Company, dba PALP, Inc. (Long Beach, CA)	\$69,872
All American Asphalt (Corona, CA)	\$98,000
Dekan Construction Corp. (Valencia, CA)	\$112,650

Staff reviewed the bids and determined that all bids were deemed responsive and the low bidder was Excel Paving Company with a bid submittal of \$69,872. Excel Paving, which recently completed the rehabilitation of the Authority's runways, has performed satisfactory work for the Authority in the past.

#### ENGINEER'S ESTIMATE

An Engineer's construction estimate of \$78,000 was prepared by the Authority's Engineering Department.

#### SCHEDULE

The work will be scheduled to begin upon award and execution of the construction contract. The project is estimated to be complete within thirty (30) calendar days from the notice to proceed to the contractor.

#### OTHER COSTS

This project will be managed in-house by Staff, including all project and construction management services, testing, and other soft costs. The estimated cost for staff's time is \$10,000.

#### CONTINGENCY

In the event of unforeseen circumstances, Staff recommends a project aggregate contingency of \$4,000.

#### OPERATIONS IMPACTS

All work will be phased and coordinated with airport departments concerned to ensure minimal impacts on airport operations. Access to the ALV during this project will be continuously maintained.

#### BUDGET IMPACTS

Appropriations in the amount of \$92,000 are included in the FY2017/2018 Capital Budget as part of the Airside Paving Improvements project line item. A breakdown summary of the project budget costs is as follows:



Construction	\$78,000
In-House Design, Construction Management, Testing and Contingency	<u>14,000</u>
Total Budget Appropriation:	<u>\$92,000</u>

The construction cost of \$69,872 is within the budget appropriations and the estimated cost for in-house project and construction management, testing and construction contingency remains within the original budget forecast.

### RECOMMENDATION

At the February 5, 2018, meeting of the Operations and Development Committee, the Committee recommended that the Commission approve the following actions for the rehabilitation of airside pavement adjacent to the Airfield Lighting Vault:

- Award a construction contract in the amount of \$69,872 to Excel Paving, dba PALP, Inc.;
- Authorize use of in-house construction management service, field observation and security for the not-to-exceed amount of \$10,000; and,
- Establish a project contingency in the amount of \$4,000 which is approximately 5% of the project construction cost.

## CONSTRUCTION AGREEMENT

(Burbank-Glendale-Pasadena Airport Authority/PALP, Inc. dba Excel Paving Company)

THIS CONSTRUCTION AGREEMENT ("Agreement") is dated February 5, 2018 for reference purposes and is executed by the Burbank-Glendale-Pasadena Airport Authority, a California joint powers agency ("Authority") and PALP, Inc., dba Excel Paving Company, a California corporation ("Contractor"). Contractor's CSLB license number is 688659. Contractor's DIR registration number is 100003331.

In consideration of the mutual covenants hereinafter set forth, the parties agree as follows:

1. **Contract Documents.** The Contract Documents consist of this Agreement, the Notice Inviting Bids, the Instructions to Bidders, the Bid (including documentation accompanying the Bid and any post-Bid documentation submitted before the Notice of Award), the Bonds, permits from regulatory agencies with jurisdiction, General Provisions, Special Provisions, Plans, Standard Plans, Standard Specifications, Reference Specifications, Addenda, Change Orders, and Supplemental Agreements to the extent attached to this Agreement. Such attachments are incorporated herein by reference.
2. **Scope of Services.** Contractor shall perform the Work in a good and workmanlike manner for the project identified as E17-19 ALV Area Paving Project ("Project"), as described in this Agreement and in the Contract Documents.
3. **Compensation.** In consideration of the services rendered hereunder, Authority shall pay Contractor a not to exceed amount of Sixty Nine Thousand, Eight Hundred Seventy Two Dollars and Zero Cents (\$69,872.00) in accordance with the prices as submitted in the Bid.
4. **Incorporation by Reference.** All of the following documents are attached hereto and incorporated herein by reference: Workers' Compensation Certificate of Insurance, Additional Insured Endorsement (Comprehensive General Liability), Additional Insured Endorsement (Automobile Liability), and Additional Insured Endorsement (Excess Liability).
5. **Antitrust Claims.** In entering into this Agreement, Contractor offers and agrees to assign to Authority all rights, title, and interest in and to all causes of action it may have under Section 4 of the Clayton Act (15 U.S.C. Sec. 15) or under the Cartwright Act (Business and Professions Code Section 16700 et seq.) arising from purchases of goods, services, or materials pursuant to this Agreement. This assignment shall be made and become effective at the time Authority tenders final payment to Contractor without further acknowledgment by the parties.
6. **Prevailing Wages.** Authority and Contractor acknowledge that the Project is a "public works project" within the scope of the Prevailing Wage Law (Labor Code Section 1720 et seq.).
7. **Workers' Compensation.** Labor Code Sections 1860 and 3700 provide that every contractor will be required to secure the payment of compensation to its employees. In accordance with the provisions of Labor Code Section 1861, by signing this Agreement, Contractor certifies as follows:

"I am aware of the provisions of Section 3700 of the Labor Code which require every employer to be insured against liability for workers' compensation or to undertake self-insurance in accordance with the provisions of that code, and I will comply with such provisions before commencing the performance of the work of this contract."

8. Execution Warranty. Any person executing this Agreement on behalf of Contractor warrants and represents that he or she has the authority to execute this Agreement on behalf of Contractor and has the authority to bind Contractor to the performance of its obligations hereunder.

9. Entire Agreement. This Agreement, including the Contract Documents and any other documents incorporated herein by specific reference, represents the entire and integrated agreement between Authority and Contractor related to the Project. This Agreement supersedes all prior oral or written negotiations, representations or agreements related to the Project. This Agreement may not be modified or amended, nor any provision or breach waived, except in a writing signed by both parties that expressly refers to this Agreement.

10. Counterparts. This Agreement may be executed in counterpart originals, duplicate originals, or both, each of which is deemed to be an original for all purposes.

TO EFFECTUATE THIS AGREEMENT, the parties have executed this Agreement by causing their duly authorized representatives to sign below.

**AUTHORITY**

Burbank-Glendale-Pasadena Airport Authority

By: \_\_\_\_\_  
Terry Tornek - President

**CONTRACTOR**

PALP, Inc. dba Excel Paving Company

By: \_\_\_\_\_  
☒ Chairman ☒ President ☐ Vice President

By: \_\_\_\_\_  
☐ Secretary ☒ Asst. Secretary  
☐ Chief Finance Officer ☐ Asst. Treasurer

[Pursuant to California Corporations Code Section 313, both signature lines must be executed unless the signatory holds at least one of the offices designated on each line.]

# CALIFORNIA ALL-PURPOSE CERTIFICATE OF ACKNOWLEDGMENT

A notary public or other officer completing this certificate verifies only the identity of the individual who signed the document to which this certificate is attached, and not the truthfulness, accuracy, or validity of that document.

State of California

County of Los Angeles

On 1/9/18 before me, A. Henderson, Notary Public,  
(Here insert name and title of the officer)

personally appeared Curtis P. Brown III and Michele E. Drakulich

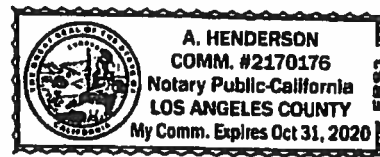
who proved to me on the basis of satisfactory evidence to be the person(s) whose name(s) is/are subscribed to the within instrument and acknowledged to me that he/she/they executed the same in his/her/their authorized capacity(ies), and that by his/her/their signature(s) on the instrument the person(s), or the entity upon behalf of which the person(s) acted, executed the instrument.

I certify under PENALTY OF PERJURY under the laws of the State of California that the foregoing paragraph is true and correct.

WITNESS my hand and official seal.

A. Henderson  
Signature of Notary Public

(Notary Seal)



## ADDITIONAL OPTIONAL INFORMATION

### DESCRIPTION OF THE ATTACHED DOCUMENT

(Title or description of attached document)

(Title or description of attached document continued)

Number of Pages \_\_\_\_\_ Document Date \_\_\_\_\_

(Additional information)

### CAPACITY CLAIMED BY THE SIGNER

- ☐ Individual (s)  
☐ Corporate Officer

(Title)

- ☐ Partner(s)  
☐ Attorney-in-Fact  
☐ Trustee(s)  
☐ Other \_\_\_\_\_

### INSTRUCTIONS FOR COMPLETING THIS FORM

Any acknowledgment completed in California must contain verbiage exactly as appears above in the notary section or a separate acknowledgment form must be properly completed and attached to that document. The only exception is if a document is to be recorded outside of California. In such instances, any alternative acknowledgment verbiage as may be printed on such a document so long as the verbiage does not require the notary to do something that is illegal for a notary in California (i.e. certifying the authorized capacity of the signer). Please check the document carefully for proper notarial wording and attach this form if required.

- State and County information must be the State and County where the document signer(s) personally appeared before the notary public for acknowledgment.
- Date of notarization must be the date that the signer(s) personally appeared which must also be the same date the acknowledgment is completed.
- The notary public must print his or her name as it appears within his or her commission followed by a comma and then your title (notary public).
- Print the name(s) of document signer(s) who personally appear at the time of notarization.
- Indicate the correct singular or plural forms by crossing off incorrect forms (i.e. he/she/they, is/are) or circling the correct forms. Failure to correctly indicate this information may lead to rejection of document recording.
- The notary seal impression must be clear and photographically reproducible. Impression must not cover text or lines. If seal impression smudges, re-seal if a sufficient area permits, otherwise complete a different acknowledgment form.
- Signature of the notary public must match the signature on file with the office of the county clerk.
  - ✦ Additional information is not required but could help to ensure this acknowledgment is not misused or attached to a different document.
  - ✦ Indicate title or type of attached document, number of pages and date.
  - ✦ Indicate the capacity claimed by the signer. If the claimed capacity is a corporate officer, indicate the title (i.e. CEO, CFO, Secretary).
- Securely attach this document to the signed document

**STAFF REPORT PRESENTED TO THE  
BURBANK-GLENDALE-PASADENA AIRPORT AUTHORITY  
FEBRUARY 20, 2018**

**ACCEPTANCE OF L.A. REGIONAL WATER QUALITY CONTROL BOARD APPROVAL  
OF REPLACEMENT PASSENGER TERMINAL PROJECT HUMAN HEALTH RISK  
ASSESSMENT; SUPPLEMENTAL AUTHORIZATION FOR ASSOCIATED EXPENSES**

**SUMMARY**

Staff seeks Commission acceptance of the Los Angeles Regional Water Quality Control Board ("LARWQCB") approval of the Human Health Risk Assessment ("HHRA") for the Adjacent Property, which is the preferred site for the Replacement Passenger Terminal project. LARWQCB has concluded: "the Regional Board considers the Adjacent Property compatible for the construction of and operation of an airport replacement passenger terminal and associated facilities (replacement terminal complex)."

Additionally, Staff seeks Commission authorization of a supplemental appropriation in the amount of \$60,000 for: (i) unbilled oversight costs by the State Office of Environmental Health Hazard Assessment ("OEHHA") and LARWQCB; (ii) unbilled work by Geosyntec on the HHRA and new work in connection with the negotiation of a land use covenant required by LARWQCB; and (iii) unbilled work by Ring Bender on the HHRA and new work negotiating and drafting the land use covenant required by LARWQCB.

**BACKGROUND**

On February 6, 2017, the Commission awarded a contract to EFI Global, Inc. ("EFI Global") for soil and soil gas sampling services on the Adjacent Property. Additionally, the Commission authorized Geosyntec to prepare an HHRA based on the results of such sampling.

On July 17, 2017, the Commission received Geosyntec's Draft HHRA and authorized the report to be finalized and submitted to state and local regulatory agencies. Using standard screening levels published by both Cal EPA (the Department of Toxic Substances Control) and USEPA, Geosyntec concluded as follows (the acronym "HI" is shorthand for hazard index):

- "For an airport worker, the calculated cancer risk and noncancer HI are at or below the *de minimis* levels. Because the calculated cancer risk and noncancer HI to an on-site airport worker are below the *de minimis* levels, the risk and hazard to an occasional airport visitor would also be below *de minimis* levels."
- "For a construction worker, the calculated cancer risk is well below the *de minimis* level. The HI is at the acceptable target level equivalence of 1.0 used by Cal-EPA and USEPA. Because the calculated cancer risk and noncancer HI to a construction worker are below and at the *de minimis* levels, the risk and hazard to an off-site

employee or worker during construction activities would also be below *de minimis* levels.”

OEHHA provided comments on the Draft HHRA in a November 20, 2017, memorandum, which was received on December 4, 2017. Geosyntec prepared a Final HHRA, dated December 21, 2017, with revisions addressing OEHHA's comments and submitted the Final HHRA to LARWQCB. Staff also placed the Final HHRA on the Burbank Replacement Terminal website for public inspection and a courtesy copy was provided to Lockheed. The Final HHRA concludes:

“In summary, based on the results of the investigation and the risk assessment, the Adjacent Property is compatible for the construction of and operation of a replacement passenger terminal and associated facilities. Potential exposures to chemicals reported in soil and soil vapor samples are not likely to result in adverse health effects to a construction worker or to an off-site worker. Further, potential exposures to chemicals reported in soil and soil vapor samples are not likely to result in adverse health effects to an airport worker or the occasional airport passenger or visitor. The results indicate that remediation is not warranted for the redevelopment of the site into a new airport terminal.”

#### LARWQCB DETERMINATION

On January 29, 2018, LARWQCB issued a letter approving the Draft HHRA and the Final HHRA. A copy of LARWQCB's approval letter is attached as Exhibit A.

LARWQCB's approval letter declares: “the Regional Board considers the Adjacent Property compatible for the construction of and operation of an airport replacement passenger terminal and associated facilities (replacement terminal complex).” The letter also requests that the Authority do the following:

- Notify LARWQCB of any changes to a building or parking location that will cause the location to exceed 25 feet in depth below ground surface (“bgs”).
- Immediately contact LARWQCB and discuss the need for additional soil/soil vapor samples for risk characterization if buildings are planned for certain areas in the southern portion of the property where no soil vapor samples were collected (only soil samples to a maximum depth of 15 feet bgs).
- Submit a Soil Management Plan to LARWQCB for review and approval prior to the start of construction activities.
- Record a Covenant and Environmental Restriction on Property to prohibit uses other than those permissible as an airport terminal complex, including sensitive uses such as homes, schools, and day care facilities.

#### SUPPLEMENTAL APPROPRIATION

At the February 6, 2017, Commission meeting, Staff presented an estimated budget of \$675,050 for the soil/soil vapor testing and preparation of the HHRA. This budget covered costs associated with: sampling work by EFI Global; oversight work and HHRA preparation

by Geosyntec; legal work by Ring Bender; and oversight work and HHRA review by OEHHA and LARWQCB.

While the total budget has not yet been exceeded, there are unbilled oversight costs from OEHHA and LARWQCB, as well as unbilled HHRA work by Geosyntec and Ring Bender. Additionally, there is a need for additional work by Geosyntec and Ring Bender in connection with the negotiation and drafting of the land use covenant required by LARWQCB. Thus, Staff requests Commission approval of a supplemental appropriation in the amount of \$60,000 for these expenses.

#### RECOMMENDATIONS

Staff recommends that the Commission accept the LARWQCB approval of the Final HHRA for the Adjacent Property and authorize a supplemental appropriation in the amount of \$60,000 for the OEHHA, LARWQCB, Geosyntec, and Ring Bender expenses described in this report.

#### Attachments

Exhibit A – January 29, 2018 LARWQCB Letter

EDMUND G. BROWN JR.  
GOVERNORMATTHEW RODRIGUEZ  
SECRETARY FOR  
ENVIRONMENTAL PROTECTION

## Los Angeles Regional Water Quality Control Board

January 29, 2018

Mr. Mark Hardyment  
Burbank-Glendale-Pasadena Airport Authority  
2627 Hollywood Way  
Burbank, California 91505

**SUBJECT: REVIEW OF DRAFT AND FINAL HUMAN HEALTH RISK ASSESSMENT**

**SITE/CASE: HOLLYWOOD BURBANK AIRPORT REPLACEMENT TERMINAL  
2801 NORTH HOLLYWOOD WAY, BURBANK, CALIFORNIA, 91505  
(SCP NO. 104.0674A, SITE ID NO. 2040502)  
ASSESSOR'S PARCEL NUMBERS (APNs): 2466-011-914, 2466-011-916**

Dear Mr. Hardyment:

The California Regional Water Quality Control Board, Los Angeles Region (Regional Board) is the public agency with primary responsibility for the protection of groundwater and surface water quality for all beneficial uses within major portions of Los Angeles County and Ventura County, including the above-referenced Site.

### TECHNICAL REPORTS

We received the following documents, submitted for our review:

- *Human Health Risk Assessment* ("Draft HHRA") dated July 17, 2017, prepared by Geosyntec Consultants.
- *Final Human Health Risk Assessment* ("Final HHRA") dated December 21, 2017, prepared by Geosyntec Consultants.

### BACKGROUND

The Site is located at 2801 North Hollywood Way in Burbank, California (Site) (Figure 1). The Site was formerly occupied by the Lockheed Martin Corporation (Lockheed) Plant B-6 site (B-6 Plant) between approximately 1941 and 1997. Operations at the Site included aircraft part cleaning and painting, tooling, welding, and machining. Chemicals used at the Site include aircraft fuels, biocides, descalers, fuel oils, gasoline, paints, solvents, acids, caustics, plastic resins and hardeners. Between 1989 and 1996, approximately 6,000 tons of soil impacted by metals, total petroleum hydrocarbons, and volatile organic compounds were removed. The Site was issued a soil closure in 1996.



The property was acquired by the Burbank-Glendale-Pasadena Airport Authority (Airport Authority) in 1997 under eminent domain. A modern 355,000-square-foot 14-gate airport terminal, parking and utility support structures (replacement terminal complex) is planned in an area referred to as the "Adjacent Property" (Figure 1). The Adjacent Property is approximately 49 acres and is adjacent to an existing airport runway and north of an existing passenger terminal at the Hollywood Burbank Airport in the City of Burbank, California. The replacement terminal complex is planned for the properties with Assessor's Parcel Numbers (APNs) 2466-011-914 and 2466-011-916.

The Airport Authority's planned construction activities involve selective regrading, trenching, and building the new terminal complex. Prior to initiating construction, the Airport Authority wanted to obtain recent data and document the findings in a HHRA to evaluate potential human health risk to construction workers during development and workers/users of the new terminal complex following development. A Soil and Soil Vapor Investigation Work Plan (Work Plan) was prepared by Geosyntec, technical consultant for the Airport Authority, to facilitate the collection of recent data in support of a HHRA. The Work Plan was approved by the Regional Board on December 12, 2016, and a corresponding field investigation was performed in February and March 2017.

Data collection in support of the field investigation and HHRA included soil vapor samples collected from 55 locations from depths of approximately 5 and 15 feet below ground surface (bgs) (Figure 2). In areas where a basement was projected to be constructed, soil vapor samples were collected at 25 feet bgs. The soil vapor samples were analyzed for volatile organic compounds (VOCs) by US EPA Method 8260B. Soil samples were collected at 3, 8, 15, and 25 (basement locations only) feet bgs from 89 locations at the Site (Figure 2). The soil samples were analyzed for the following:

- I. California Administrative Manual (CAM) 17 metals by US Environmental Protection Agency (EPA) Method 6010B/7471A
- II. Total Petroleum Hydrocarbons (TPH) quantified as diesel and motor oil (TPHd and TPHmo, respectively) by US EPA Method 8015M
- III. Polycyclic aromatic hydrocarbons (PAHs) by US EPA Method 8270C SIM
- IV. Polychlorinated biphenyls (PCBs) by US EPA Method 8082
- V. Select soil samples from soil vapor borings were collected for physical parameter analysis, such as permeability, porosity, grain size, dry bulk density and fractional organic carbon.

The results from the field investigation served as the primary basis for the Draft HHRA. The Draft HHRA was reviewed by the Office of Environmental Health Hazard Assessment in a memorandum (OEHHA memo) dated November 20, 2017 (attached). The Draft HHRA was revised based on editorial comments in the OEHHA memo to produce the Final HHRA, but the results remained the same in both documents. The findings from the Draft HHRA and Final HHRA are presented below.

## HHRA FINDINGS

The findings from the Draft HHRA and Final HHRA indicate the following:

1. For an airport worker, the calculated cancer risk and noncancer hazard index (HI) are at or below *de minimis* ( $10^{-6}$ ) levels. Because the calculated cancer risk and noncancer HI to an on-site airport worker are below the *de minimis* levels, the risk and hazard to an occasional airport worker would also be *de minimis* levels. As such, the cancer risk and non-cancer hazard for airport workers is below typically acceptable levels.

2. For a construction worker, the calculated cancer risk is well below the *de minimis* level. The HI is at the acceptable target level equivalence of 1.0 used by Cal-EPA and USEPA. Because the calculated cancer risk and noncancer HI to a construction worker are below and at the *de minimis* levels, the risk and hazard to an off-site employee or worker during construction activities would also be below *de minimis* levels. As such, the cancer risk and non-cancer hazard for construction workers is below typically acceptable levels.
3. Prior to the initiation of construction of the replacement terminal complex, a Soil Management Plan (SMP) will be prepared by Geosyntec to confirm additional protection of human health during construction activities.

#### REGIONAL BOARD APPROVAL


The Regional Board approves the Draft HHRA and Final HHRA with the following comments and requests:

1. In regards to the second bullet on page 16 of the OEHA memo, "*LA RWQCB should decide on the need for additional sampling, e.g. hexavalent chromium, organochlorine pesticides, and soil vapor*", the Regional Board did not find a need for additional sampling based on the results of the Draft and Final HHRA documents which assess human health risk from soil and soil vapor exposure to a maximum depth of 25 feet bgs. The risk from soil includes the soil ingestion, contact, and inhalation pathways, while the risk from soil vapor includes the vapor intrusion pathway. In addition, historical data and site use history for the portion of the former Lockheed B-6 Plant that includes the Adjacent Property were examined to conclude that no additional sampling is required.
2. Following the review of the results of the field investigation, Draft HHRA, OEHA memo, and Final HHRA, the Regional Board considers the Adjacent Property compatible for the construction of and operation of an airport replacement passenger terminal and associated facilities (replacement terminal complex).
3. The Regional Board shall be notified of any changes to a building or parking location that will cause the location to exceed 25 feet in depth bgs. Soil and soil vapor deeper than 25 feet bgs was not assessed as part of the Draft and Final HHRA for the Adjacent Property. Changes in building or parking depth greater than 25 feet bgs may require additional soil/soil vapor sample collection and risk analysis to assess the risk to human health at the deeper building or parking location.
4. If buildings are planned for the southern portion of Area D-DU3 and F-DU1 (Figure 2), where no soil vapor samples were collected (only soil samples to a maximum depth of 15 feet bgs), the Airport Authority shall immediately contact the Regional Board and discuss the need for collecting additional soil/soil vapor samples for risk characterization in those areas.
5. A Soil Management Plan (SMP) shall be submitted to the Regional Board for review and approval prior to the start of construction activities. The SMP shall address future soil excavation activities and describe the methods for managing impacted soil encountered during excavation and redevelopment activities. The SMP shall address the following:

- a. Excavation, management, transportation of excavated soil
  - b. Erosion and sediment (E&S) controls
  - c. Collection and analysis of confirmatory soil samples
  - d. Placement and disposal of the excavated soil
6. A Covenant and Environmental Restriction on Property ("land use covenant" or "deed restriction") shall be recorded for the Site to prohibit uses other than those permissible as an airport terminal complex, including sensitive uses such as homes, schools, or day care facilities.

**If you have any questions or concerns related to this project, please contact Ms. Nicole Alkov (Case Manager) at (213) 576-6677 or [nicole.alkov@waterboards.ca.gov](mailto:nicole.alkov@waterboards.ca.gov).**

Sincerely,

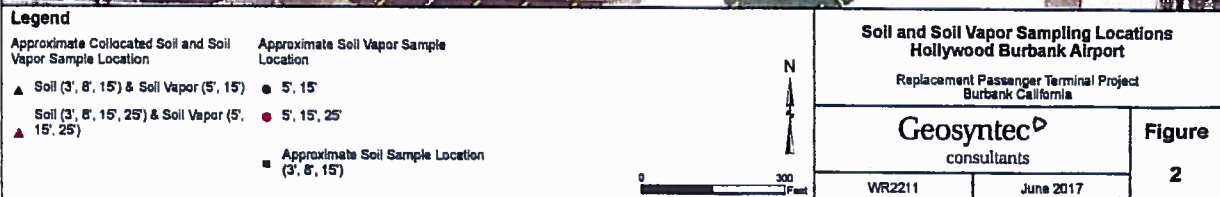
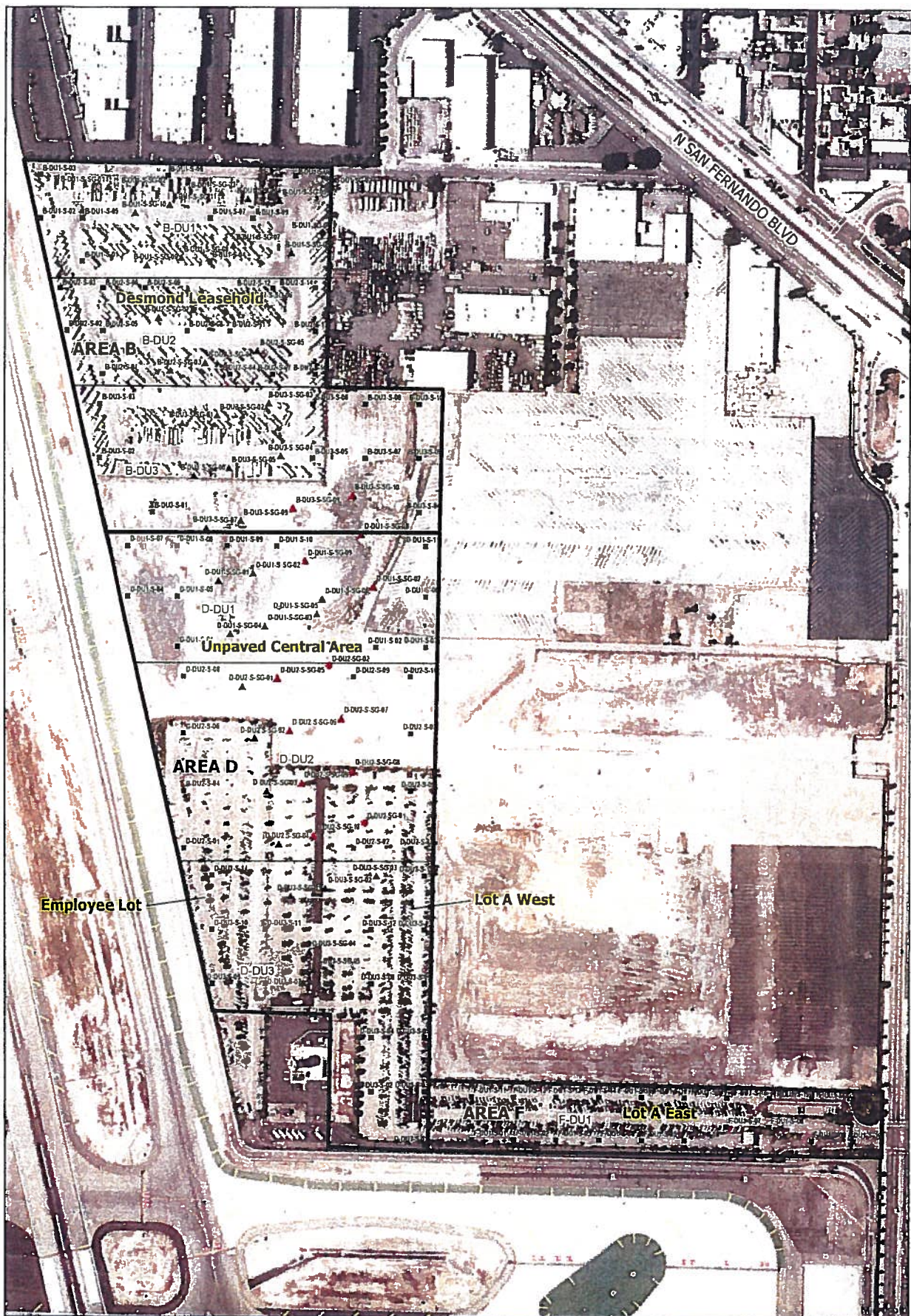
  
Samuel Unger, P.E.  
Executive Officer

Enc.: Figure 1 – Adjacent Property Site Map  
Figure 2 – Soil and Soil Vapor Sample Locations  
Figure 3 – Soil Vapor Sample Locations and Replacement Terminal Complex  
OEHHA Memo dated November 20, 2017

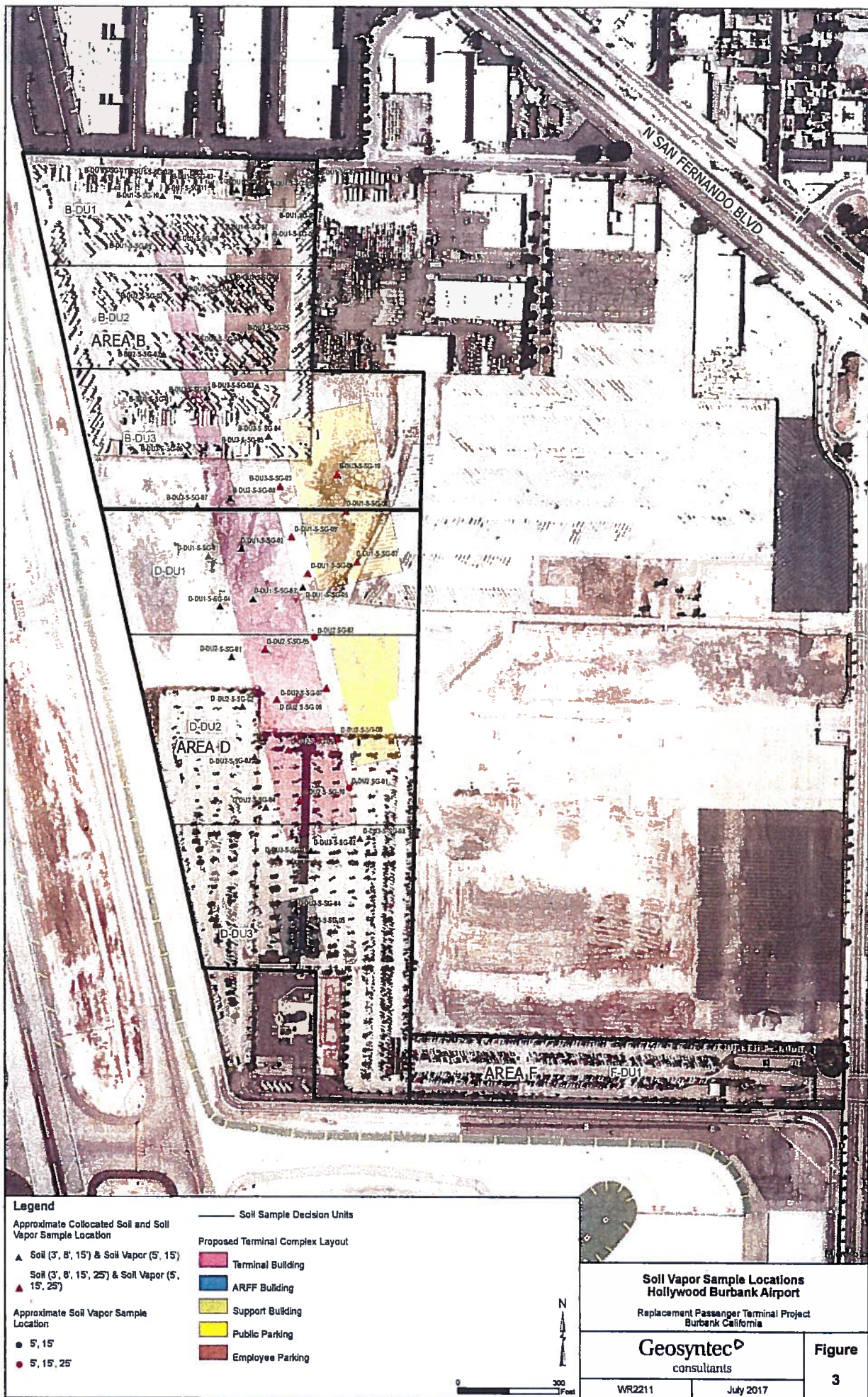
cc: Mr. Ravi Arulanantham, Geosyntec Consultants ([RARulanantham@Geosyntec.com](mailto:RARulanantham@Geosyntec.com))  
Mr. Robert Cheung, Geosyntec Consultants ([RCheung@Geosyntec.com](mailto:RCheung@Geosyntec.com))  
Ms. Liaht Rosenstein, Lockheed Martin Corporation ([Liaht.Rosenstein@lmco.com](mailto:Liaht.Rosenstein@lmco.com))  
Ms. Anita Fang, LARWQCB ([Xiao-Xue.Fang@Waterboards.ca.gov](mailto:Xiao-Xue.Fang@Waterboards.ca.gov))  
Mr. Gary Riley, EPA Region IX ([Riley.Gary@epa.gov](mailto:Riley.Gary@epa.gov))











# Office of Environmental Health Hazard Assessment

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Matthew Rodriguez  
Secretary for  
Environmental Protection



Edmund G. Brown Jr.  
Governor

## MEMORANDUM

**TO:** Ms. Nicole Alkov  
Engineering Geologist  
Site Cleanup Program, Unit II  
Los Angeles Regional Water Quality Control Board  
320 West 4<sup>th</sup> Street, Suite 200  
Los Angeles, CA 90013

**FROM:** Hristo Hristov, M.D., Ph.D., M.Env.Sc.  
Integrated Risk Assessment Branch  
Office of Environmental Health Hazard Assessment

**DATE:** November 20, 2017

**SUBJECT:** Review of Human Health Risk Assessment Hollywood Burbank Airport  
Replacement Passenger Terminal, Burbank-Glendale-Pasadena Airport Authority  
2627 Hollywood Way, Burbank, California 91505

**SWRCB # R4-16-035**

**OEHHA # 880439-00**

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**Document Reviewed** (Italicized text is quoted from the request or from the documents provided for review.)

As per your request, I reviewed the Human Health Risk Assessment Hollywood Burbank Airport Replacement Passenger Terminal, Burbank-Glendale-Pasadena Airport Authority, 2627 Hollywood Way, Burbank, California 91505, prepared by Geosyntec Consultants (Geosyntec) and dated 17 July 2017.

### Scope of the Review

This review is intended to deliberate on the risk and hazard results for the airport personnel and for the construction workers involved in building the new terminal at the site.

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**California Environmental Protection Agency**

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[www.oehha.ca.gov](http://www.oehha.ca.gov)



## **Limitations**

An adequate sampling strategy, sample handling, and sample analysis are pre-requisites for an accurate characterization of the site contamination. The Office of Environmental Health Hazard Assessment (OEHHA) was not involved in the characterization, remediation or post-remedial sampling activities at this site. Accordingly, my comments and conclusions are contingent upon the adequacy of the site characterization and upon the correctness, completeness and representativeness of the information provided in the reviewed report.

OEHHA did not review the initially provided approximately 15,000 pages of analytical data, including quality control, calibration curves, etc. The analytical data (approximately 1,500 pages) provided later (7/27/2017), were merely reviewed for consistency with the data shown in tables in the report and used in the human health risk assessment.

## **Background Information**

A new terminal is planned to be built on the Adjacent Property of approximately 49 acres located directly next to the north/south airplane runway and north of the existing passenger terminal of the Hollywood Burbank Airport. The Adjacent Property occupies parts of the former Lockheed Plant B-6 site where over 80 manufacturing and support buildings and infrastructure were demolished between 1990 and 1995. The site underwent several investigations and was remediated. Groundwater at the site was found at 250 ft bgs (below ground surface) and moving in a predominantly southeastern direction. Considering data in recent TetraTech reports, Geosyntec determined that groundwater contaminants would not result in health risks to the airport employees and to construction workers. Geosyntec prepared a Work Plan (approved by the Regional Water Board on 12 December 2016) to direct collection of representative soil and soil vapor samples for the whole site divided for this purpose into three separate areas with each area further subdivided into decision units. A total of 140 ISM (incremental sampling methodology) soil samples were collected from 3, 8, and 15 ft bgs. Discrete samples were also collected from 15 and 25 ft bgs at locations where basements were planned. Soil vapor sampling was performed at 55 points from 5 and 15 ft bgs. 16 additional soil vapor samples were collected at planned basement locations. The samples were analyzed for chemicals used at the former plant and previously identified at the site. The resulting analytical data were evaluated to determine the maximum concentration for each retained contaminant of potential concern (COPC) to be followed as input into the screening level human health risk assessment that is the subject of this review.



## **General Comments**

### **On the Sampling**

**Comment 1.** The performed soil and soil vapor sampling is consistent with the Work Plan. The work plan and the report do not provide information on the following:

- P. 9 indicates that at future terminal basements discrete soil samples were collected from 15' and 25' below ground surface (bgs). No information was provided to OEHHA regarding the location of basements in the terminal. The location of the samples relative to the basement locations should be verified by LA RWQCB. It should be noted, that changes in the building plans, e.g., resulting in construction of a basement at a different non-sampled location may compromise the results of this risk assessment. LA RWQCB should take the necessary actions to prevent potential health impact resulting from such construction plan changes.
- Organochlorine pesticides (OCPs) were sampled from the unpaved area only (1 discrete surface sample from Area B and 4 discrete surface samples from Area D). OCPs are known for low solubility, extreme hydrophobicity, sorption, and persistence, and tendency to volatilize. A redistribution through dry and wet deposition may have occurred over the rest of the site (paved at the time of sampling but possibly unpaved at the time of OCPs use). LA RWQCB should decide on the representativeness of those samples and on the need for additional sampling.
- No soil vapor samples were collected at Area F and the southern part of Area D-DU3. LA RWQCB needs to make a decision on the adequacy of the existing sampling and on the need for additional sampling.

### **On the Analytical Data**

**Comment 2.** The laboratory analytical reports consists of soil data for metals, total petroleum hydrocarbons (TPHs), polychlorinated biphenyls (PCBs), polycyclic aromatic hydrocarbons (PAHs), and pesticides summarized in 4 tables. Another table presents a statistical summary of chemicals analyzed in soil. The data presented in the tables generally agree with the analytical reports with few exceptions that should not impact the results of the risk assessment since the latter is based on the maximum measured concentrations. Zinc was found in blanks (at 1.38 mg/kg) for the sets collected from 3' and 8' bgs. This sample contamination is not expected to significantly bias the risk results.

The collected soil vapor data also follow the results shown in the analytical laboratory reports. Separate tables summarize the soil vapor data and provide a statistical summary of soil vapor data.

### **On the Contaminants of Potential Concern (COPCs)**

The analysis of the soil samples identified: 13 metals; TPHs (total petroleum hydrocarbons) as Motor Oil and as Diesel; Aroclor-1254; 9 PAHs (polycyclic aromatic hydrocarbons); and DDT.

**Comment 3.** P. 10, Section 3.1.3 Soil Sampling Results states *"The concentrations of metals detected in soil appear to be associated with naturally occurring background concentrations."*

The report does not present any table, discussion or reference to support such determination. I identified the *"Kearney Foundation Special Report, 1996. Background Concentrations of Trace and Major Elements in California Soils, Division of Agriculture and Natural Resources, University of California. March"* in the report reference list and presumed that the background data ranges from this reference were used to make that determination. However, the analytical results show Zinc at a maximum concentration of 1,400 mg/kg, exceeding its maximum background concentration of 236 mg/kg (according to the Kearney Foundation document). Concentrations for 12 other metals were found to be at or below the background concentrations in the cited reference. It should be noted that Zn and the 12 other metals were followed in the risk assessment. I recommend that Geosyntec provide a table and discussion to support the above statement and to make it transparent. Alternatively, the methods described in DTSC, 1997 can be followed to determine whether the metals at this site are at background concentrations.

**Comment 4.** Pp. 6-7, and p. 12 provide a brief discussion to support a conclusion regarding the type of chromium at the site and to validate the type of chromium analysis. According to the report, *"The results of the chromium investigation in AOC 12 and AOC 13 indicate a lack of significant concentrations of hexavalent chromium and that the predominant form of chromium reported in soil is trivalent chromium. The concentrations of hexavalent chromium in 3 of 30 soil samples found during the Lockheed 2014 investigation are an order of magnitude below the industrial screening level of 6.3 mg/kg (Regional Screening Level; USEPA, 2017a). Based upon the results for soil samples collected in the two AOCs within the Adjacent Property, the Regional Board issued a letter in 2015 finding that Lockheed was not required to conduct further investigations as to those areas. (Regional Board, 2015). Therefore, no further soil sampling for hexavalent chromium was performed..."*

The hexavalent chromium was not followed in the risk assessment. It should be noted that the above determination was based on discrete sampling obtained from 3 locations from 2 areas of concern only (the report refers to 33 samples collected between 10 and 100 ft bgs). Since OEHHA was not involved in the site characterization, I cannot provide a qualified opinion on the representativeness of those results to the whole site. Hexavalent chromium is a carcinogen important to the total risk evaluation. CalEPA does not support exclusion of COPCs on a basis of comparison to a screening level. Such exclusion underestimates the cumulative risk and the hazard index. LA RWQCB should decide on the need for further investigation of the hexavalent chromium contamination based on their knowledge of the site. Hexavalent chromium should be followed in the risk assessment unless defensible reasons supporting its exclusion are provided.

**Comment 5.** P. 11 states “...arsenic was not selected and not evaluated in the HHRA because the maximum concentration of arsenic in soil is 2.08 mg/kg, which is considered within background levels in Southern California soils.” This decision needs to be explained since the rest of the metals (except hexavalent chromium) were followed in the risk assessment, although also considered to be present at background levels.

**Comment 6.** The report does not contain a table showing the selected COPCs. Adding a table showing supporting information for the inclusion/exclusion of the COPCs would add the necessary transparency.

#### **On the Conceptual Site Model (CSM)**

The CSM presented on Fig. 4 correctly depicts the complete pathways for the two exposure scenarios, namely future airport worker (also representative of passenger), and future construction worker (also representative of maintenance worker) (p. 14). The potential for exposure to future off-site worker through inhalation of particles originating on site is evaluated on the basis of the risk results from the two scenarios considered in this report.

#### **On the Human Health Risk Assessment**

Per p. 13, “The HHRA is based on a Tier 1 approach, where the maximum concentrations of detected chemicals are compared to non-site-specific health protective screening levels (e.g., DTSC-based screening levels [DTSC-SLs] or USEPA regional screening levels [RSLs]).” Geosyntec also modified and derived screening levels, especially for VOCs under construction worker scenario.

### On the Exposure Assessment

**Comment 7.** Notes under pp. 14 and 17 refer to “current configuration of 9/80(8 days at 9 hours per day, 1 day at 8 hours per day every 2 weeks [one day off]).” Based on Geosyntec e-mail dated 10/02/2017, “A 9/80 work schedule entails working for 9 hours for 8 days and 8 hours for 1 day for a total of 80 hours over 9 days (9/80) every 2 weeks. For this 9/80 work schedule, assuming a typical average 2-week vacation per year (work 50 weeks per year), an employee works 2,000 hours per year (80 hours every 2 weeks for 25 weeks = 80 hours \* 25 weeks) or 225 days per year (9 days every 2 weeks for 25 weeks = 9 days \* 25 weeks). ... the employee receives 1 work day off every other week **AND** is off every weekend (Saturday and Sunday).” It should be noted that the risk assessment results may not apply if an employee works under a different schedule, e.g., not having regular weekends off.

### On the Toxicity Assessment

**Comment 8.** According to p. 15, “The currently available toxicity values (Table 10) for the COPCs are the OEHHA (2017) and the USEPA Integrated Risk Information System (IRIS) (USEPA, 2017b) and are used to derive screening levels presented in the following sections. In cases where the toxicity criteria for noncancer hazards are available from either OEHHA or USEPA, the more conservative criterion was selected.”

The toxicity values shown in Table 10 do not follow the above “the more conservative” condition for all COPCs. The table should be corrected, as follows:

Benzo(a)pyrene – The oral(dermal) slope factor should read  $2.9\text{E}+00$  (mg/kg-d)<sup>-1</sup> (OEHHA, 2016). The URF should read  $1.1\text{E}-03$  (μg/m<sup>3</sup>)<sup>-1</sup> (OEHHA, 2016);

Benzo(g,h,i)perylene – The chronic oral(dermal) RfD should read  $3.0\text{E}-04$  mg/kg-d based on Benzo(a)pyrene consistent with the screening level shown in Table 14;

Benzo(k)fluoranthene - The oral(dermal) slope factor should read  $1.2\text{E}+00$  (mg/kg-d)<sup>-1</sup> (OEHHA, 2016). The URF should read  $1.1\text{E}-04$  (μg/m<sup>3</sup>)<sup>-1</sup> (OEHHA, 2016);

Beryllium – The RfC should read  $7.0\text{E}-03$  μg/m<sup>3</sup> (OEHHA, 2016);

Chrysene - The oral(dermal) slope factor should read  $1.2\text{E}-01$  (mg/kg-d)<sup>-1</sup> (OEHHA, 2016). The URF should read  $1.1\text{E}-05$  (μg/m<sup>3</sup>)<sup>-1</sup> (OEHHA, 2016). The chronic oral(dermal) RfD should read  $3.0\text{E}-04$  mg/kg-d based on benzo(a)pyrene (per Table 10 reference). The RfC should read  $2.0\text{E}-03$  μg/m<sup>3</sup> based on benzo(a)pyrene (per Table 10 reference);

Indeno(1,2,3-cd)pyrene - The oral(dermal) slope factor should read  $1.2\text{E}+00$  (mg/kg-d)<sup>-1</sup> (OEHHA, 2016). The URF should read  $1.1\text{E}-04$  (μg/m<sup>3</sup>)<sup>-1</sup> (OEHHA, 2016). The chronic oral(dermal) RfD should read  $3.0\text{E}-04$  mg/kg-d based on benzo(a)pyrene (per Table 10

reference). The RfC should read  $2.0\text{E-}03 \mu\text{g}/\text{m}^3$  based on benzo(a)pyrene (per Table 10 reference);

Mercury - The chronic oral(dermal) RfD should read  $1.6\text{E-}04 \text{ mg}/\text{kg-d}$  (OEHHA, 2016). The RfC should read  $3.0\text{E-}02 \mu\text{g}/\text{m}^3$  (OEHHA, 2016);

Nickel - The URF should read  $2.6\text{E-}04 (\mu\text{g}/\text{m}^3)^{-1}$  (OEHHA, 2016);

I used the toxicity values cited above in my derivations of screening levels for the airport worker, and subchronic reference concentrations consistent with the Regional Screening Levels (RSLs) User's Guide (US EPA, 2017) in the derivation of screening levels for the construction worker scenario.

### On the Risk Characterization

The cancer risk and non-cancer hazard were calculated by dividing the maximum measured soil or soil vapor concentration for each COPC by the corresponding screening level followed by multiplying the quotient by  $1.0\text{E-}06$  for carcinogens and by 1 for non-carcinogens. The total incremental lifetime cancer risks and the hazard indices were calculated as a sum of the incremental lifetime cancer risks, and the hazard quotients, respectively for each chemical under each scenario.

### Airport Worker Scenario

#### Risk and Hazard Due to Contaminants in Soil

**Comment 9.** The measured maximum soil concentrations were used to estimate the cancer risk and non-cancer hazard due to exposure through ingestion, dermal contact, and inhalation of particles. The maximum soil concentrations, the Cancer and Non-cancer Screening Levels (DTSC, 2017; US EPA, 2017), and the resulting cancer risk and non-cancer hazard are shown in Table 14 of the report. I recalculated the screening levels using the RSL Calculator (US EPA, 2017) for the COPCs identified in comments 5 and 8 above by using the more conservative toxicity values, and the exposure factors per DTSC, 2014. The calculated screening levels and the estimated risk and hazard are shown in Table 1.

Table 1. Screening Levels, Risk and Hazard for Some COPCs in Soil

Chemical	Maximum Soil Concentration, mg/kg	Cancer Screening Level, mg/kg	Non-Cancer Screening Level, mg/kg	Cancer Risk	Non-Cancer Hazard
Benzo(a)pyrene	0.013	0.44	135.0	$3.0\text{E-}08$	0.0001
Benzo(g,h,i)perylene	0.029	NC	136.0	NC	0.0002
Benzo(k)fluoranthene	0.024	1.1	135.0	$2.0\text{E-}08$	0.0002

Beryllium	0.26	6,950.0	2,210.0	4.0E-11	0.0001
Chrysene	0.021	10.6	135.0	2.0E-09	0.0002
Indeno(1,2,3-cd)pyrene	0.016	1.1	135.0	1.0E-08	0.0001
Mercury	0.21	NC	4.45	NC	0.05
Nickel	8.11	64,100.0	11,100.0	1.0E-10	0.0007
Arsenic	2.08	2.27	4.25	9.0E-07	0.49

Notes:

NC Non-carcinogen or no data

**Comment 10.** To address the exposure of the airport worker to ingestion, dermal contact and inhalation of particles pathways, the available maximum soil vapor data were converted to soil data using the DTSC, 2011a, Appendix E partitioning equation. The conversion is based on a rewritten equation and may yield additional uncertainty. The conversion results are shown in Table 2 below.

Table 2. Maximum Soil Vapor Concentrations Converted to Soil Concentrations

Chemical	Maximum Soil Vapor Concentration, $C_v$ , $\mu\text{g}/\text{m}^3$	Converted Soil Concentration, $C_s$ , $\text{mg}/\text{kg}$
Benzene	5.91E+01	1.33E-04
Carbon tetrachloride	2.02E+02	6.95E-05
1,1-Dichloroethene	6.51E+01	2.19E-05
Ethylbenzene	1.05E+02	3.65E-04
Methylene chloride	9.91E+02	1.90E-03
Tetrachloroethene	2.48E+03	1.56E-03
1,1,2-Trichloro-1,2,2-trifluoroethane	4.79E+02	5.59E-05
1,1,1-Trichloroethane	2.93E+01	1.46E-05
Trichloroethene	1.22E+03	1.08E-03
Trichlorofluoromethane	6.57E+01	1.06E-05

The converted soil concentrations were compared to soil cancer and non-cancer screening levels calculated by the RSL Calculator (US EPA, 2017) (using the more conservative toxicity criteria, OEHHA, 2016, and exposure parameter values, DTSC, 2014). The cancer and non-cancer screening levels, and the resulting cancer risk and non-cancer hazard quotients are shown in Table 3 below:

Table 3. Screening Levels, Cancer Risk and Non-Cancer Hazard Due to VOCs in Soil

Chemical	Converted Soil Concentration, $\text{mg}/\text{kg}$	Cancer Screening Level, $\text{mg}/\text{kg}$	Non-Cancer Screening Level, $\text{mg}/\text{kg}$	Cancer Risk	Hazard Quotient
Benzene	1.33E-04	1.43E+00	46.0	9.3E-11	0.000003
Carbon tetrachloride	6.95E-05	4.28E-01	248.0	1.6E-10	0.0000003

1,1-Dichloroethene	2.19E-05	NC	352.0	NC	0.00000006
Ethylbenzene	3.65E-04	2.54E+01	20,500.0	1.4E-11	0.00000002
Methylene chloride	1.90E-03	2.41E+01	2,480.0	7.9E-11	0.00000008
Tetrachloroethene	1.56E-03	2.65E+00	342.0	5.9E-10	0.0000005
1,1,2-Trichloro-1,2,2-trifluoroethane	5.59E-05	NC	28,100.0	NC	0.000000002
1,1,1-Trichloroethane	1.46E-05	NC	7,200.0	NC	0.000000002
Trichloroethene	1.08E-03	6.04E+00	18.7	1.8E-10	0.00006
Trichlorofluoromethane	1.06E-05	NC	350,000	NC	3.0E-11
Total				1.0E-09	7.0E-05

Notes:

NC Non-carcinogen or no data

The total excess lifetime cancer risk (sum of the total risk from Table 1, Table 3, and the total risk from the remaining COPCs, see Table 14 of the report) of 1.0E-06, and the hazard index (sum of the hazard indexes from Table 1, Table 3, and the hazard index from the remaining COPCs, see Table 14 of the report) of 0.73 are below the levels typically acceptable under industrial/commercial scenario (risk of 1.0E-05 and hazard of 1.0).

The soil concentration of lead, 15.9 mg/kg is about 20 times lower than the lead soil screening level for industrial worker of 320 mg/kg implying that no significant health impact is expected due to exposure to lead.

### **Risk and Hazard Due to Contaminants in Soil Vapor Inhaled Indoors**

Geosyntec estimated soil vapor screening levels (Table 12) by applying the DTSC, 2011a default attenuation factor of 0.0005 (future commercial buildings) to the indoor air screening levels derived by DTSC, 2017 and US EPA, 2017. The maximum soil vapor concentrations were further compared to the derived soil vapor screening levels to estimate a total excess lifetime cancer risk of 1.0E-06 and hazard index of 0.008 (Table 16 of the report), both below the levels typically acceptable under industrial/commercial scenario (risk of 1.0E-05 and hazard of 1.0).

### **Total Risk and Hazard for Airport Worker**

**Comment 11.** The total excess lifetime cancer risk of 2.0E-06 and the hazard index of 0.74 are below the levels typically acceptable under industrial/commercial scenario (risk of 1.0E-05 and hazard of 1.0).

### **Construction Worker Scenario**

#### **On the Risk and Hazard Due to Contaminants in Soil**

**Comment 12.** According to p. 16, "For a construction worker, soil DTSC-SLs were calculated based on the same methods used to calculate DTSC-SLs for a commercial



*worker, but with exposure parameters specific to a construction worker following DTSC guidance (DTSC, 2014)."*

I used the RSL Calculator for the construction worker scenario updated with the exposure parameters shown in DTSC, 2014, with subchronic toxicity values where available (US EPA, 2017), and considered the toxicity values (per comment 8 above). The derived cancer and non-cancer soil screening levels and the cancer risk and non-cancer hazard are shown in Table 4 below.

Table 4. Screening Levels, Risk and Hazard for All COPCs in Soil

Chemical	Maximum Soil Concentration, mg/kg	Cancer Screening Level, mg/kg	Non-Cancer Screening Level, mg/kg	Cancer Risk	Non-Cancer Hazard
<b>Background</b>					
Antimony	1.58	NC	1.36E+02	NC	0.01
Barium	197.0	NC	1.60E+04	NC	0.01
Beryllium	0.26	1.28E+02	2.89E+01	2.03E-09	0.01
Chromium III	11.0	NC	2.02E+04	NC	0.0005
Cobalt	9.27	3.41E+01	7.76E+01	2.72E-07	0.12
Copper	16.1	NC	3.39E+03	NC	0.005
Mercury	0.21	NC	8.03E+00	NC	0.03
Molybdenum	1.02	NC	1.70E+03	NC	0.0006
Nickel	8.11	1.18E+03	7.47E+02	6.87E-09	0.01
Vanadium	32.6	NC	3.74E+02	NC	0.09
Arsenic	2.08	1.30E+01	1.12E+00	1.6E-07	<b>1.86</b>
<b>Subtotal</b>				<b>5.0E-07</b>	<b>2.15</b>
<b>Site Contamination</b>					
Aroclor 1254	0.057	3.88E+00	3.34E+00	1.47E-08	0.02
Benzo(a)pyrene	0.013	2.91E+00	6.78E+00	4.47E-09	0.002
Benzo(g,h,i)perylene	0.029	NC	3.51E+01	NC	0.0008
Benzo(k)fluoranthene	0.024	7.10E+00	6.78E+00	3.38E-09	0.0035
Chrysene	0.021	7.10E+01	6.78E+00	2.96E-10	0.003
DDT	6.3	4.99E+01	1.18E+02	1.26E-07	0.05
Fluoranthene	0.012	NC	1.17E+04	NC	0.000001
Indeno(1,2,3-cd)pyrene	0.016	7.10E+00	6.78E+00	2.25E-09	0.002
1-Methylnaphthalene	0.011	2.94E+02	8.19E+03	3.74E-11	0.000001
2-Methylnaphthalene	0.014	NC	4.68E+02	NC	0.00003
Pyrene	0.013	NC	3.51E+04	NC	0.0000004
TPH as Diesel	85.0	NC	9.48E+01	NC	0.90
TPH as Motor Oil	190.0	NC	5.51E+04	NC	0.003
Zinc	1400.0	NC	1.02E+05	NC	0.01
<b>Subtotal</b>				<b>1.0E-07</b>	<b>0.99</b>



	Total	6.0E-07	3.14
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Notes:

NC Non-carcinogen or no data

Bold Exceeded acceptable risk or hazard

The total incremental lifetime cancer risk of 6.0E-07 is well below the typically acceptable level of 1.0E-05 for construction workers. The hazard index of 3.14 exceeds the typically acceptable level of 1.0. It should be noted, however, that the background contaminants, especially arsenic are the major contributors to both cancer risk and non-cancer hazard. The risk and hazard due to site contamination are below the levels typically acceptable for construction workers. LA RWQCB should decide on the need for construction worker protection, e.g., protective equipment due to exposure to arsenic.

**Comment 13.** Geosyntec incorrectly used the industrial/commercial soil screening level for lead of 320 mg/kg (DTSC, 2017) to compare to the maximum site lead concentration of 15.9 mg/kg (Table 15). No discussion was provided in the document. I run the DTSC Modified Adult Lead Model (DTSC, 2011b) to derive a site soil screening level of 46 mg/kg. According to the model, there is a 0.1% probability that the fetal lead blood concentration due to exposure to the maximum soil lead concentration measured at the site will exceed the target lead blood concentration increase of concern of 1 µg/dL.

#### **On the Estimation of Cancer Risk and Non-cancer Hazard to Construction Workers from Measured Soil Vapor Concentrations**

The risk and hazard to volatile organic compounds (VOCs) were estimated from soil vapor data collected at the site. In the absence of published soil vapor screening levels, Geosyntec derived site-specific soil vapor screening levels and compared them to the maximum VOC concentrations to estimate the risk and hazard.

Appendix A presents the derivation of site-specific soil vapor screening levels for a construction worker scenario. It contains a description of two models, reference list and two tables. The VOC Emissions Model serves to derive emission rates, while the X/Q model presents the derivation of a dispersion factor. Combining the results of those two models allows the derivation of air concentrations corresponding to the soil vapor concentrations measured at the site. However, a different approach was followed by Geosyntec.

The provided appendix is poorly presented, confusing and lacks details to allow reproduction of the results shown in tables.

**Comment 14.** There is no description of the steps followed in the calculation of those site-specific soil vapor screening levels.

**Comment 15.** The VOC emission model described by Geosyntec was replaced by the Volatilization Factor (VF) model (US EPA, 1996). No description of the VF model is provided in the appendix, although Table A-1 presents the parameters used to derive VFs for the VOCs measured in the site soil. The equation used to estimate the VFs shown under the table applies to industrial/commercial workers (US EPA, 2002). Instead, the consultant should have used the equation estimating subchronic volatilization factor for construction worker shown in section 4.9.6 of the Region 9 RSLs User's Guide (US EPA, 2017) and Eq. 5-14 (US EPA, 2002). In addition, the values for constants A, B, and C used to calculate the dispersion factor Q/C (p. 3 of the appendix) apply to industrial/commercial workers. The values applicable to construction worker are shown in Eq. 5-15 of the Supplemental Soil Screening Guidance (US EPA, 2002) and in the Region 9 User's Guide (US EPA, 2017). Accordingly, the VFs for the soil vapor COPCs presented in the first column of Appendix Table A-2 are incorrect.

**Comment 16.** P. 2 of the appendix shows an equation for estimating the total solute concentration CT. No reference is provided for the model and no derivation or reference is shown for the CT term. I was not able to match or reproduce this equation from the soil matrix partitioning equations derived by Feenstra et al., 1991 (DTSC, 2011a).

**Comment 17.** According to the remaining text on p. 2, *"The soil concentration term ( $\rho_b \times$  soil concentration) in the US EPA soil equation (in fact, DTSC, 2011a, Appendix E, according to Mr. R. Cheung, teleconference 10/10/2017) was replaced by the total solute concentration associated with measured soil vapor concentrations."* That DTSC, 2011a partitioning equation was also used to derive a conversion factor (CF<sub>soil-sv</sub>) equation shown under Table A-1 (e-mail from Mr. R. Cheung, Geosyntec, dated 10/12/2017). The CF<sub>soil-sv</sub> conversion factor's derivation was not shown and I was not able to derive it from the DTSC, 2011a equation. Clear explanation of the derivation of the presented equations is needed.

**Comment 18.** Table 17 presents the maximum VOC concentrations, the derived construction worker cancer and non-cancer screening levels and the calculated risk and hazard. The screening levels are the soil vapor RBCs shown in Table A-2 of the appendix. The note under Table 17 refers to those construction worker screening levels as *"Ambient air screening levels calculated the same methodologies as DTSC's Recommended Screening Levels in Ambient Air but with default exposure parameters for a constructions worker..."* Measured soil vapor concentrations cannot be directly compared to ambient air concentrations. The note is confusing and needs to be revised or clarified.

To make the review of this section possible, the consultant needs to:

- Clearly describe the steps in the derivation of soil vapor screening levels;

- Eliminate the description of models and equations not used in this derivation;
- Provide references for all equations and derivation of the converted equations, e.g., for the CF<sub>soil-sv</sub>;
- Provide support for all input parameter values.

The approach presented by Geosyntec is intended to estimate the cancer risk and non-cancer hazard due to inhalation of VOC gases in ambient air but omits the estimation of risk and hazard to construction worker due to exposure through ingestion of, dermal contact with, and inhalation of VOCs absorbed to particles.

I chose to address all the complete exposure pathways for the construction worker by:

1. Converting the maximum soil vapor concentrations measured at the site to soil concentrations using the DTSC, 2011a, Appendix E rewritten equation (Table 2 above);
2. Calculating the VFs for the VOCs in soil vapor (US EPA, 2017; US EPA, 2002)

Table 5. VFs for the VOCs in Soil Vapor

Chemical	VF, m <sup>3</sup> /kg
Benzene	1.28E+03
Carbon tetrachloride	5.16E+02
1,1-Dichloroethene	4.01E+02
Ethylbenzene	2.01E+03
Methylene chloride	8.80E+02
Tetrachloroethene	8.37E+02
1,1,2-Trichloro-1,2,2-trifluoroethane	3.51E+02
1,1,1-Trichloroethane	5.92E+02
Trichloroethene	8.09E+02
Trichlorofluoromethane	3.11E+02

3. Deriving the cancer and non-cancer total screening levels (combining the soil ingestion, dermal contact, and inhalation of particles and vapors in ambient air pathways) by following the RSL construction scenario equations (US EPA, 2017). To address subchronic exposure under the construction scenario, subchronic non-cancer toxicity values were applied, if available. The VFs calculated in step 2 were substituted in the derivation of screening levels for inhalation of vapors.

Table 6. Cancer and Non-cancer Total Soil Screening Levels

Chemical	SLs-c, mg/kg	SLs-nc, mg/kg
Benzene	7.30	144.27

Carbon tetrachloride	2.78	110.88
1,1-Dichloroethene	NC	79.33
Ethylbenzene	90.90	1,070.86
Methylene chloride	79.76	973.15
Tetrachloroethene	2.74	116.35
1,1,2-Trichloro-1,2,2-trifluoroethane	NC	66,199.53
1,1,1-Trichloroethane	NC	11,486.17
Trichloroethene	21.95	4.18
Trichlorofluoromethane	NC	1,087.83

Notes:

SLs-c Total soil screening concentration, cancer  
SLs-nc Total soil screening concentration, non-cancer  
NC Non-carcinogen or no data

4. The values for cancer risk and non-cancer hazard were calculated by dividing each converted soil concentration (Table 2) by the corresponding cancer and non-cancer screening level (Table 6), then multiplying the resulting quotient by 1.0E-06 for carcinogens, and by 1 for non-carcinogens. The total incremental lifetime cancer risk and the hazard index were calculated as a sum of the cancer risk and hazard quotient for each chemical.

Table 7. Cancer Risk to Construction Worker Due to the VOCs in Soil

Chemical	C <sub>s</sub> , mg/kg	SLs-c, mg/kg	Cancer Risk
Benzene	1.33E-04	7.30	1.8E-11
Carbon tetrachloride	6.95E-05	2.78	2.5E-11
1,1-Dichloroethene	2.19E-05	NC	NC
Ethylbenzene	3.65E-04	90.90	4.0E-12
Methylene chloride	1.90E-03	79.76	2.4E-11
Tetrachloroethene	1.56E-03	2.74	5.7E-10
1,1,2-Trichloro-1,2,2-trifluoroethane	5.59E-05	NC	NC
1,1,1-Trichloroethane	1.46E-05	NC	NC
Trichloroethene	1.08E-03	21.95	4.9E-11
Trichlorofluoromethane	1.06E-05	NC	NC
Total			7.00E-10

Notes:

Cs Soil concentration converted from measured maximum soil vapor concentration  
SLs-c Total soil screening concentration, cancer  
NC Non-carcinogen or no data

Table 8. Non-cancer Hazard to Construction Worker Due to the VOCs in Soil

Chemical	Cs, mg/kg	SLs-c, mg/kg	HQ
Benzene	1.33E-04	144.27	9.21E-07
Carbon tetrachloride	6.95E-05	110.88	6.27E-07

1,1-Dichloroethene	2.19E-05	79.33	2.76E-07
Ethylbenzene	3.65E-04	1,070.86	3.41E-07
Methylene chloride	1.90E-03	973.15	1.95E-06
Tetrachloroethene	1.56E-03	116.35	1.34E-05
1,1,2-Trichloro-1,2,2-trifluoroethane	5.59E-05	66,199.53	8.45E-10
1,1,1-Trichloroethane	1.46E-05	11,486.17	1.27E-09
Trichloroethene	1.08E-03	4.18	2.58E-04
Trichlorofluoromethane	1.06E-05	1,087.83	9.78E-09
Hazard Index			0.0003

Notes:

Cs                      Soil concentration converted from measured maximum soil vapor concentration  
SLs-c                  Total soil screening concentration, non-cancer  
HQ                      Hazard Quotient

The total risk and hazard index calculated are below the levels typically acceptable under construction scenario (risk of 1.0E-05 and hazard of 1.0).

It should be noted that the above total screening levels are health (risk and hazard) – based and are derived for the purpose of estimating the risk and hazard. The soil screening levels are limited by each contaminant soil saturation concentration calculated using the corresponding supporting equation (US EPA, 2017), and are derived as the lower of the health-based and the saturation concentration. The resulting concentrations may be used to screen site contamination. The estimated soil saturation concentrations,  $C_{sat}$  for the site-related VOCs are shown in the table below:

$C_{sat}$  for the VOCs in Soil Vapor

Chemical	$C_{sat}$ , mg/kg
Benzene	1.97E+03
Carbon tetrachloride	4.46E+02
1,1-Dichloroethene	1.17E+03
Ethylbenzene	4.94E+02
Methylene chloride	4.45E+03
Tetrachloroethene	1.75E+02
1,1,2-Trichloro-1,2,2-trifluoroethane	5.61E+02
1,1,1-Trichloroethane	6.84E+02
Trichloroethene	7.80E+02
Trichlorofluoromethane	9.00E+02

### Total Risk and Hazard for Construction Worker

The soil contaminants determined by Geosyntec to be of background origin are the major contributors to cancer risk and non-cancer hazard for construction workers. The

hazard quotient for arsenic exceeds the typically acceptable level for non-cancer hazard.

The risk and hazard due to the non-volatile site-related contaminants are lower than typically accepted levels.

The total risk and Hazard Index due to site-related VOCs are negligible.

### Conclusions

- Specific parts of the report are poorly presented, confusing and lack details to allow reproduction of the results shown in tables. Missing discussions, support, and/or references make the report difficult to review. LA RWQCB should decide on the need for report revision to make it understandable to the lay reader.
- LA RWQCB should decide on the need for additional sampling, e.g., hexavalent chromium, organochlorine pesticides, and soil vapor.
- The estimated risk and hazard consider all included COPCs. Several COPCs are assumed to be of background origin. LA RWQCB should decide on discarding or retaining those COPCs while making a decision on the need for construction workers' protection, i.e., exposure due to arsenic.
- Changes in the construction of a basement location to a different, non-sampled location may require additional sampling to assess the risk to human health at the new basement location.
- The results of this risk assessment may not be valid for an airport employee working under a schedule other than the "9/80 work schedule" used in this risk assessment.
- Using the maximum soil and soil vapor concentrations, I estimated the cancer risk and non-cancer hazard, and found them to be below the typically acceptable levels for the airport workers.
- Using the maximum soil and soil vapor concentrations, I estimated the cancer risk and found it to be below the typically acceptable level for construction workers. The Hazard index exceeds the acceptable level of 1. However, the major hazard contributor, arsenic, is considered to be of background origin.

Please do not hesitate to contact me at (916) 322-8364 or by e-mail at [hhrstov@oehha.ca.gov](mailto:hhrstov@oehha.ca.gov), if you have any questions related to this review.

Memorandum reviewed by:

Carmen Milanes, MPH, Section Chief  
Integrated Risk Assessment and Research Section

## References

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**STAFF REPORT PRESENTED TO THE  
BURBANK-GLENDALE-PASADENA AIRPORT AUTHORITY  
FEBRUARY 20, 2018**

**JOINT LETTER WITH CITY OF BURBANK REGARDING  
FEDERAL AVIATION ADMINISTRATION NEXTGEN CONCERNS**

**SUMMARY**

Staff seeks Commission approval of a joint letter with the City of Burbank regarding Federal Aviation Administration ("FAA") NextGen concerns.

**BACKGROUND**

On January 9, 2018, the Burbank City Council unanimously (5-0) approved a draft letter regarding FAA NextGen concerns and directed that it be submitted to the Commission for consideration of a joint submission by the City of Burbank and the Authority. A copy of the draft letter, which was received by Staff on January 25, 2018, is attached as Exhibit A.

Staff supports Burbank's proposed joint letter and recommends that the Commission approve it without change. It should be noted that the joint letter will not be the first time that the Authority has notified the FAA of Burbank residents' concerns about NextGen. Sixteen months ago Executive Director Miller wrote the FAA for clarification regarding both NextGen and the restriction on easterly takeoffs by commercial flights heavier than 12,500 pounds. A copy of that letter is attached as Exhibit B. A copy of the FAA's response is attached as Exhibit C.

**RECOMMENDATION**

Staff recommends that the Commission approve the proposed joint letter with the City of Burbank regarding FAA NextGen concerns and authorize the President to sign the letter on the Authority's behalf.

**Attachments:**

Exhibit A – Draft Joint Letter with Burbank

Exhibit B – October 28, 2016 Authority Letter to FAA

Exhibit C – FAA Response Letter to Authority (received October 31, 2016)

The Honorable Dan Elwell  
Acting Administrator  
Federal Aviation Administrator  
800 Independence Avenue SW, Room 1022  
Washington, DC 20591

Dear Administrator Elwell:

The Burbank City Council has been receiving resident concerns regarding the impacts of NextGen in our community. The residents believe they are experiencing increased aircraft noise due to lower altitude flights, and they ask that we take all possible steps to address these concerns. It appears this increase in noise is a result of new flight patterns instituted by the FAA as part of its implementation of the NextGen air traffic control technology.

We understand that the safety of the flying public is the first priority of the FAA, as it should be. We also understand that NextGen is intended to increase efficiency for airplanes and their customers. However, we believe there are some steps that the FAA can take now and in the near future to eliminate any future impacts inflicted on our residents. As the FAA reviews its post-implementation of the SoCal Metroplex project, we ask that you consider all options to reduce the noise impact in Burbank. The FAA may consider:

- Adjustments to the current flight path to limit the noise in our community.
- Enforcement of FAA-established altitude levels for planes flying above residential areas.
- Reduce and/or eliminate negative impacts of future FAA flight path changes.

The FAA's own website notes that noise, particularly disruptions to sleep, can have serious, ongoing health effects, and mentions a related research plan. We urge the FAA to pursue these changes, and to take action to address the noise and lower altitude flight concerns in our community.

Sincerely,



October 28, 2016

Sent via email: [glen.martin@faa.gov](mailto:glen.martin@faa.gov)

Mr. Glen Martin  
Regional Administrator  
Federal Aviation Administration  
15000 Aviation Boulevard  
Hawthorne, CA 90250

Dear Mr. Martin:

At the past two Burbank City Council meetings, certain individuals in the community have made comments that the implementation of NextGen in the Southern California Metroplex, and specifically at BUR, will result in increased flights, changes in arrival and departure paths, and the creation of more noise and pollution. In addition, they are saying that when NextGen Technology is implemented at BUR in November 2016, it could increase the number of flights by up to 12 additional flights each hour over and above what BUR is currently experiencing. And these individuals have linked the implementation of NextGen to the upcoming Measure B proposition that is on the November 8 ballot for registered voters in Burbank to decide whether the Airport Authority can build a 14-gate, 355,000-square-foot replacement terminal.

As stated in Section 2.3 of the SoCal Metroplex Environmental Assessment ("EA"), (located at [http://www.metroplexenvironmental.com/docs/socal\\_metroplex/final/SoCal\\_Metroplex\\_Flight\\_Schedule\\_Technical\\_Report\\_Final\\_20160826.pdf](http://www.metroplexenvironmental.com/docs/socal_metroplex/final/SoCal_Metroplex_Flight_Schedule_Technical_Report_Final_20160826.pdf)) "the Proposed Action [to implement NextGen] would not result in an increase in the number of aircraft operations at the Hollywood Burbank Airport, but would increase the throughput of the terminal airspace to better reach the throughput for which the Study Airport runways were designed. In other words, the total numbers of aircraft operations for the future itinerant instrument flight rating arrivals and departures are expected to be the same under both the Proposed Action and the No Action Alternative."

If I understand this correctly, the EA says that implementing NextGen at BUR will not result in an increase in the number of airport operations, which are projected to be the same whether or not NextGen is implemented. Is my understanding correct?

Some community members are also saying that when the replacement terminal is built, and the Airport Authority demolishes the existing 86-year-old terminal, easterly takeoffs will occur for commercial flights heavier than 12,500 pounds. In an email sent by Council Member Dr. David Gordon to the FAA, dated August 1, 2016, Council Member Gordon asked FAA several specific questions. Question #4 read: "Are there FAA easterly take-off restrictions for commercial flights currently in place imposed as a result of the existing passenger terminal's proximity to the east-west runway? If so, would such easterly take-off restrictions be removed once the existing terminal is demolished/relocated?"

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Mark A. McClardy, FAA Director, Airports Division, Western Pacific Region directly responded to Dr. Gordon's question as follows: "No. As noted on page 11 of the 1996 ROD, 'The replacement passenger terminal building will not affect the runway use patterns or the level of aircraft operations at the airport.' The existing restriction on aircraft heavier than 12,500 pounds is not due to the proximity of the existing terminal to the runway, but the required separation between aircraft and the Verdugo Mountains and the aircraft arrival stream into Los Angeles International Airport. Thus, if the existing terminal was removed, all else being equal, the restriction would remain."

Is FAA Director Mark McClardy's statement still correct and true?

Our understanding of the implementation of NextGen at BUR is that it will not change existing arrival or departure flights to and from the Hollywood Burbank Airport, and that implementation of NextGen is not relevant to and has no impact on the development of a 14-gate replacement passenger terminal at Hollywood Burbank Airport.

Thank you for your time and clarification of the above important subject matters.

Sincerely,



Frank R. Miller  
Executive Director

cc: Ian Gregor, Federal Aviation Administration, [ian.gregor@faa.gov](mailto:ian.gregor@faa.gov)  
John T. Hatanaka, Hollywood Burbank Airport  
Dan Feger, Hollywood Burbank Airport  
Lucy M. Burghdorf, Hollywood Burbank Airport  
Mark D. Hardyment, Hollywood Burbank Airport



U.S. Department  
of Transportation  
**Federal Aviation  
Administration**

Western-Pacific Region  
Office of the Regional Administrator

P.O. Box 92007  
Los Angeles, CA 90009-2007

**OCT 31 2016**

Mr. Frank Miller  
Hollywood Burbank Airport  
2627 N. Hollywood Way  
Burbank, CA 91505

Dear Mr. Miller:

I am writing in response to your letter dated October 28, 2016. You asked me whether the FAA's Southern California Metroplex project would result in an increase in aircraft operations at Hollywood Burbank Airport (BUR). You also asked if demolition of the existing terminal would allow commercial aircraft heavier than 12,500 pounds to take off to the east.

As described in the Final Environmental Assessment for the Southern California Metroplex Project, the purpose of the Project is to optimize aircraft arrival and departure procedures at 21 study airports, including six major airports – one of which is BUR. The Project would improve the predictability and segregation of routes, as well as increase flexibility in providing air traffic services. Implementation of the Project would not increase the number of aircraft operations at the Study Airports. Furthermore, the Proposed Action does not involve ground disturbance or physical construction of any facilities.

The FAA's 1996 Record of Decision for BUR's Replacement Passenger Terminal Project states: "The replacement passenger terminal building will not affect the runway use patterns or the level of aircraft operations at the airport." The restriction that prevents aircraft heavier than 12,500 pounds from departing to the east is not due to the proximity of the existing terminal. Rather, it is due to the FAA's required separation standards between aircraft and the Verdugo Mountains. Therefore, the restriction would remain if the existing terminal was removed.

Thank you for this opportunity to answer your inquiry. If you have any questions, please contact me or Tamara A. Swann, Deputy Regional Administrator, at (310) 725-3550.

Sincerely,

Glen A. Martin  
Regional Administrator