

October 15, 2021

VIA E-MAIL, HAND-DELIVERY

City Clerk
City of Los Angeles
200 N. Spring St.
City Hall, Room 360
Los Angeles, CA 90012
cityclerk@lacity.org

2021 OCT 18 PM 1:04
CITY CLERK

RE: Appeal of Board of Airport Commissioners' Certification of the Final Environmental Impact Report for the Airfield and Terminal Modernization Project (SCH No. 2019049020)

Dear City Clerk:

Service Employees International Union United Service Workers West ("USWW"), and USWW members Victor Landa, Wilma Sharpe, and Valerie King, Physicians for Social Responsibility-Los Angeles ("PSR-LA"), Koreatown Immigrant Workers Alliance ("KIWA"), and Sunrise Movement LA ("Sunrise LA") (collectively "**Appellants**") hereby respectfully appeal ("**Appeal**") the October 7, 2021 decision by the Board of Airport Commissioners ("**BOAC**") to certify the above-referenced Final Environmental Impact Report ("**EIR**") and associated environmental findings for the Airfield and Terminal Modernization Project ("**ATMP**" or "**Project**") at the Los Angeles International Airport ("**LAX**").

1. This Appeal is submitted under the California Environmental Quality Act, Pub. Res. Code § 21000 et seq., ("**CEQA**"), which provides the certification of an EIR by a nonelected decisionmaking body may be appealed to the agency's elected decisionmaking body. (See Pub. Res. Code § 21151(c).) Here, this is the Los Angeles City Council.
2. This Appeal also is filed pursuant to the Los Angeles Municipal Code ("**LAMC**" or "**Code**") § 11.5.13-C, which states (emphasis added):

"Appeal. When any decision-maker in any action authorized by this Chapter [i.e., Planning and Zoning Code], other than the City Council, certifies an environmental impact report, adopts a negative declaration, a mitigated negative declaration, or a sustainable communities environmental assessment; or determines that the Project subject to approval under this Chapter is not subject to CEQA, that certification, approval, or determination may be appealed to the City Council, provided that:

- i. all administrative appeals of the Project approval were exhausted;
- ii. the appeal is filed with the Department of City Planning within 15 days of the Project approval becoming final; and
- iii. the appeal is filed in a form and manner required by the Department of City Planning."

Here, LAMC § 11.5.13-C applies because BOAC is a nonelected decisionmaking body that certified the EIR, approved the Project, and granted the requested LAX Specific Plan Compliance Review.¹ The LAX Specific Plan Compliance Review is authorized pursuant to the Planning and Zoning Code (see LAMC § 11.5.7.A) and the LAX Specific Plan (§ 7.F).² Additionally, the City of Los Angeles (“City”) provides no further administrative appeals for the Project (besides filing this CEQA Appeal), the Appeal is filed within 15 days of BOAC’s approval, and this Appeal is being concurrently filed with the City Clerk and Department of City Planning.

Thus, this Appeal is timely and falls squarely within LAMC § 11.5.7 CEQA Procedures—which specifically stays the LAX Specific Plan Compliance Review until this CEQA Appeal is decided by the City Council. (Id., subd. D.)

3. **REASON FOR THE APPEAL:** The ATMP EIR fails to comply with CEQA. In short, the final EIR fails to adequately address Appellants’ concerns with the EIR’s analysis of Project impacts, including but not limited to the ATMP’s impacts and mitigation related to traffic, vehicle miles traveled (“VMT”), noise, air quality, and greenhouse gas (“GHG”) emissions; as well as the fundamentally flawed Project description and deficient overriding consideration findings. Unless these errors are cured, the City cannot make the required CEQA findings. As such, Appellants urge the City to stay action on the LAX Specific Plan and EIR (collectively “Project Approvals”) until the issues previously identified in prior comment letters are fixed in a recirculated, CEQA-compliant Draft EIR.
4. **SPECIFIC POINTS IN ISSUE:** The specific points at issue were fully outlined in comments previously submitted to BOAC and the Los Angeles World Airports (“LAWA”), which show substantial evidence of an inadequate CEQA review. These comments include comment letters dated March 15, 2021 and September 14, 2021 (attached hereto as Attachment 1 and 2, respectively, and inclusive of expert letters and other documentation attached thereto). This Appeal also incorporates by this reference all other comments made by any commenting party.³
5. **HOW ARE YOU AGGRIEVED BY THE DECISION:** Appellants have members that live in the vicinity of the Project, breathe the air, suffer traffic congestions, and will suffer other environmental impacts of the Project unless it is properly analyzed and mitigated. For example, USWW represents more than 40,000 property service workers across California, including approximately 3,700 employees at LAX (pre-COVID) with an additional 1,300 security/janitorial workers living within approximately six miles of LAX—like Appellants Victor Landa, Wilma Sharpe, and Valerie King.

Appellant organizations are also committed to the assurance of responsible development in Los Angeles and informed decisionmaking by public officials regarding projects that may cause significant impacts to the environment in the City of Los Angeles. For example, KIWI was created in 1992 to address worker exploitation amongst Korean and Latino workers in Koreatown and to struggle in solidarity with other communities for a more just Los Angeles.⁴

¹ BOAC (10/7/21) Item 9 Report, pp. 1-2, https://lawa.granicus.com/MetaViewer.php?view_id=4&clip_id=789&meta_id=51943.

² LAX Specific Plan, pp. 10-13, https://planning.lacity.org/odocument/8c371dd7-15a2-4d05-a8ee-25a78a6362d4/13-0285_ord_182542.pdf.

³ See e.g., Final EIR, Attachment F-3, <https://cloud1lawa.box.com/s/nc7ckunvfg9xj57zvrkjp4kju72ng6i>.

⁴ KIWI, <https://kiwi.org/new-folder>.

Since then, KIWI has expanded its reach to housing and neighborhood rights, equitable development policies, and participatory community planning and continues to advocate to improve the lives of immigrant workers in low-wage industries in Koreatown and build a foundation for social change.

Similarly, Sunrise LA is a community-based organization focusing on raising accountability in Los Angeles with key partners in environmental justice, labor, climate, indigenous, economic, gender, and racial justice organizations to further a shared vision of a Green New Deal.⁵

So too, PSR-LA advocates for policies and practices that improve public health, eliminate environmental threats, and address health disparities.⁶ With an emphasis on health, the environment, social justice, and public policy, PSR-LA's current programs address air/climate justice and the connection between land use decisions affecting public health.

Hence, granting this Appeal will confer substantial benefit not only to individual Appellants and further organization goals, but would also benefit the public, citizens, residents, businesses, and taxpayers affected by the Project, and will result in the enforcement of important public rights.

6. **HOW DID THE DECISION-MAKER ERRED OR ABUSED THEIR DISCRETION:** BOAC certified the EIR despite substantial evidence demonstrating that the EIR failed to adequately analyze Project impacts, consider feasible mitigation measures, project alternatives, or an adequate statement of overriding consideration (to name a few). Without a proper CEQA review, the CEQA findings cannot be made with substantial evidence.

Appellants respectfully reserve the right to supplement this appeal justification at future hearings and proceedings for this Project. (See *Galante Vineyards v. Monterey Peninsula Water Management Dist.* (1997) 60 Cal.App.4th 1109, 1120 [CEQA litigation not limited only to claims made during EIR comment period].)

Finally, Appellants request all notices of CEQA actions and any approvals, determinations, or public hearings to be held on the Project under state or local law requiring local agencies to mail such notices to any person who has filed a written request for them. (See Pub. Res. Code §§ 21092.2, 21167(f) and Gov. Code § 65092 and LAMC § 197.01.F.) Please send notice by electronic and regular mail to: Jane Martin, 1650 Harbor Bay Pkwy Suite 200, Alameda, CA 94502 (jane.martin@seiu-ussww.org).

Sincerely,

SERVICE EMPLOYEES INTERNATIONAL UNION
UNITED SERVICE WORKERS WEST


David Huerta, President SEIU-USWW

KOREATOWN IMMIGRANT WORKERS
ALLIANCE


Alexandra Suh, Executive Director

⁵ Sunrise Movement LA, <https://sunrisemovementla.org/goals>.

⁶ PSR-LA, <https://www.psr-la.org/about-psr-la/our-mission-and-values/>.

WILMA SHARPE

Wilma Sharpe
Wilma Sharpe, Self & USWW Member

VALERIE KING

Valerie King
Valerie King, Self & USWW Member

VICTOR LANDA

Victor Landa
Victor Landa, Self & USWW Member

SUNRISE MOVEMENT LA

Rachel Paige
Rachel Paige Smith, Member

PHYSICIANS FOR SOCIAL RESPONSIBILITY-LOS
ANGELES

Eric Romann
Eric Romann, STAND-LA Coalition
Coordinator

ATTACHMENTS:

1. Draft EIR Comments (3/15/21) (including Exhibits A-C attached thereto)
2. Final EIR Comments (9/14/21) (including Exhibits A-F attached thereto)

ATTACHMENT 1

GIDEON KRACOV

Attorney at Law

801 South Grand Avenue
11th Floor
Los Angeles, California 90017

(213) 629-2071
Fax: (213) 623-7755

gk@gideonlaw.net
www.gideonlaw.net

March 15, 2021

VIA EMAIL & LAWA WEB-PORTAL:

Evelyn Quintanilla
Los Angeles World Airports
P.O. Box 92216
Los Angeles, California 90009-2216
equintanilla@lawa.org
lax-atmp@lawa.org
<https://app.smartsheet.com/b/form/b23e8d3a234b47f789334078f8c0bdd5>

RE: DRAFT EIR COMMENTS; LAX AIRFIELD AND TERMINAL MODERNIZATION PROJECT

Dear Ms. Quintanilla:

On behalf of Service Employees International Union, United Service Workers West (“**USWW**”) and UNITE HERE Local 11 (“**Local 11**”) (collectively “**Commenters**”), this Office provides the City of Los Angeles (“**City**”) Los Angeles World Airports (“**LAWA**”) the following comments¹ regarding the Draft Environmental Impact Report (SCH No. 2019049020) (“**DEIR**”)² for the above-referenced Airfield and Terminal Modernization Project (“**ATMP**” or “**Project**”) located at the Los Angeles International Airport (“**LAX**”).

In short, Commenters find that the DEIR fails to adequately analyze Project impacts and mitigation related to traffic, vehicle miles traveled (“**VMT**”), noise, air quality, and greenhouse gas (“**GHG**”) emissions, and also lacks an adequate project description and any overriding consideration findings. As such, Commenters urge the City/LAWA to stay action on any Project approvals until the issues identified below have been addressed in a recirculated DEIR pursuant to the California Environmental Quality Act, Pub. Res. Code § 21000 *et seq.*, (“**CEQA**”) and 14 Cal. Code Regs. § 15000, *et seq.* (“**CEQA Guidelines**”).

This Project can and must do better. Rising inequality threatens Los Angeles’ prosperity. There are serious challenges in the region concerning affordable housing and living wage jobs — and COVID has made things even more difficult for our members. USWW and Local 11 work to stem this rising tide of inequality and fight to make our region a place of opportunity for all—a place where their members can work and afford to live. LAWA must better consider to what extent this Project will ensure better permanent service jobs for airline service/hospitality workers near LAX who will feel the significant air quality, GHG, and other impacts caused by the Project. True community and worker benefits—as identified below—are needed if this Project is to be approved.

¹ Please note that pages cited herein are either to the page’s stated pagination (referenced herein as “**p. ##**”) or the page’s location in the referenced PDF document (referenced herein as “**PDF p. ##**”).

² Inclusive of all appendices referenced herein as (“**APP-##**”).



This comment letter incorporates by this reference in their entirety the following comment letters: 1) expert traffic comments by RK Engineering Group; 2) expert noise comments by RK Engineering Group; and 3) expert air quality/GHG comments by SWAPE (attached hereto as Exhibits A, B, and C [respectively]).

I. STANDING OF COMMENTERS

USWW represents more than 40 thousand property service workers across California, including approximately 3,700 employees at LAX (pre-COVID) with an additional 1,300 security/janitorial workers living within approximately six miles of LAX. USWW and its sister local unions have many members, including public sector and healthcare workers, who reside and work in Los Angeles where this Project is located.

Local 11 represents more than 25,000 workers employed in hotels, restaurants, airports, sports arenas, and convention centers throughout Southern California and Phoenix, Arizona—including more than 5,600 workers at LAX and 900 in the Airport Hospitality Enhancement Zone (“AHEZ”) (pre-COVID).

Members of USWW and Local 11 join together to fight for improved living standards and working conditions. Making these comments to public officials in connection with matters of public concern compliance with applicable zoning rules and compliance with the CEQA is protected by the First Amendment, the *Noerr-Pennington* doctrine, and is within the core functions of the union. Unions have standing to litigate land use and environmental claims. (See *Bakersfield Citizens v. Bakersfield* (2004) 124 Cal.App.4th 1184, 1198.) So too, they have public interest standing given that the Project relates to LAWA’s public duty to comply with applicable zoning and CEQA laws, and where USWW and Local 11 seek to have that duty enforced. (See e.g., *Rialto Citizens for Responsible Growth v. City of Rialto* (2012) 208 Cal.App.4th 899, 914-916, n6; *La Mirada Avenue Neighborhood Assn. of Hollywood v. City of Los Angeles* (2018) 22 Cal.App.5th 1149, 1158-1159; *Weiss v. City of Los Angeles* (2016) 2 Cal.App.5th 194, 205-206; *Save the Plastic Bag Coalition v. City of Manhattan Beach* (2011) 52 Cal.4th 155, 166, 169-170.)

II. THE DEIR FAILS TO SATISFY CEQA’S EIR REQUIREMENTS

A. BRIEF BACKGROUND ON CEQA

CEQA requires lead agencies to analyze the potential environmental impacts of its actions in an environmental impact report. (See, e.g., Pub. Res. Code § 21100; *Cmtys. for a Better Env’t v. S. Coast Air Quality Mgmt. Dist.* (2010) 48 Cal.4th 310.) The EIR is the very heart of CEQA. (*Dunn-Edwards v. BAAQMD* (1992) 9 Cal.App.4th 644, 652.) “The ‘foremost principle’ in interpreting CEQA is that the Legislature intended the act to be read so as to afford the fullest possible protection to the environment within the reasonable scope of the statutory language.” (*Cmtys. for a Better Env’t v. Cal. Res. Agency* (2002) 103 Cal.App.4th 98, 109.)

CEQA’S PURPOSE: CEQA has two primary purposes. First, CEQA is designed to inform decision makers and the public about the potential, significant environmental effects of a project. (See CEQA Guidelines § 15002(a)(1).) To this end, public agencies must ensure that its analysis “stay in step with evolving scientific knowledge and state regulatory schemes.” (*Cleveland National Forest Foundation v. San Diego Assn. of Governments* (“*Cleveland II*”) (2017) 3 Cal.5th 497, 504.) Hence, an analysis which “understates the severity of a project’s impacts impedes meaningful public discussion and skews the decisionmaker’s perspective concerning the environmental

consequences of the project, the necessity for mitigation measures, and the appropriateness of project approval.” (*Id.*, on remand (“*Cleveland III*”) (2017) 17 Cal.App.5th 413, 444; see also *Citizens of Goleta Valley v. Board of Supervisors* (1990) 52 Cal.3d 553, 564 [quoting *Laurel Heights Improvement Assn. v. Regents of University of California* (1988) 47 Cal.3d 376, 392].)

Second, CEQA requires public agencies to avoid or reduce environmental damage by requiring implementation of “environmentally superior” alternatives and all feasible mitigation measures. (CEQA Guidelines § 15002(a)(2) & (3); see also *Citizens of Goleta Valley*, 52 Cal.3d at 564.) If a project has a significant effect on the environment, the agency may approve the project only if it finds that it has “eliminated or substantially lessened all significant effects on the environment where feasible” and that any significant unavoidable effects on the environment are “acceptable due to overriding concerns.” (Pub. Res. Code § 21081; see also CEQA Guidelines § 15092(b)(2)(A) & (B).)

STANDARD OF REVIEW FOR EIRS: Although courts review an EIR using an ‘abuse of discretion’ standard, that standard does not permit a court to “uncritically rely on every study or analysis presented by a project proponent in support of its position ... [,] [a] clearly inadequate or unsupported study is entitled to no judicial deference.” (*Berkeley Keep Jets Over the Bay v. Bd. of Port Comm’rs.* (2001) 91 Cal.App.4th 1344, 1355 [quoting *Laurel Heights*, 47 Cal.3d at 409 n. 12].) A prejudicial abuse of discretion occurs “if the failure to include relevant information precludes informed decisionmaking and informed public participation, thereby thwarting the statutory goals of the EIR process.” (*San Joaquin Raptor/Wildlife Rescue Center v. County of Stanislaus* (1994) 27 Cal.App.4th 713, 722; see also *Galante Vineyards v. Monterey Peninsula Water Management Dist.* (1997) 60 Cal.App.4th 1109, 1117; *County of Amador v. El Dorado County Water Agency* (1999) 76 Cal.App.4th 931, 946.)

SUBSTANTIAL EVIDENCE: Under CEQA, substantial evidence includes facts, a reasonable assumption predicated upon fact, or expert opinion supported by fact; not argument, speculation, unsubstantiated opinion or narrative, clearly inaccurate or erroneous evidence, or evidence of social or economic impacts that do not contribute to, or are not caused by, physical impacts on the environment. (See e.g., Pub. Res. Code §§ 21080(e), 21082.2(c), and CEQA Guidelines §§ 15064(f)(5) & 15384.) As such, courts will not blindly trust bare conclusions, bald assertions, and conclusory comments without the “disclosure of the ‘analytic route the . . . agency traveled from evidence to action.’” (*Laurel Heights Improvement Assn. v. Regents of University of California* (1988) 47 Cal.3d 376, 404 405 [quoting *Topanga Assn. for a Scenic Community v. County of Los Angeles* (1974) 11 Cal.3d 506, 515]; see also *Citizens of Goleta Valley* (1990) 52 Cal.3d at 568-569.)

B. THE DEIR ANALYSIS OF TRAFFIC IMPACTS IS GROSSLY INADEQUATE AND MUST BE REDONE

CEQA requires analysis of traffic impacts related to a project. (See *Kings County Farm Bureau v. Hanford* (1990) 221 Cal.App.3d 692, 727.) In particular, CEQA requires analysis of project-related traffic impacts in a manner that does not minimize cumulative impacts. (See e.g., *Cleveland III*, 17 Cal.App.5th at 444-445 [traffic analysis based on methodology with known data gaps that underestimated traffic impacts necessarily prejudiced informed public participation and decisionmaking]; *Kings County Farm Bureau*, 221 Cal.App.3d at 718, 727 [rejecting determination that less than one percent to area emissions was less than significant because analysis improperly focused on the project-specific impacts and did not properly consider the collective effect of the relevant projects on air quality]; *Save Cuyama Valley v. County of Santa Barbara* (2013) 213 Cal.App.4th 1059, 1072 [upheld the use of same thresholds for immediate and cumulative impacts when its application was “undoubtedly more stringent cumulative-impact threshold”]; *Al Larson*

Boat Shop, Inc. v. Board of Harbor Comm'rs, (1993) 18 Cal.App.4th 729, 749 [upheld where cumulative impacts were not minimized or ignored].) The relevant inquiry is not only the relative amount of increased traffic that the Project will cause, but whether any additional amount of Project traffic should be considered significant in light of the already serious problem. (See *Los Angeles Unified School District v. City of Los Angeles* (1997) 58 Cal.App.4th 1019, 1025.)

A prejudicial abuse of discretion occurs under CEQA "if the failure to include relevant information precludes informed decisionmaking and informed public participation, thereby thwarting the statutory goals of the EIR process." (*San Joaquin Raptor/Wildlife Rescue Center v. County of Stanislaus* (1994) 27 Cal.App.4th 713, 722; see also *Galante Vineyards v. Monterey Peninsula Water Management Dist.* (1997) 60 Cal.App.4th 1109, 1117; *County of Amador v. El Dorado County Water Agency* (1999) 76 Cal.App.4th 931, 946.) The EIR must disclose information that is needed for a reasoned analysis of the issues. (See *Madera Oversight Coalition v. County of Madera* (2011) 199 Cal.App.4th 48, 104.)

While the courts review an EIR using an "abuse of discretion" standard, "the reviewing court is not to 'uncritically rely on every study or analysis presented by a project proponent in support of its position.' A 'clearly inadequate or unsupported study is entitled to no judicial deference.'" (*Berkeley Keep Jets Over the Bay v. Bd. of Port Comm'rs.* (2001) 91 Cal.App.4th 1344, 1355 [emphasis added] [quoting *Laurel Heights Improvement Assn. v. Regents of University of California* (1988) 47 Cal. 3d 376, 391 409, fn. 12].) Substantial evidence in the record must support any foundational assumptions used for the impact analyses in the EIR. (See e.g., *Citizens of Goleta Valley v. Board of Supervisors* (1990) 52 Cal. 3d 553, 568 [EIR must contain facts and analysis, not just bare conclusions]; *Laurel Heights*, 47 Cal. 3d at 392-93 [agency's conclusions must be supported with substantial evidence].)

As pointed out in expert traffic comments (attached hereto as Exhibit A) the DEIR's traffic analysis contains several flaws that fail to analyze the full extent of the Project's long-term impacts, as well as fails to impose all reasonable feasible mitigation measures. While the expert traffic comment letter speaks for itself, Commenters wish to highlight some of the findings about the DEIR's inadequate traffic analysis, including:

- The DEIR fails to perform a Level of Service ("LOS") analysis even though local traffic guidelines in effect at the time compelled as much.
- The DEIR fails to analyze long-term vehicle miles traveled ("VMT") impacts beyond 2028, even though such impacts are admitted.
- The DEIR's VMT analysis fails to account for all VMTs, specifically non-passenger trips (e.g., employees and other trips) for this regional serving use. This is inconsistent with local VMT traffic assessment guidelines, which underestimates the full impact of the project.
- While the DEIR admits significant unavoidable passenger VMT impacts, no mitigation measures are offered to help relieve this increase in VMT as a result of the project. The DEIR incorrectly proclaims that there is no feasible mitigation to reduce this impact when, in fact, there are numerous additional measures available (e.g., additional off-site van pools and neighborhood shuttles for passengers, expand public transit services, provide public transit subsidies, provide bike-share and car-share programs, improve pedestrian and bicycle infrastructure, etc.).

- The DEIR fails to specify any transportation impacts during the seven-year construction phase of the project.
- The DEIR's consistency analysis with the City's Mobility Plan 2035 is entirely lacking, whereby it looks to merely three measures of the plan, when the Plan includes more than 50 different policies that should be analyzed.

In sum, as highlighted by the traffic expert comment letter, the DEIR's traffic/VMT analysis and conclusions rely upon faulty assumptions, data gaps, and missing relevant information—which ultimately ignores and minimizes the ATMP's traffic/VMT impacts—and thus violates CEQA. (See e.g., *Cleveland III*, 17 Cal.App.5th at 444-445; *Al Larson Boat Shop, Inc.*, 18 Cal.App.4th at 749; *San Joaquin Raptor/Wildlife Rescue Center*, 27 Cal.App.4th at 722; *Citizens of Goleta Valley*, 52 Cal. 3d at 568.)

C. THE DEIR VASTLY UNDERSTATES NOISE IMPACTS AND CUTS OFF IMPACT ANALYSIS IN 2028

An EIR must disclose and feasibly mitigate noise impacts. (See *Los Angeles Unified School District v. City of Los Angeles* (1997) 58 Cal.App.4th 1019.) These impacts must be explained with “plain language” and draw an explicit connection between increased exposures to their likely human-health effects (e.g., headaches, nuisance, etc.). (See CEQA Guidelines § 15140; see also *San Franciscans for Reasonable Growth v. City and County of San Francisco* (1987) 193 Cal.App.3d 1544, 1548; *Bakersfield Citizens*, 124 Cal.App.4th at 1219.) Furthermore, a lead agency may not ignore cumulative noise impacts by claiming an area is already heavily impacted by noise and, therefore, project-related additions would be insignificant. (See *Los Angeles Unified*, 58 Cal.App.4th at 1025.)

Here, as pointed out in the expert noise comment letter (attached hereto as *Exhibit B*), the DEIR's noise analysis contains several flaws that mask all potential impacts from the ATMP, which need to be mitigated to the maximum extent feasible. While this expert comment letter speaks for itself, Commenters highlighted the following findings made by the noise experts:

- The DEIR's noise analysis delivers contradictory statements and appears to dismiss the widely recognized fact that environmental noise affects human health. The California Noise Control Act explicitly declares that excessive noise is a serious hazard to the public health and exposure to certain levels of noise can result in physiological and psychological damage.
- The DEIR relies on unsubstantiated 29 decibel (“**dba**”) attenuation for classrooms, which is nine more than the widely accepted 20 dba attenuation standard.
- The DEIR fails to provide any data that the 28 schools identified within the applicable 65-dba Community Noise Equivalent Level (“**CNEL**”) contour around LAX would achieve this even the excessive 29 dba noise attenuation.
- The DEIR fails to provide maximum exterior noise levels (“**Lmax**”) at exposed schools. This is critical in establishing the environmental setting of the school.
- The DEIR fails to consider long-term noise impacts beyond 2028, even though LAX is planned to generate an additional 165,316 annual aircraft operations by 2045—a level that exceeds Burbank Airport operations from last year.

- The DEIR's CNEL contour maps make no changes to the new terminal location, which is unlikely given that the Project is proposing new terminals in place of parking lots. This will impact nearby sensitive receptors (e.g., hotel patrons).
- The DEIR fails to provide supporting documentation underlying its noise modeling that makes verification impossible and, thus, the conclusions are unsubstantiated
- The DEIR fails to use actual field measurements to determine construction noise impacts. This is particularly important when determining nighttime noise impacts.
- The DEIR does not include all reasonable feasible mitigation measures, such as a requirement for active construction noise monitoring at adjacent noise sensitive receptors anytime construction activities take place during nighttime hours. Active nighttime noise monitoring would help ensure actual construction noise levels (not based on computer models) do not exceed the nighttime noise standards in the City of Los Angeles or exceed existing ambient nighttime noise levels by more 5 dBA.

In sum, as highlighted by the expert noise comment letter, the DEIR's noise analysis relies on missing relevant data, false assumptions, fails to draw explicit connections to real noise impacts—which ultimately minimizes noise impacts suggesting the area is already impacted—and thus violates CEQA. (See e.g., *Cleveland III*, 17 Cal.App.5th at 444-445; *San Joaquin Raptor/Wildlife Rescue Center*, 27 Cal.App.4th at 722; *San Franciscans for Reasonable Growth*, 193 Cal.App.3d at 1548; *Los Angeles Unified*, 58 Cal.App.4th at 1025.)

D. AIR QUALITY & GHG IMPACTS ARE UNDERESTIMATED IN THE DEIR WHICH FAILS TO SHOW ITS WORK

Air quality impacts and their concomitant impacts on human health must be studied in the CEQA document. (See *Bakersfield Citizens for Local Control v. City of Bakersfield* (2004) 124 Cal.App.4th 1184, 1220 [quoting CEQA Guidelines § 15126.2(a)].) Courts have recognized the threat of toxic air contaminants ("TACs"), such as the carcinogenic threat posed by diesel particulate matter ("DPM") emitted from highway vehicles and particularly from heavy-duty trucks. (See *Cleveland III*, 17 Cal.App.5th at 438-439 [citing a growing body of scientific evidence, including several studies and estimates by California Air Resources Board, showing proximity to heavy traffic volumes is associated with increased respiratory symptoms, risk of heart and lung disease, elevated mortality rates, and that DPM resulted in 720 excess cancer cases per million in the San Diego region in 2000].) Hence, CEQA requires an agency to correlate transportation-related emissions to anticipated adverse health impacts. (*Id.* at 33; see also *Berkeley Keep Jets Over the Bay Com. v. Board of Port Comrs.* (2001) 91 Cal.App.4th 1344, 1367-1371.)

So too, the California Supreme Court demands robust GHG analysis to assess a project's impact on climate change. Lead agencies must provide the contours of their logical argument and fill the analytical gap to support their significance determinations with substantial evidence and reasoned explanation. (See *Center for Biological Diversity v. Cal. Dept. of Fish and Wildlife* ("*Newhall Ranch*") (2015) 62 Cal.4th 204, 227.) Under CEQA Guidelines § 15064.4(b), acceptable methods include comparing the increased GHG emissions to (a) the pre-project baseline emissions, or (b) an adopted numeric threshold, or (c) determine the project's compliance with an officially adopted plan intended to reduce a project's cumulative contribution to the effects of climate change (e.g., climate action plans, GHG reduction plans). (*Id.* at 229-231.) While agencies enjoy discretion in the choice of methodology, CEQA requires the analysis be "based to the extent possible on scientific and factual data ... stay[ing] in step with evolving scientific knowledge and state regulatory schemes."

(*Cleveland II*, 3 Cal.5th at 515, 519 [quoting CEQA Guidelines § 15064(b)].)

Moreover, merely because “a project is designed to meet high building efficiency and conservation standards ... does not establish that its [GHG] emissions from transportation activities lack significant impacts.” (*Newhall Ranch*, 62 Cal.4th at 229 [citing Natural Resources Agency].)³ This concept is known as ‘additionality’ whereby GHG emission reductions otherwise required by law or regulation are appropriately considered part of the baseline and, pursuant to CEQA Guideline § 15064.4(b)(1), a new project’s emission should be compared against that existing baseline.⁴ Hence, a “project should not subsidize or take credit for emissions reductions which would have occurred regardless of the project.”⁵ In short, as observed by the Court, newer developments must be more GHG-efficient. (See *Newhall Ranch*, 62 Cal.4th at 226.)

As pointed out in the air quality/GHG comment letter (attached hereto as *Exhibit C*), the DEIR fails to adequately evaluate the Project’s air quality, health risk, and GHG impacts. Findings on DEIR insufficiency include:

- The DEIR utilizes incomplete/unsubstantiated input parameters for its air quality and GHG modeling (e.g., underestimates land uses, failure to analyze construction trips, underestimates off-road construction equipment emissions, and underestimates architectural coating emissions, etc.). As a result, neither the air quality, health risks, or GHG conclusions can be relied upon.
- While admitting significant and unavoidable air quality/GHG emissions, the DEIR fails to consider and implement numerous feasible mitigation measures—as required under CEQA.
- The DEIR’s Health Risk Assessment (“HRA”) relies on incomplete/unsubstantiated modeling and, thus, DEIR’s air model underestimates emissions associated with the Project’s construction and operational activities. As a result, toxic air contaminants (“TAC”) are underestimated.
- The DEIR’s HRA fails to disclose total emissions from operational sources and, thus, cannot be verified to ensure the HRA fully accounts for all sources.
- The DEIR fails to analyze the ATMP’s air quality and GHG impacts beyond 2028 and, thus, the DEIR fails to consider the long-term operational impacts of the Project.

³ See Final Statement of Reasons for Regulatory Action: Amendments to State CEQA Guidelines Addressing Analysis and Mitigation of GHG Emissions Pursuant to SB-97 (“**Final Statement of Reasons**”) (Dec. 2009), p. 23 (while a Platinum LEED® rating may be relevant to emissions from a building’s energy use, “that performance standard may not reveal sufficient information to evaluate transportation-related emissions associated with that proposed project”), http://resources.ca.gov/ceqa/docs/Final_Statement_of_Reasons.pdf.

⁴ See Final Statement of Reasons, p. 89; *see also* California Air Pollution Control Officers Association (“CAPCOA”) (Aug. 2010) Quantifying Greenhouse Gas Mitigation Measures, pp. 32, A3 (“in practice is that if there is a rule that requires, for example, increased energy efficiency in a new building, the project proponent cannot count that increased efficiency as a mitigation or credit unless the project goes beyond what the rule requires; and in that case, only the efficiency that is in excess of what is required can be counted.”), <http://www.capcoa.org/wp-content/uploads/2010/11/CAPCOA-Quantification-Report-9-14-Final.pdf>.

⁵ *Ibid.*, CAPCOA, at p. A-3.

- The DEIR's GHG analysis fails to consider performance-based standards under the California Air Resources Board's ("CARB") 2017 Scoping Plan to ensure Project consistency with relevant GHG plans. For example, the DEIR estimates the Project would achieve 20.40 VMT per employee, which exceeds that anticipated under CARB's 2017 Scoping Plan.
- The DEIR's GHG analysis fails to consider performance-based standards under the Southern California Association of Governments' ("SCAG") 2020 Regional Transportation Plan/Sustainable Communities Strategies ("RTP/SCS"). For example, the DEIR estimates 20.40 VMT per employee exceeds the 19.2 VMT anticipated in target year 2045 under SCAG's 2020 RTP/SCS.

In sum, as highlighted by the expert comment letter, the DEIR's air quality and GHG analysis relies on faulty assumptions, missing scientific data, and analytical gaps showing the Project is meeting its additionality requirement—which ultimately minimizes emission impacts—and thus violates CEQA. (See e.g., *Citizens of Goleta Valley*, 52 Cal. 3d at 568; *Newhall Ranch*, 62 Cal.4th at 226-229; *Cleveland II*, 3 Cal.5th at 515, 519.)

E. THE DEIR HAS AN IMPROPER AND INACCURATE PROJECT DESCRIPTION

An "accurate, stable and finite project description is the *sine qua non* of an informative and legally sufficient EIR." (*San Joaquin Raptor Rescue Ctr. v. Cnty. of Merced* (2007) 149 Cal.App.4th 645, 654-655 [quoting *Cnty. of Inyo v. City of Los Angeles* (1977) 71 Cal.App.3d 185, 199] [emphasis in original].) As one court explained, "only through an accurate view of the project may affected outsiders and public decision-makers balance the proposal's benefit against its environmental cost, consider mitigation measures, assess the advantage of terminating the proposal (i.e., the 'no project' alternative), and weigh other alternatives in the balance." (*Citizens for a Sustainable Treasure Island v. City & Cnty. of San Francisco* (2014) 227 Cal.App.4th 1036, 1052.) Hence, an accurate project description is an "indispensable component of a valid EIR." (*Western Placer Citizens for an Agr. and Rural Env't v. Cnty. of Placer* (2006) 144 Cal.App.4th 890, 898.)

Here, a reoccurring criticism in the attached comment letters is the DEIR's narrow, self-serving timeline of assessing the Project's impacts. First, the DEIR anticipates that the current airport configuration is a "constraint on growth" starting in 2028. (DEIR, p. 2-17.) But the ATMP's improvements (e.g., extending Terminal 1 and constructing a new passenger terminal with additional gates) (DEIR, p. 2-1, 2-9, Fig. 2-1) are characterized as merely "modernization" of LAX to accommodate continued growth in airline passengers over "several decades" (DEIR, p. 2-18). This is internally inconsistent with the claim that the Project is not growth-inducing. The DEIR fails to: 1) explain how the anticipated growth at LAX was not already accounted for by the SCAG's 2020 RTP/SCS, which noted several modernization projects already approved and ongoing at LAX;⁶ or 2) describe how the ATMP will not prematurely expand LAX's capacity that will lead to the airport maintaining or even significantly increasing its regional share of air travel—contrary to what SCAG anticipates (DEIR, Tbl. 2-1 [LAX's regional passenger share anticipated to drop from regional 76.75 % to 64.42 % from 2017 to 2045]). In both scenarios, impacts will be more significant than those forecast in the 2020 RTP/SCS.

⁶ SCAG (2020) RTP/SCS, Aviation and Airport Ground Access Technical Report, p. 38 (noting several LAX projects), https://scag.ca.gov/sites/main/files/file-attachments/0903fconnectsocal_aviation-and-airport-ground-access.pdf?1606001540.

Second, and more fundamentally, the DEIR's impact analysis arbitrarily limits its analysis to 2028 when project construction is to end. This ignores the impacts associated with nearly 45 million annual passengers ("MAP") anticipated post-2028. (DEIR, APP-B [110.8 MAP in 2028 to 155.6 MAP in year 2045].) Essentially, the DEIR ignores the entire operational and longer-term impacts of the Project (i.e., post-2028). (See e.g., DEIR, p. 4.1.1-34 & 36 [air impacts associated only for 2028 modeled].) For example, there is no explanation of how air emissions from this post-2028 growth will comport with the emissions anticipated for the air basin in a manner consistent with the Clean Air Act ("CAA") and applicable State Implementation Plan ("SIP"). This is a blatant abuse of discretion lacking in substantial evidence. A 'clearly inadequate or unsupported study is entitled to no judicial deference.'" (*Berkeley Keep Jets*, 91 Cal.App.4th at 1355.)

In sum, the DEIR's project description and truncated analysis is inaccurate and misleading, which distorts the public decisionmaking process—which violates CEQA. (See *Citizens for a Sustainable Treasure Island*, 227 Cal.App.4th at 1052.) To say post-2028 growth is limited without the Project (on the one hand), and then fail to analyze the impacts of post-2028 growth as an impact of the ATMP (on the other) is a major error. Furthermore, this truncated concept of the Project serves only to chop-up the full impacts of the ATMP, which also violates CEQA. (See e.g., *San Joaquin Raptor/Wildlife Rescue Center v. Cnty. of Stanislaus* (1994) 27 Cal.App.4th 713, 730 [held use of "truncated project concept" violated CEQA]; *Bozung v. LAFCO* (1975) 13 Cal.3d 263, 283-284 [CEQA mandates "that environmental considerations do not become submerged by chopping a large project into many little ones—each with a minimal potential impact on the environment - which cumulatively may have disastrous consequences."].) A project's CEQA review must assess "the whole of an action" to ensure that all of the project's environmental impacts are considered. (CEQA Guidelines § 15378.) Before undertaking a project, the lead agency must assess the environmental impacts of all reasonably foreseeable phases of a project, and a public agency may not segment a large project into two or more smaller projects to mask serious environmental consequences or evade CEQA review. (See e.g., CEQA Guidelines § 15378(a); *McQueen v. Bd. of Supervisors* (1988) 202 Cal.App.3d 1136, 1146-47.)

F. THE DEIR FAILS TO ADOPT ALL FEASIBLE MITIGATION

CEQA disfavors formulation of mitigation measures to post-approval studies with no performance standards to guide the mitigation. (See e.g., CEQA Guidelines § 15126.4(a)(1)(B); *Communities for a Better Environment v. City of Richmond* (2010) 184 Cal.App.4th 70, 92-93.) A lead agency may only defer the formulation of mitigation measures when it possesses "'meaningful information' reasonably justifying an expectation of compliance." (*Sundstrom v. County of Mendocino* (1988) 202 Cal.App.3d 296, 308 [quoting *No Oil, Inc. v. City of Los Angeles* (1974) 13 Cal.3d 68, 77 fn. 5]; see also *Sacramento Old City Association v. City Council of Sacramento* (1991) 229 Cal.App.3d 1011, 1028-29 [mitigation measures may be deferred only "for kinds of impacts for which mitigation is known to be feasible"].)

CEQA requires lead agencies to "craft mitigation measures that would satisfy enforceable performance criteria." (*City of Maywood v. Los Angeles Unified School Dist.* (2012) 208 Cal.App.4th 362, 407.) The imposition of specific, performance-based mitigation measures helps "[e]nsure the integrity of the process of decisionmaking by precluding stubborn problems or serious criticism from being swept under the rug." (*Concerned Citizens of Costa Mesa, Inc. v. 32nd Dist. Agricultural Assn.* (1986) 42 Cal.3d 929, 935; see also *Preserve Wild Santee v. City of Santee* (2012) 210 Cal.App.4th 260, 280-281.) Nor may a lead agency rely on mere compliance with existing laws or unrealistic mitigation measures of uncertain efficacy/feasibility. (See e.g., *Cleveland III*, 17 Cal.App.5th at 433 ["none of these measures had any probability of implementation, their inclusion

in the EIR was illusory.”]; *Californians for Alternatives to Toxics v. Department of Food and Agriculture* (2005) 136 Cal.App.4th 1, 17 [“[c]ompliance with the law is not enough to support a finding of no significant impact under the CEQA.”]; *Kings County Farm Bureau*, 221 Cal.App.3d at 727 [finding groundwater purchase agreement inadequate mitigation because there was no evidence that replacement water was available].)

Here, another reoccurring criticism in the attached comment letters is the DEIR’s failure to implement all feasible mitigation measures for admitted significant impacts. Here, the DEIR admits the ATMP will have significant, unmitigated air quality, GHG, noise, and transportation impacts. (DEIR, pp. 1-24 – 1-25.) However, the Project fails to impose all feasible mitigation measures—as confirmed by expert comments attached hereto, including numerous measures that the DEIR fails to show to be infeasible. These measures, as set forth in the expert comment letters, include:

TRAFFIC (Exhibit A, p. 4 [highlighted for your convenience]):

mitigation to reduce this impact. However, there are in fact numerous additional mitigation measures that can be included to reduce the VMT impact, including: provide additional off-site van pools and neighborhood shuttles for passengers, expand public transit services, provide public transit subsidies, provide bike-share and car-share programs, and encourage passengers (such as through advertisement) to use other modes of transportation getting to and from the airport. Additionally, there are other improvements that the project could do to improve pedestrian and bicycle infrastructure which has been shown to reduce VMT. Thus, additional mitigation measures should also include improvements to the pedestrian network, on-site traffic calming improvements, protected bike lanes, cycle tracks or separated bike trails, additional secured bike storage and end of trip facilities, and other non-automotive improvements to help reduce the projects affect upon VMT.

NOISE (Exhibit B, p. 5[highlighted for your convenience]):

Section 4.7.3.5.2.2, Mitigation Measures. The DEIR does not include all reasonably feasible mitigation measures for reducing potential noise impacts. The Construction Noise Control Plan should include a requirement for active construction noise monitoring at adjacent noise sensitive receptors anytime construction activities take place during nighttime hours. Active nighttime noise monitoring would help ensure actual construction noise levels (not based on computer models) do not exceed the nighttime noise standards in the City of Los Angeles or exceed existing ambient nighttime noise levels by more 5 dBA. The monitoring program should monitor and establish the adequate baseline noise levels for each receptor prior to commencing any activity. The monitoring program should also notify construction management personnel when noise levels approach and/or exceed the applicable thresholds. Construction activity should cease or be modified in order to ensure violations do not occur. Repeated violations should result in fines or other penalties.

AIR QUALITY & GHGs (Exhibit C, pp. 12-18 [highlighted for your convenience]):

- **Ground Support Equipment Conversion:**
 - Transition all baggage tugs, belt loaders, lifts, pushback tractors, and utility carts at SDIA that are owned and operated by airlines and their ground handling contractors to service aircraft, shall be transitioned to alternative fuels (i.e., electric, natural gas, renewable diesel, biodiesel).

* * *

- **Renewable Electricity:**
 - Power project-related buildings with 100 percent renewable electricity.
- **Clean Vehicle Parking:**
 - Designate 10 percent of new parking stalls for a combination of low-emitting, fuel-efficient, and carpool/vanpool vehicle.
- **Electric Vehicle Chargers:**
 - Install electric vehicle charging ports at three percent of new parking stalls and another three percent would be "EVSE-ready."
- **Ground Transportation Clean Vehicle Program:**
 - Implement a Commercial Ground Transportation Clean Vehicle Program.
- **Bicycle Facilities:**
 - Install shower stalls and lockers, as well as covered bicycle storage for employees.
- **Employee Parking Cash-Out Program:**
 - Implement a parking cash-out program for employees.

* * *

- Diesel engines, whether for off-road or on-road equipment, shall not be left idling for more than two minutes, at any location, except as provided in exceptions to the applicable state regulations regarding idling for off-road and on-road equipment (e.g., traffic conditions, safe operating conditions).
- Instruct construction workers and equipment operators on the maintenance and tuning of construction equipment and require that such workers and operators properly maintain and tune equipment in accordance with manufacturer specifications.
- Before starting onsite ground disturbance, demolition, or construction activities, submit a Construction Emissions Minimization Plan for review and approval. The plan shall include estimates of the construction timeline, with a description of each piece of off-road equipment required. The description may include, but is not limited to, equipment type, equipment manufacturer, engine model year, engine certification (Tier rating), horsepower, and expected fuel usage and hours of operation. For off-road equipment using alternative fuels, the description shall also specify the type of alternative fuel being used. Make the Construction Emissions Minimization Plan available to the public for review onsite during working hours. Post at the construction site a legible and visible sign summarizing the plan. State that the public may ask to inspect the plan for the project at any time during working hours and shall explain how to request to inspect the plan. Post at least one copy of the sign in a visible location on each side of the construction site facing a public right-of-way.

- Develop and implement a phased carbon management program that is consistent with the standards of ACI "Level 3+" Airport Carbon Accreditation Program, or equivalent, including calculation of annual carbon emissions from airport activity, identifying emissions reduction targets, tracking progress toward achieving effective carbon management procedures, and publishing an annual biennial carbon footprint report as a component of the Airport's broader environmental sustainability program.

* * *

CAPCOA's Quantifying Greenhouse Gas Mitigation Measures	
Measures – Energy	
<i>Building Energy Use</i>	
Obtain Third-party HVAC Commissioning and Verification of Energy Savings	
<i>Lighting</i>	
Install Higher Efficacy Public Street and Area Lighting	
Limit Outdoor Lighting Requirements	
<i>Alternative Energy Generation</i>	
Establish Onsite Renewable or Carbon-Neutral Energy Systems	
Establish Onsite Renewable Energy System – Solar Power	
Utilize a Combined Heat and Power System	
Measures – Transportation	
<i>Land Use/Location</i>	
Increase Destination Accessibility	
Increase Transit Accessibility	
Orient Project Toward Non-Auto Corridor	
Locate Project near Bike Path/Bike Lane	
<i>Neighborhood/Site Enhancements</i>	
Provide Pedestrian Network Improvements, such as:	
<ul style="list-style-type: none"> • Compact, mixed-use communities • Interconnected street network • Narrower roadways and shorter block lengths • Sidewalks • Accessibility to transit and transit shelters • Traffic calming measures and street trees • Parks and public spaces • Minimize pedestrian barriers 	
Provide Traffic Calming Measures, such as:	
<ul style="list-style-type: none"> • Marked crosswalks • Count-down signal timers • Curb extensions • Speed tables • Raised crosswalks • Raised intersections • Median islands • Tight corner radii • Roundabouts or mini-circles • On-street parking • Planter strips with trees • Chicanes/chokers 	
Incorporate Bike Lane Street Design (on-site)	
Provide Bike Parking in Non-Residential Projects	
Provide Electric Vehicle Parking	

Commute Trip Reduction Programs
Implement Commute Trip Reduction (CTR) Program – Voluntary <ul style="list-style-type: none"> • Carpooling encouragement • Ride-matching assistance • Preferential carpool parking • Flexible work schedules for carpools • Half time transportation coordinator • Vanpool assistance • Bicycle end-trip facilities (parking, showers and lockers) • New employee orientation of trip reduction and alternative mode options • Event promotions and publications • Flexible work schedule for employees • Transit subsidies • Parking cash-out or priced parking • Shuttles • Emergency ride home
Implement Commute Trip Reduction (CTR) Program – Required Implementation/Monitoring <ul style="list-style-type: none"> • Established performance standards (e.g. trip reduction requirements) • Required implementation • Regular monitoring and reporting
Implement Subsidized or Discounted Transit Program
Provide Ent of Trip Facilities, including: <ul style="list-style-type: none"> • Showers • Secure bicycle lockers • Changing spaces
Implement Commute Trip Reduction Marketing, such as: <ul style="list-style-type: none"> • New employee orientation of trip reduction and alternative mode options • Event promotions
<ul style="list-style-type: none"> • Publications
Implement Preferential Parking Permit Program
Price Workplace Parking, such as: <ul style="list-style-type: none"> • Explicitly charging for parking for its employees; • Implementing above market rate pricing; • Validating parking only for invited guests; • Not providing employee parking and transportation allowances; and • Educating employees about available alternatives.
Implement Employee Parking “Cash-Out”
Transit System Improvements
Transit System Improvements, including: <ul style="list-style-type: none"> • Grade-separated right-of-way, including bus only lanes (for buses, emergency vehicles, and sometimes taxis), and other Transit Priority measures. Some systems use guideways which automatically steer the bus on portions of the route. • Frequent, high-capacity service • High-quality vehicles that are easy to board, quiet, clean, and comfortable to ride. • Pre-paid fare collection to minimize boarding delays. • Integrated fare systems, allowing free or discounted transfers between routes and modes. • Convenient user information and marketing programs. • High quality bus stations with Transit Oriented Development in nearby areas. • Modal integration, with BRT service coordinated with walking and cycling facilities, taxi services, intercity bus, rail transit, and other transportation services.

Implement Transit Access Improvements, such as:
<ul style="list-style-type: none"> Sidewalk/crosswalk safety enhancements Bus shelter improvements
Expand Transit Network
Increase Transit Service Frequency/Speed
Provide Bike Parking Near Transit
Provide Local Shuttles
Road Pricing/Management
Implement Area or Cordon Pricing
Improve Traffic Flow, such as:
<ul style="list-style-type: none"> Signalization improvements to reduce delay; Incident management to increase response time to breakdowns and collisions; Intelligent Transportation Systems (ITS) to provide real-time information regarding road conditions and directions; and Speed management to reduce high free-flow speeds.
Required Project Contributions to Transportation Infrastructure Improvement Projects
Vehicles
Utilize Alternative Fueled Vehicles, such as:
<ul style="list-style-type: none"> Biodiesel (B20) Liquefied Natural Gas (LNG) Compressed Natural Gas (CNG)
Measures – Water
Water Supply
Use Gray Water
Use Locally Sourced Water Supply
Water Use
Adopt a Water Conservation strategy
Design Water-Efficient Landscapes (see California Department of Water Resources Model Water Efficient Landscape Ordinance), such as:
<ul style="list-style-type: none"> Planting vegetation with minimal water needs, such as native species; Choosing vegetation appropriate for the climate of the project site; Choosing complimentary plants with similar water needs or which can provide each other with shade and/or water.
Plant Native Trees and Vegetation
Measures – Vegetation
Vegetation
Urban Tree Planting
Create New Vegetated Open Space

Measures – Construction
Construction
Use Alternative Fuels for Construction Equipment
Urban Tree Planting
Use Electric and Hybrid Construction Equipment
Limit Construction Equipment Idling Beyond Regulation Requirements
Institute a Heavy-Duty Off-Road Vehicle Plan, including: <ul style="list-style-type: none"> Construction vehicle inventory tracking system; Requiring hour meters on equipment; Document the serial number, horsepower, manufacture age, fuel, etc. of all onsite equipment; and Daily logging of the operating hours of the equipment.
Implement a Construction Vehicle Inventory Tracking System
Measures – Miscellaneous
Miscellaneous
Establish a Carbon Sequestration Project, such as: <ul style="list-style-type: none"> Geologic sequestration or carbon capture and storage techniques, in which CO₂ from point sources is captured and injected underground; Terrestrial sequestration in which ecosystems are established or preserved to serve as CO₂ sinks; Novel techniques involving advanced chemical or biological pathways; or Technologies yet to be discovered.
Establish Off-Site Mitigation
Use Local and Sustainable Building Materials
Require Environmentally Responsible Purchasing, such as: <ul style="list-style-type: none"> Purchasing products with sustainable packaging; Purchasing post-consumer recycled copier paper, paper towels, and stationary; Purchasing and stocking communal kitchens with reusable dishes and utensils; Choosing sustainable cleaning supplies; Leasing equipment from manufacturers who will recycle the components at their end of life; Choosing ENERGY STAR appliances and Water Sense-certified water fixtures; Choosing electronic appliances with built in sleep-mode timers; Purchasing 'green power' (e.g. electricity generated from renewable or hydropower) from the utility; and Choosing locally-made and distributed products.

G. THE DEIR FAILS TO IDENTIFY OVERRIDING CONSIDERATIONS

The DEIR should identify facts relating to a CEQA-compliant statement of overriding considerations. (See *Lawler v. City of Redding* (1992) 7 Cal.App.4th 778 [vacating city's approval of a sports facility on city-owned land in an unincorporated area until adopting measures to sufficiently mitigate noise impacts].) When approving a project that will have significant environmental impacts not fully mitigated, a lead agency must adopt a "statement of overriding considerations" finding that the project's benefits outweigh its environmental harm. (Pub. Res. Code § 21081(b); see also CEQA Guidelines § 15043; *Sierra Club v. Contra Costa County* (1992) 10 Cal.App.4th 1212, 1222.) An overriding statement expresses the larger, more general reasons for approving the project, such as the need to create new jobs, provide housing, generate taxes, and the like. (See

Concerned Citizens of S. Central LA v. Los Angeles Unif. Sch. Dist. (1994) 24 Cal.App.4th 826, 847.) It must fully inform and disclose the specific benefits expected to outweigh environmental impacts, supported by substantial evidence. (See CEQA Guidelines §§ 15043(b) & 15093(b); see also *Sierra Club*, 10 Cal.App.4th at 1223.) However, an agency may adopt a statement of overriding considerations only after it has imposed all feasible mitigation measures to reduce a project's impact to less than significant levels. (See CEQA Guidelines §§ 15091 & 15126.4.) Hence, decisionmakers may not approve a project when feasible mitigation measures can substantially lessen or avoid such impacts. (See e.g., Pub. Res. Code § 21002; CEQA Guidelines § 15092(b)(2).) So too, additional overriding considerations may be necessary to adequately override those additional impacts that the DEIR underestimates.

To the extent that overriding considerations are needed, key among the findings that the lead agency must make is that:

“Specific economic, legal, social, technological, or other considerations, including the provision of employment opportunities for highly trained workers, make infeasible the mitigation measures or alternatives identified in the environmental impact report ... [and that those] benefits of the project outweigh the significant effects on the environment.” (Pub. Res. Code § 21081(a)(3) & (b), emphasis added.)

Here, the DEIR fails to identify significant impacts and/or incorporate feasible mitigation measures. Nor does the DEIR identify any overriding considerations. To the extent the City considers approving the Project with significant environmental impacts, the City should consider the overriding benefits to service/hospitality workers near LAX and the Airport Hospitality Enhancement Zone (“AHEZ”) that will suffer the brunt of significant air quality, GHG, and other impacts caused by the ATMP development. Considerations should include, at a minimum: a) the number of construction and operational jobs that will be for “highly trained workers” and what the likely salary and wage ranges of these jobs will be; and b) to what extent this Project will ensure better permanent service jobs for contracted airline service/hospitality workers.

Furthermore, the City/LAWA should consider the following that ultimately serves to reduce the Project's significant VMT, GHG, and mobile-emissions impacts:

- Expanded public transit service from neighborhoods where service/hospitality workers live to LAX/AHEZ at times needed for all shifts of work;
- Free or reduced transit passes for LAX/AHEZ workers;
- Free or reduced parking at LAX/AHEZ for workers who carpool;
- Quality job creation that expands housing opportunities near LAX/AHEZ for employees via:
 - a. Operational jobs that provide real living wages able to afford an apartment in Los Angeles, which housing experts estimate must be \$33/hour in 2015⁷—LAX's current

⁷ Southern California Public Radio (89.3KPPC) (1/15/15) LA Residents Need To Make \$33 An Hour To Afford The Average Apartment (“You need to earn at least \$33 an hour — \$68,640 a year — to be able to afford the average apartment in Los Angeles County, according to Matt Schwartz, president and chief executive of the

living wage of \$16.50/hour is not enough even when healthcare costs are not considered. This is necessary for workers to be able to afford to live near LAX/AHEZ and not commute longer distance that increase VMT and mobile-emissions;

and/or

- b. Airlines contribute to an affordable housing fund directly for service workers living in neighborhoods surrounding the airport that will promote employees living closer to LAX/AHEZ;

and/or

- c. Operational jobs that provide real healthcare, which must be increased from the current LAX living wage law requiring merely \$5.55/hour for healthcare.⁸

H. DEIR RECIRCULATION IS REQUIRED

CEQA requires a lead agency to recirculate an EIR when significant new information is added to the EIR following public review but before certification. (See Pub. Res. Code § 21092.1.) New information is significant if “the EIR is changed in a way that deprives the public of a meaningful opportunity to comment upon a substantial adverse environmental effect of the project” including, for example, “a disclosure showing that ... [a] new significant environmental impact would result from the project.” (CEQA Guidelines § 15088.5.) Here, recirculation is required because the DEIR fails to analyze the Project’s real impacts (i.e., post-2028) and fails to implement all feasible mitigation measures and/or demonstrate proposed mitigation measures are infeasible (to name a few of the fatal flaws of this DEIR). Neither the public nor decisionmakers can meaningfully comment and consider the Project’s impacts absent this information and, thus, a recirculated DEIR that addresses the issues discussed herein is necessary.

III. CONCLUSION

In closing, Commenters urge the City/LAWA to stay all action on the Project until the issues discussed herein are resolved in a recirculated, CEQA-compliant DEIR. Faults in the DEIR include incomplete analysis and mitigation of traffic, air quality, noise, GHG impacts, an inadequate project description, and the absence of overriding considerations.

This Project can and must do better. Rising inequality threatens Los Angeles’ prosperity. There are serious challenges in the region concerning affordable housing and living wage jobs — and COVID has made things even more difficult for our members. USWW and Local 11 work to stem this rising tide of inequality and fight to make our region a place of opportunity for all—a place where their members can work and afford to live. LAWA must better consider to what extent this Project will ensure better permanent service jobs for airline service workers who will feel the significant air quality, GHG, and other impacts caused by the Project. True community and worker benefits are needed if this Project is to be approved.

California Housing Partnership, which advocates for affordable housing.”), <https://www.scpr.org/blogs/economy/2015/01/15/17806/la-residents-need-to-make-34-an-hour-to-afford-ave/>.

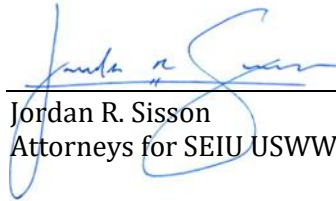
⁸ California USSW service employee’s health and welfare trust fund has been quoted healthcare costs for a family Kaiser plan for LAX employees that cost up to \$9.40/hour for family coverage.

On behalf of Commenters, this Office requests, to the extent not already on the notice list, all notices of CEQA actions and any approvals, determinations, or public hearings to be held on the Project under state or local law requiring local agencies to mail such notices to any person who has filed a written request for them. (Pub. Res. Code §§ 21092.2, 21167(f) and Gov. Code § 65092 and LAMC § 197.01.F.) Please send notice by electronic and regular mail to: Jordan R. Sisson, Esq., 801 S. Grand Avenue, 11th Fl., Los Angeles, CA 90017, jordan@gideonlaw.net.

Thank you for your consideration of these comments. Commenters reserve the right to supplement these comments at future hearings and proceedings for this Project. (See *Galante Vineyards v. Monterey Peninsula Water Management Dist.* (1997) 60 Cal.App.4th 1109, 1120 [CEQA litigation not limited only to claims made during EIR comment period].) We ask that this letter and attachments are placed in the administrative record for the Project.

Sincerely,

LAW OFFICE OF GIDEON KRACOV



Jordan R. Sisson
Attorneys for SEIU USWW and UNITE HERE Local 11

Attachments:

Exhibit A:	RK Engineering Group (3/15/21) LAX ATMP DEIR Transportation Review
Exhibit B:	RK Engineering Group (3/15/21) LAX ATMP DEIR Noise Review
Exhibit C:	SWAPE (3/15/21) Comments on the ATMP

EXHIBIT A

March 15, 2021

Mr. Jordan Sisson
LAW OFFICE OF GIDEON KRACOV
801 South Grand Avenue, 11th Floor
Los Angeles, CA 90017

**Subject: LAX Airfield and Terminal Modernization Project Draft EIR
Transportation Review, City of Los Angeles**

Dear Mr. Sisson:

Introduction

RK ENGINEERING GROUP, INC. (RK) is pleased to provide this review of the LAX Airfield and Terminal Modernization Project Draft Environmental Impact Report (DEIR), dated October 2020, with respect to transportation impacts. The project consists of airfield, terminal and landside improvements to the Los Angeles International Airport (LAX).

Los Angeles World Airport (LAWA) proposes to implement airfield, terminal and landside roadway improvements at LAX. The proposed project consists of several primary elements, (including airfield improvements) that would enhance operational management and safety within the airfield, new terminal facilities to upgrade passenger processing capabilities and enhance the passenger experience, and an improved system of the roadways to better access the Central Terminal Area (CTA) and new facilities while reducing congestion. It is anticipated that the project construction would occur from Year 2021 to Year 2028 (when full completion of the project is expected).

The project is an extensive multi-phase construction project which will occur over several years (2021 to 2028) and has the potential of impacting the public roadway and transportation system both during construction and with future operation of the expanded facilities.

RK has reviewed the DEIR and its appendices with respect to the proposed project and the impact to transportation systems in the vicinity of the site. The Transportation Impact Analysis primarily focused on the project's Vehicle Miles Traveled (VMT) impacts, consistency with the local and regional transportation/land use plans, geometric design hazards and freeway safety analysis in the area. A traditional Level of Service (LOS) analysis of the roadway systems in the study area was not provided as part of the DEIR or its appendices.

RK has identified several deficiencies with respect to the assessment of the impacts to the public roadway system. These deficiencies include failing to analyze the full extent of the project's long term impact and a lack of meaningful analysis of the project's impact on the adequacy of existing transportation infrastructure within the study area to accommodate the increased throughput capacity and efficiency of the LAX facilities. The DEIR also does not consider all reasonably feasible mitigation measures for reducing potential impacts. Furthermore, the construction impacts of the project, which are expected to last until Year 2028 are glossed over, and the vehicular impacts during construction with respect to roadway, intersection and parking have not been analyzed in the DEIR.

Comments

The following comments are offered with respect to the transportation impacts of the LAX Airfield and Terminal Modernization Project DEIR:

1. The DEIR did not assess the Level of Service (LOS) impacts to the roadways and intersections in the project study area. The Notice of Preparation (NOP) for the DEIR was dated April 2019, and at that time, the Los Angeles Department of Transportation (LADOT) Traffic Study Guidelines dated January 2016 were in effect. Even though the DEIR is dated October 2020, the guidelines in affect at the time of the NOP should have been utilized. Those guidelines require a detailed LOS analysis of those intersections where the project would have a potential impact upon the existing and future levels of service. While RK acknowledges that transportation impacts under CEQA should now generally be based on VMT, leaving out the LOS analysis presents incomplete information as to the actual impact of this project on the local and area-wide roadway system. The expected impacts of the increased employment and passenger activity at LAX between now and Year 2028 when the project is completed must be associated with the project.

2. The DEIR does not disclose the full extent of the project's transportation impact by failing to analyze long-term conditions (i.e. year 2045). The transportation analysis is based on project impacts in year 2028, yet as discussed in Section 2.3.1.2.2, and supported by the data in Appendix B, "airfield congestion is not projected to be a constraint on growth until after year 2028". Hence, one of the primary purposes of the project is to reduce potential constraints on growth after year 2028. This is evident when looking at the Activity Forecast Report, provided in Appendix B, Table 3-5, which shows that the total unconstrained annual passengers at LAX will grow from 110.8 Million Annual Passengers in year 2028 to 155.6 Million Annual Passengers in year 2045. The result is that the project would cause a substantially greater increase in VMT and traffic generation, compared to "without" project conditions, after year 2028. Yet the DEIR conceals the long term impacts of the project by only analyzing near-term conditions in year 2028. The final EIR should address all reasonably foreseeable long term impacts (i.e. year 2045) from the project, as is reported elsewhere in the DEIR.
3. The total trip generation without the proposed project will be 399,752 daily trips, as shown in Table 4.8-4, whereas with the total trip generation with the project is only projected to be 407,942 daily trips, as shown in Table 4.8-8. This is only an increase of 8,190 daily trips, which calculates to be only a 2% increase in daily trips. Since the existing number of daily trips is noted as 316,128 daily trips, this indicates that the growth in daily trips with the project from Existing Conditions to the With Project Conditions (Year 2028) is 91,814 daily trips, however, the project is only responsible for 8,190 of those trips which is less than 10% of the total projected growth. As discussed in comment #2 above, the project trip generation would likely be substantially higher in year 2045 than year 2028. Failing to disclose the full extent of project trip generation and project VMT results in underreported impacts.
4. The DEIR does not analyze and disclose the full impact of the project's net effect on VMT. Threshold 4.8-3 incorrectly evaluates the VMT from "passengers" only. Instead, Threshold 4.8-3 should be based on the total project service population VMT, including passengers, employees and other trips. For regional serving uses, the City of Los Angeles Transportation Assessment Guidelines require that regional serving projects should be evaluated to determine whether the project would result in a net increase in "total" VMT. By not evaluating VMT impacts from the entire service population of the project, including employees, the project impacts are underreported.

5. The transportation mitigation measures in the DEIR are inadequate and do not include all reasonably feasible requirements for reducing VMT. According to Page 4.8-56 of the DEIR, the project has a significant and unavoidable impact as a result of total passenger VMT in comparison to the baseline conditions. It would require a reduction of 32,786 VMT per day to meet the passenger related VMT criteria. However, no mitigation measures are offered to help relieve this increase in VMT as a result of the project. CEQA requires significant impacts be mitigated to the maximum extent feasible. THE DEIR incorrectly proclaims that there is no feasible mitigation to reduce this impact. However, there are in fact numerous additional mitigation measures that can be included to reduce the VMT impact, including: provide additional off-site van pools and neighborhood shuttles for passengers, expand public transit services, provide public transit subsidies, provide bike-share and car-share programs, and encourage passengers (such as through advertisement) to use other modes of transportation getting to and from the airport. Additionally, there are other improvements that the project could do to improve pedestrian and bicycle infrastructure which has been shown to reduce VMT. Thus, additional mitigation measures should also include improvements to the pedestrian network, on-site traffic calming improvements, protected bike lanes, cycle tracks or separated bike trails, additional secured bike storage and end of trip facilities, and other non-automotive improvements to help reduce the projects affect upon VMT.
6. The DEIR offers very little in terms of transportation impacts during construction, which is expected to occur for at least seven years. Typically, most major projects such as the proposed project would make estimates for each phase of construction of the traffic impacts associated with the hundreds of construction workers and numerous trips made by construction vehicles that need to travel to and from the project site. None of this type of evaluation was included in the DEIR and future plans are left open to figure out how the transportation system will be accommodated during construction. With the combination of continued passenger growth at the airport, the disruption of traffic conditions as a result of the construction work and the addition of hundreds of additional vehicles, including large trucks, there will be substantial impacts to traffic flow and delays to the motoring public both using the airport and traveling on the near-by roadways.

The impacts of parking, the large number of construction workers, and equipment/materials storage have not been addressed in the DEIR. It raises questions, such as: How and where will construction workers park and to what extent will this affect parking for the public at the airport? If shuttle buses will be employed by the project to transport construction workers from off-site parking facilities, then to what extent will this affect airport operations? The potential impacts during construction have not been adequately evaluated and the DEIR continually differs mitigation of these issue into the future.

7. The DEIR leaves out several key policy objectives when assessing whether the project would conflict with an applicable program, plan, ordinance, or policy addressing the circulation system (including transit, roadways, bicycle and pedestrian facilities) that was adopted to protect the environment. For example, Table 4.8-11 only analyzes the project's consistency with three (3) policies from of the Los Angeles Mobility Plan 2035. However, there are in fact over fifty (50) different policies in the Mobility Plan 2035, many of which the project would likely conflict with. For example, the DEIR has not demonstrated how the project is consistent with Mobility Plan 2035 policies to enhance roadway safety (Policy 1.1), promote complete streets (Policy 1.2), ensure multi-modal detour facilities are provided during construction (Policy 1.6), expand bicycle network (Policy 2.6), maintain the vehicle network (Policy 2.7), accommodate people with disabilities (Policy 3.2), increase transit service (Policy 3.4), implement first and last mile solutions to transit service (Policy 3.5), support integrated and dynamic transportation database (Policy 4.2), encourage zero emissions vehicle (Policy 5.4). The DEIR should assess consistency with all applicable policy measures.

Conclusions

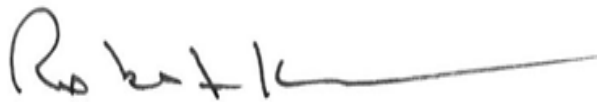
RK Engineering Group, Inc. has reviewed the LAX Airfield and Terminal Modernization Project DEIR with respect to transportation impacts. Several shortcomings within the analysis have been identified, and as a result, not all potentially significant impacts have been identified.

In particular, the DEIR fails to analyze the full extent of the project impact, which will occur after year 2028, when the modernization project would allow for significantly more growth in passenger travel. The DEIR also does not disclose the potential roadway safety and operational impacts from construction, passenger vehicle and employee traffic.

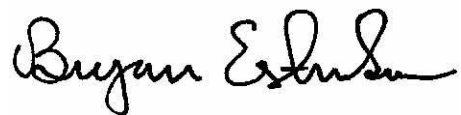
Furthermore, the DEIR does not apply all reasonably feasible mitigation measures to mitigate significant VMT impacts to the maximum extent feasible.

RK appreciates the opportunity to work with the LAW OFFICE OF GIDEON KRACOV in reviewing the LAX Airfield and Terminal Modernization Project DEIR. If you have any questions please give call at (949) 474-0809

Sincerely,



Robert Kahn, P.E.
Founding Principal



Bryan Estrada, AICP, PTP
Principal

Registered Civil Engineer 20285
Registered Traffic Engineer 0555



rk16416.doc
JN:2952-2020-01

Robert Kahn, P.E., T.E

Founding Principal

Areas of Expertise

Traffic Engineering
Transportation Planning
Transportation Solutions
Traffic Impact Analysis
Circulation Systems for Planned Communities
Traffic Control Device Warrants
Traffic Calming
Traffic Safety Studies
Bicycle Planning
Parking Demand Studies
Transportation Demand Management
Traffic Signal, Signing and Striping Plans
Traffic Control Plans
Parking Lot Design
Acoustical Engineering
Noise Impact Studies
Expert Witness / Legal Services

Professional History

RK Engineering Group, Inc., Founding Principal
2001-Present
RKJK & Associates, Inc., Principal, 1990-2000
Robert Kahn and Associates, Inc., Principal, 1988-1990
Jack G. Raub Company,
Vice President Engineering Planning, 1977-1988
The Irvine Company, Program Engineer, 1972-1977
Caltrans CA Division of Highways, Assistant Engineer, 1968-1972

Representative Experience

Robert Kahn, P.E., has worked professionally in traffic engineering and transportation planning since 1968. He received his Master of Science degree in civil engineering from the University of California, Berkeley, Institute of Transportation and Traffic Engineering. Mr. Kahn received his Bachelors degree in Civil Engineering from the University of California, Berkeley.

Mr. Kahn started his career in California Division of Highways (Caltrans) and developed the first computerized surveillance and control system for the Los Angeles area. Mr. Kahn developed the California Incident Detection Logic which is utilized throughout California for the detection of traffic incidents on the freeway system.

Mr. Kahn has worked for a major land development company preparing Master Plans for infrastructure. He also has worked eleven years with a multi-disciplined consulting engineering firm in charge of the Engineering Planning Department. This included all facets of preliminary design, tentative map preparation, transportation and environmental engineering, and public agency coordination.

Mr. Kahn has provided traffic and transportation services to major planned communities including Aliso Viejo, Coto De Caza, Foothill Ranch, Highlands Ranch in Denver, Colorado, Mission Viejo, Talega Planned Community in San Clemente, and Wolf Valley Ranch in Temecula. He has also provided contract traffic engineering services to the Cities of Irvine, Norwalk, Perris and San Jacinto in Riverside County, California.

Mr. Kahn has prepared traffic impact studies for numerous communities throughout Southern California, Nevada and in Colorado. Major traffic impact studies include the Aliso Viejo Town Center, the Summit Development, the Shops at Mission Viejo, Kaleidoscope, Dana Point Headlands, Foothill Ranch, Talega, Majestic Spectrum, and Centre Pointe in the City of Chino.

His work in the area of parking demand studies and parking lot design has been extensive. Shared parking studies for the Aliso Viejo Town Center, Foothill Ranch Towne Centre, Trabuco Plaza and numerous commercial sites have been completed to accurately determine the peak parking demand for mixed use projects. Mr. Kahn has been able to make the most efficient utilization of parking lots by maximizing efficient and safe systems.

Robert Kahn, P.E., T.E

Founding Principal

Education

University of California, Berkeley, M.S., Civil Engineering, 1968

University of California, Berkeley, B.S., Civil Engineering, 1967

University of California, Los Angeles, Graduate Courses in Transportation Systems, 1970

Registrations

California Registered Civil Engineer
No. 20285 – April 1971

California Registered Professional Engineer
Traffic, No. 0555 – June 1977

Colorado Professional Engineer
No. 22934, November 1984

Nevada Professional Engineer Civil
No. 10722 – March 1994

County of Orange, California Certified Acoustical Consultant
No. 201020 - 1984

Affiliations

Institute of Transportation Engineers (ITE)

American Society of Civil Engineers (ASCE)

Urban Land Institute (ULI)

Orange County Traffic Engineers Council (OCTEC)

Teaching

UCI Graduate Urban Design Studio Class – Guest Instructor

ITS Berkeley – Tech Transfer
Fundamentals of Traffic Engineering – Instructor

UCI Senior Civil Engineering Mentoring Program (CE181)

Mr. Kahn has been an innovator in developing and implementing traffic calming techniques. Over twenty years ago, Mr. Kahn refined the design and implementation standards for speed humps for use in local neighborhoods. Most recently, he has been involved in the development of modern roundabouts in lieu of traffic signals or other traffic control devices at intersections. Mr. Kahn previously presented the use of traffic calming devices in newly developing communities to the Institute of Transportation Engineers Traffic Calming Conference in Monterey, California.

Mr. Kahn has been involved in the design of traffic signal systems, signing and striping plans on hundreds of projects for both the public and private sector. Most recently, he has completed the design of several traffic signals which will serve the renovated Shops at Mission Viejo Mall. Mr. Kahn was in charge of a major ITS project for the City of Irvine, which provided fiberoptic interconnect and closed circuit TV along Barranca Parkway, Alton Parkway and Lake Forest Drive.

Mr. Kahn has been involved in acoustical engineering since 1978. He was in responsible charge of the Aliso Viejo Noise Monitoring Program which redefined the 65 CNEL noise contours for MCAS El Toro. He has also developed computer applications of the FHWA Noise Model.

Mr. Kahn has prepared numerous noise impact reports in the Aliso Viejo, Mission Viejo, Foothill Ranch, Santa Margarita, Ladera and Talega Planned Communities. Noise impacts from stationery sources including car washes, loading docks, air conditioning compressors, drive-thru speakers and other sources have been evaluated in the Aliso Viejo Auto Retail Center Noise Study, Albertsons Store 606 Noise Study-Rancho Cucamonga, Pro Source Distribution Building Final Noise Study in Ontario. Major specific plan and zone change noise studies have been prepared for the Summit Heights Specific Plan in Fontana, Lytle Creek Land and Resources Property in Rialto, Tamarack Square in Carlsbad, California, International Trade and Transportation Center in Kern County, California, and Sun City/Palm Springs.

Mr. Kahn founded the firm of Robert Kahn and Associates in 1988, which was the predecessor to RKJK & Associates, Inc. in 1990. He has made presentations to the ITE and the California Public Works Conference. Mr. Kahn has published numerous articles on traffic impact assessment, traffic calming, striping and the status of Bicycle Sharing in the USA. He was awarded the Wayne T property award in 2011-2012. Mr. Kahn has been a mentor and advisor to the UCI Senior Civil Engineering Project (CE181) for the past several years. He provides students the opportunity to develop a real life transportation project for the program.

Robert Kahn, P.E., T.E.

Founding Principal

Robert Kahn has been involved in numerous legal cases as an expert witness and providing legal assistance in the area of traffic and environmental engineering. This has included traffic/parking impact analysis, traffic/circulation/parking impacts of ROW takes, traffic engineering design review, traffic safety studies and noise/vibration impact assessments. A sampling of these projects include the following cases:

- Tustin Avenue/Rose Drive Grade Separation Impact to Del Cerro Mobile Estates, City of Placentia
- 9582 Chapman Avenue – ULI Shared Parking, City of Garden Grove
- Plantation Apartments Norwalk 12809 Kalnor Avenue I-5 Construction Noise Monitoring Assessment
- City of Huntington Beach vs. Alvarez, et al, Traffic Review of ROW taking
- Gene Autry Way Extension – Impacts to Anaheim Holiday Inn and Staybridge Suites Hotel, Anaheim
- UCSD Student Center Traffic and Parking Impact Review, City of San Diego
- Palma De La Reina Traffic Impact Analysis Review
- Newport Tech Center Traffic Study Review, Newport Beach
- City of Irvine Planning Area 18, 34 and 39 DEIR Traffic Impact Review, City of Irvine
- City of San Diego Big Box Ordinance, City of San Diego
- City of Yucaipa Big Box Ordinance, City of Yucaipa
- Electra Real Estates USA Mid Coast Corridor Transit Project Traffic/Circulation and Parking Impact Review, City of San Diego
- Rancho El Revino Specific Plan Traffic Impact Study Review
- President Hotel Santa Ana parking lot dispute
- Caceres vs. City of Fontana, represented City in an Intersection (Production at Santa Ana Ave.) Accident
- Corona vs. City of Fontana, represented City in an Intersection (Sierra Ave. and Summit Ave.) Accident
- Sunset and Gordon Mixed Use Site Traffic Review
- Baldwin Hills Crenshaw Plaza EIR and Traffic Study Review
- Saint Mary's University Wellness Pavilion EIR and Traffic Study Review
- 15 Degree South Residential Project Traffic Review
- Review of the OCTA Tustin Avenue Rose Drive Grade Separation Representing the Del Cerro Mobile Estates
- OCTA State College Blvd Grade Separation Representing the Fullerton Commerce Center and Fullerton Industrial Park

Bryan Estrada, AICP, PTP

Principal

Areas of Expertise

Transportation and Environmental Planning
Transportation Demand Management
Traffic Impact Studies
Parking Studies
Air Quality Analysis
Greenhouse Gas/Global Climate Change Analysis
Environmental Acoustics/Noise Analysis
CEQA Compliance
Synchro Traffic Analysis Software
California Emissions Estimator Model (CalEEMod)
FHWA Noise Modeling
SoundPLAN Software
AutoCAD

Education and Training

University of California, Irvine, B.A., Urban Studies
California Air Resources Board, Air Quality Training Program
Geo Instruments Vibration Monitoring Short Course

Professional History

RK Engineering Group, Inc.
Principal
2007 - Present

Certificates and Affiliations

American Institute of Certified Planners (AICP)
Professional Transportation Planner (PTP)
American Planning Association
Association of Environmental Professionals

Representative Experience

Mr. Bryan Estrada is a native of Southern California and also stayed in the area by attending the University of California, Irvine, School of Planning, Policy and Design where he received a Bachelor of Arts degree in Urban Studies. Mr. Estrada's multidisciplinary background is concentrated around current transportation challenges and their environmental impacts within urban areas. Mr. Estrada is committed to sustainable development practices, transportation demand management, and global climate change awareness.

Since 2007, Mr. Estrada has gained experience in the many aspects of Transportation and Environmental Planning while working with RK Engineering Group. He is an active member of the American Planning Association (APA) and the Association of Environmental Professionals (AEP), and stays up to date on the latest trends and topics concerning CEQA policy. He is frequently engaged with local government agencies, community groups, and developers to help to craft innovative solutions to mitigate traffic, noise and air quality impacts throughout the community.

Mr. Estrada's experience includes traffic/transportation planning, air quality and greenhouse gas analysis, and environmental acoustics/noise analysis. He has also contributed to the design and construction of traffic signal plans, signing and striping plans and traffic control plans. He is regularly out in the field performing assessments and inventories of project sites and meeting with community stakeholders.

Mr. Estrada works on transportation and environmental planning projects that range from focused site-specific technical studies to regional and General Plan level analyses. His recent work includes Mixed Use Development projects in Downtown Huntington Beach, the City of Aliso Viejo General Plan Update and Aliso Viejo Town Center Vision Plan, Eleanor Roosevelt High School eStem Academy Traffic Impact Study and On-Site Circulation Plan (Eastvale, CA), Great Wolf Lodge Resort (Garden Grove, CA), Starbucks Coffee Shops (multiple locations through Southern California), Paradise Knolls Specific Plan (Jurupa Valley, CA), Vista Del Agua Specific Plan (Coachella, CA), and Monterey Park Hotel Mixed Use Development Project (Monterey Park, CA).

Mr. Estrada has obtained the American Institute of Certified Planners (AICP) certification granted by the American Planning Association and the Professional Transportation Planner (PTP) certification granted by the Transportation Professional Certification Board.

EXHIBIT B

March 15, 2021

Mr. Jordan Sisson
LAW OFFICE OF GIDEON KRACOV
801 South Grand Avenue, 11th Floor
Los Angeles, CA 90017

**Subject: LAX Airfield and Terminal Modernization Project Draft EIR Noise
Review, City of Los Angeles**

Dear Mr. Sisson:

Introduction

RK ENGINEERING GROUP, INC. (RK) is pleased to provide this review of potential environmental noise impacts from the LAX Airfield and Terminal Modernization Project. This review is based on the information provided in the Los Angeles International Airport Airfield and Terminal Modernization Project Draft Environmental Impact Report, October 2020 (hereinafter referred to as DEIR).

Los Angeles World Airport (LAWA) proposes to implement airfield, terminal and landside roadway improvements at LAX. The proposed project consists of several primary elements, (including airfield improvements) that would enhance operational management and safety within the airfield, new terminal facilities to upgrade passenger processing capabilities and enhance the passenger experience, and an improved system of the roadways to better access the Central Terminal Area (CTA) and new facilities while reducing congestion. It is anticipated that the project construction would occur from Year 2021 to Year 2028 (when full completion of the project is expected).

The project is an extensive multi-phase construction project which will occur over several years (2021 to 2028) and has the potential of impacting surrounding residential neighborhoods, schools and businesses from increased construction and operational noise.

The purpose of this letter is to review the DEIR from a noise impact standpoint and provide comments to help ensure that all potential impacts from the project are adequately identified and the effects mitigated to the maximum extent feasible.

Comments

The following comments are offered with respect to the noise impacts of the LAX Airfield and Terminal Modernization Project DEIR:

1. Section 4.7.1.1.3, Effects of Noise on Humans. The DEIR delivers contradictory statements and appears to dismiss the widely recognized fact that environmental noise affects human health. Specifically, the statement on page 4.7.1-13 that says, “the effects of noise on health are too speculative for further evaluation in this CEQA document” is misleading. The California Noise Control Act explicitly declares that excessive noise is a serious hazard to the public health and exposure to certain levels of noise can result in physiological and psychological damage¹. CEQA standards dictate that an EIR convey a meaningful idea of the health consequences from the project’s environmental impacts to allow for informed agency decision making and informed public participation. Therefore, the final EIR should take additional steps to correlate the potential health effects of noise exposure to the identified project impacts.
2. Section 4.7.1.2.3, Classroom Disruption. The DEIR references noise level data from “LAX school sound insulation efforts” that shows the average noise reduction at schools near LAX is 29 dBA with windows closed. However, it does not provide the data to substantiate this statement. The widely accepted industry standard for exterior-to-interior noise reduction from building shell insulation is 20 dBA, as identified in Table 4.7.1-2. Therefore, additional evidence should be provided to support the use of 29 dBA exterior-to-interior noise reduction for schools. As will be seen, this assumption is a key factor in the assessment of impacts to classroom disruption. Furthermore, by using the average observed interior noise reduction, it is likely that potential building shell noise reduction at schools with inferior insulation would be overestimated. It is therefore recommended that the classroom disruption analysis be based on building performance for each specific classroom/building within the study area or utilize the industry standard 20 dBA noise reduction. As it is

¹ California Health and Safety Code, Division 28. Noise Control Act, 4600, et.al.

now, the DEIR appears to be using overly generous assumptions and is not analyzing the full extent of potential impacts.

3. Section 4.7.1.3.2, Environmental Setting. In relationship to the issue of classroom disruption discussed in Comment #2, the DEIR does not substantiate the screening criteria of 84 and 94 dBA exterior exposure for schools to be below 55 dBA and 65 dBA in the classroom, respectively. Figure 4.7.1-6 and Table 4.7.1-6 identify 28 schools that are located within the existing LAX 65 dBA CNEL contour. Yet no evidence has been provided that shows that all of the school buildings in all of the 28 schools would provide at least 29 dBA of building insulation, as has been assumed in the study. Absent substantial evidence, the DEIR should assume a maximum exterior-to-interior building noise reduction of 20 dBA with windows closed. As a result, additional noise impacts may likely occur beyond what has been reported.
4. Section 4.7.1.3.2, Environmental Setting. The final EIR should provide a table indicating the exterior Lmax noise level exposure at all schools identified in Figure 4.7.1-6 and Table 4.7.1-6. Since this information is used as the basis for establishing the existing environmental setting and for analyzing the project's impact to school exposure, it is important that the data be provided for all sensitive noise receptors (schools) within the study area (65 dBA CNEL contour).
5. Section 4.7.1.5, Project Impacts. The DEIR fails to consider the full extent of project noise impacts by not analyzing long-term conditions (i.e. year 2045). The buildout noise analysis year in the DEIR is year 2028, yet as shown in Appendix B, Table 3-7, LAX is expected to generate an additional 165,316 annual aircraft operations in Year 2045, as compared to Year 2028. This would result in substantially higher noise levels and additional impacts beyond what has been analyzed in the EIR. To put it into perspective, the Hollywood Burbank Airport, which is one of the top 10 busiest airports in the State of California², generated approximately 146,095 total annual aircraft operations last year³. Thus, a significant amount of planned growth, which can be directly and/or cumulatively attributed to the project, was not accounted for in the DEIR.

² Federal Aviation Administration. Website:

https://www.faa.gov/airports/planning_capacity/passenger_allcargo_stats/passenger/media/cy18-commercial-service-enplanements.pdf

³ Hollywood Burbank Airport. Website: https://hollywoodburbankairport.com/about-us/history_facts/

6. Section 4.7.1.5, Project Impacts. As discussed in Section 2.3.1.2.2, and supported by the data in Appendix B, “airfield congestion is not projected to be a constraint on growth until after year 2028”. Hence, one of the primary purposes of the airfield, terminal and landside improvements is to reduce potential constraints on growth after year 2028. Yet the DEIR conceals the long term impacts of the project by only analyzing near-term conditions in year 2028. Based on the data shown in Appendix B, Activity Forecasts Reports, the impacts of the “with project” versus “without project” scenarios would likely be much more substantial in year 2045 than in year 2028. The final EIR should address all reasonably foreseeable long term impacts (i.e. year 2045) from the project, as reported elsewhere in the DEIR.
7. Section 4.7.1.5, Project Impacts. Figures 4.7.1-7 through 4.7.1-10 show the 2028 Forecast “Proposed Project” CNEL Contours (65-75 dB). However, upon review of the CNEL contour map, there is no change in noise levels in the vicinity of the proposed Terminal 9 and Concourse 0. This seems unlikely, especially near Concourse 0, which would be replacing an existing parking lot with an active terminal for Southwest Airlines. Given the close proximity to the existing Hyatt Regency Hotel and neighboring office buildings along Sepulveda Boulevard, further detail of the potential noise impacts from planes taxing in and out of the area should be provided.
8. Section 4.7.2, Roadway Noise. The computed noise levels shown in Table 4.7.2-3, 4.7.2-4, and 4.7.2-5 cannot be verified as there is limited supporting data provided in Appendix F. For example, the actual ADT along roadway segments does not appear to be provided.
9. Section 4.7.3, Construction Traffic and Equipment Noise and Vibration. The DEIR incorrectly utilizes 24-hour CNEL noise levels to evaluate whether construction activities would exceed the ambient noise level by 5 dBA at a noise sensitive use between the hours of 9:00 p.m. and 7:00 a.m. Monday through Friday or before 8:00 a.m. or after 6:00 p.m. on Saturday, or at any time on Sunday. The impact analysis should be based upon actual field measured Leq noise levels during nighttime hours only to determine significance during the nighttime hours. The existing CNEL noise levels shown in Table 4.7.3-1 do not represent the actual nighttime noise levels near the noise sensitive receptors. Nighttime noise levels are significantly quieter than what has been reported using the CNEL metric. Thus, the

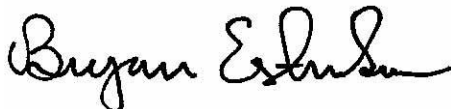
findings shown in Table 4.7.3-5 are not accurate and additional noise impacts would be expected.

10. Section 4.7.3.5.2.2, Mitigation Measures. The DEIR does not include all reasonably feasible mitigation measures for reducing potential noise impacts. The Construction Noise Control Plan should include a requirement for active construction noise monitoring at adjacent noise sensitive receptors anytime construction activities take place during nighttime hours. Active nighttime noise monitoring would help ensure actual construction noise levels (not based on computer models) do not exceed the nighttime noise standards in the City of Los Angeles or exceed existing ambient nighttime noise levels by more 5 dBA. The monitoring program should monitor and establish the adequate baseline noise levels for each receptor prior to commencing any activity. The monitoring program should also notify construction management personnel when noise levels approach and/or exceed the applicable thresholds. Construction activity should cease or be modified in order to ensure violations do not occur. Repeated violations should result in fines or other penalties.

Conclusions

RK appreciates the opportunity to work with the LAW OFFICE OF GIDEON KRACOV in reviewing the LAX Airfield and Terminal Modernization Project DEIR. If you have any questions please give call at (949) 474-0809

Sincerely,



Bryan Estrada, AICP, PTP
Principal

rk16435.doc
JN:2952-2020-02

Bryan Estrada, AICP, PTP

Principal

Areas of Expertise

Transportation and Environmental Planning
Transportation Demand Management
Traffic Impact Studies
Parking Studies
Air Quality Analysis
Greenhouse Gas/Global Climate Change Analysis
Environmental Acoustics/Noise Analysis
CEQA Compliance
Synchro Traffic Analysis Software
California Emissions Estimator Model (CalEEMod)
FHWA Noise Modeling
SoundPLAN Software
AutoCAD

Education and Training

University of California, Irvine, B.A., Urban Studies
California Air Resources Board, Air Quality Training Program
Geo Instruments Vibration Monitoring Short Course

Professional History

RK Engineering Group, Inc.
Principal
2007 - Present

Certificates and Affiliations

American Institute of Certified Planners (AICP)
Professional Transportation Planner (PTP)
American Planning Association
Association of Environmental Professionals

Representative Experience

Mr. Bryan Estrada is a native of Southern California and also stayed in the area by attending the University of California, Irvine, School of Planning, Policy and Design where he received a Bachelor of Arts degree in Urban Studies. Mr. Estrada's multidisciplinary background is concentrated around current transportation challenges and their environmental impacts within urban areas. Mr. Estrada is committed to sustainable development practices, transportation demand management, and global climate change awareness.

Since 2007, Mr. Estrada has gained experience in the many aspects of Transportation and Environmental Planning while working with RK Engineering Group. He is an active member of the American Planning Association (APA) and the Association of Environmental Professionals (AEP), and stays up to date on the latest trends and topics concerning CEQA policy. He is frequently engaged with local government agencies, community groups, and developers to help to craft innovative solutions to mitigate traffic, noise and air quality impacts throughout the community.

Mr. Estrada's experience includes traffic/transportation planning, air quality and greenhouse gas analysis, and environmental acoustics/noise analysis. He has also contributed to the design and construction of traffic signal plans, signing and striping plans and traffic control plans. He is regularly out in the field performing assessments and inventories of project sites and meeting with community stakeholders.

Mr. Estrada works on transportation and environmental planning projects that range from focused site-specific technical studies to regional and General Plan level analyses. His recent work includes Mixed Use Development projects in Downtown Huntington Beach, the City of Aliso Viejo General Plan Update and Aliso Viejo Town Center Vision Plan, Eleanor Roosevelt High School eStem Academy Traffic Impact Study and On-Site Circulation Plan (Eastvale, CA), Great Wolf Lodge Resort (Garden Grove, CA), Starbucks Coffee Shops (multiple locations through Southern California), Paradise Knolls Specific Plan (Jurupa Valley, CA), Vista Del Agua Specific Plan (Coachella, CA), and Monterey Park Hotel Mixed Use Development Project (Monterey Park, CA).

Mr. Estrada has obtained the American Institute of Certified Planners (AICP) certification granted by the American Planning Association and the Professional Transportation Planner (PTP) certification granted by the Transportation Professional Certification Board.

EXHIBIT C



Technical Consultation, Data Analysis and
Litigation Support for the Environment

2656 29th Street, Suite 201
Santa Monica, CA 90405

Matt Hagemann, P.G, C.Hg.
(949) 887-9013
mhagemann@swape.com

Paul E. Rosenfeld, PhD
(310) 795-2335
prosenfeld@swape.com

March 15, 2021

Jordan Sisson
Law Office of Gideon Kracov
801 S. Grand Ave., 11th Floor
Los Angeles, CA 90017

Subject: Comments on the Airfield & Terminal Modernization Project (SCH No. 2019049020)

Dear Mr. Sisson,

We have reviewed the October 2020 Draft Environmental Impact Report ("DEIR") for the Airfield & Terminal Modernization Project ("Project") located in the City of Los Angeles ("City"). The Project proposes the development of Taxiway D Extension West, Runway 6L-24R Exits, Concourse 0, Terminal 9, as well as the removal and replacement of 15 of the 18 West Remote Gates and roadway system improvements, on the 3,800-acre airport property.

Our review concludes that the DEIR fails to adequately evaluate the Project's air quality, health risk, and greenhouse gas impacts. As a result, emissions and health risk impacts associated with construction and operation of the proposed Project are underestimated and inadequately addressed. An updated EIR should be prepared to adequately assess and mitigate the potential air quality, health risk, and greenhouse gas impacts that the project may have on the surrounding environment.

Air Quality

Inadequate Analysis of Architectural Coating Emissions

The Air Quality, Human Health Risk Assessment, Greenhouse Gas Emissions, and Energy ("AQ & GHG Report"), provided as Appendix C to the DEIR, estimates that architectural coating activities associated with the proposed Concourse 0 East Interior Fit-Out, Concourse 0 West Interior Fit-Out, Terminal 9 East Fit-Out, and Terminal 9 West Fit-Out would result in VOC emissions of 12-, 16-, 13-, and 13-pounds per day ("lbs/day"), respectively (Appendix C, pp. 29). However, the AQ & GHG Report's analysis of the

Project's architectural coating-related VOC emissions is unsubstantiated, as it relies upon an underestimated Concourse 0 land use size.

Specifically, the DEIR indicates that Concourse 0 would include 745,000-SF of concourse/passenger operations and 318,000-SF of office space for administrative purposes, thus resulting in a total land use size of 1,063,000-SF (p. 1-6). As such, the AQ & GHG Report's analysis of the Project's architectural coating emissions should have relied upon a land use size of 1,063,000-SF for Concourse 0. However, review of the AQ & GHG Report demonstrates that the analysis assumes that Concourse 0 East and Concourse 0 West would each only be 372,500-SF, for a total of 745,00-SF (see excerpt below) (Appendix C, pp. 29).

Project #	Project Description	Total Building Area (sqft)
23	C0 East Interior Fit-Out	372,500
42	C0 West Interior Fit-Out	372,500
72	Terminal 9 East Fit-Out	600,345
86	Terminal 9 West Fit-Out	600,345

As demonstrated above, the analysis of Concourse 0 fails to include the proposed office space, underestimating the land use size by 318,000-SF. As a result, the AQ & GHG Report's analysis of the Project's architectural coating emissions is inconsistent with the information provided by the DEIR. Thus, by underestimating the size of Concourse 0, the AQ & GHG Report underestimates the VOC emissions associated with the Project's architectural coating activities and should not be relied upon to determine Project significance.

Failure to Adequately Analyze Construction Trips

While the AQ & GHG Report considers the construction-related emissions associated with worker trips, it fails to consider emissions associated with hauling and vendor trips required by Project construction (Appendix C.1, pp. 146-153). This is incorrect, as vendor and hauling, as well as worker, trips result in short-term construction-related emissions associated with on-road vehicles.¹ Thus, by failing to consider the hauling and vendor trips required for Project construction, the AQ & GHG Report underestimates the Project's construction-related emissions and should not be relied upon to determine Project significance.

Failure to Evaluate All Operational Emission Sources

Regarding the Project's operational emissions, the DEIR states:

"Sources of operational emissions evaluated in the analysis include aircraft engines and auxiliary power units (APUs); ground support equipment (GSE); ground vehicles used to transport passengers, cargo, and supplies to and from the airport; stationary water and space heaters; emergency generators; and indirect GHG emissions from electrical demand" (p. 4.4-5).

¹ "CalEEMod User Guide." available at: <http://www.caleemod.com/>, p. 2.

However, the DEIR's analysis of the Project's operational emissions fails to take into account emissions associated with water usage and solid waste disposal.² This presents an issue, as supplying and treating water, as well as disposing of solid waste, throughout Project operation contributes to operational greenhouse gas ("GHG") emissions.³ Thus, by failing to consider emissions associated with solid waste and water, the AQ & GHG Report underestimates the Project's operational GHG emissions and should not be relied upon to determine Project significance.

Failure to Implement All Feasible Mitigation to Reduce Emissions

As discussed above, the DEIR relies upon an unsubstantiated analysis of the Project's emissions. However, despite the DEIR's flawed emissions analysis, the DEIR's construction-related and operational emissions estimates indicate a significant air quality impact. Specifically, regarding the Project's construction-related criteria air pollutant emissions, the DEIR states:

"With implementation of Mitigation Measures MM-AQ/GHG (ATMP)-1 and 2, significant impacts associated with construction emissions would be reduced, but not to a level that would be less than significant. Specifically, even with implementation of all feasible construction-related mitigation measures, the proposed Project-related estimated incremental increases in construction-related emissions of CO, VOC, NOX, and SOX would exceed the daily emission thresholds established by SCAQMD. The emissions of CO, VOC, and SOX would exceed the construction emission thresholds during the periods when one of the north runways is closed to safely tie-in the Taxiway D extension. The runway closure period would require aircraft to taxi farther to the open runways. Once these connections are completed, taxi times would drop and would be similar to Without Project taxi times. Although these runway closures would be temporary (approximately 4 to 5 months in two different years) relative to the total proposed Project construction duration, they do represent peak day total construction emissions for all pollutants. Construction emissions of NOX would exceed the construction emission thresholds in several years that do not include the runway closures. No other feasible mitigation measures have been identified that would further reduce these impacts to air quality. Therefore, impacts to air quality from Project-related construction emissions would be **significant and unavoidable**" (p. 4.1.1-43 – 4.1.1-44).

Furthermore, regarding the Project's operational criteria air pollutant emissions, the DEIR states:

"With implementation of Mitigation Measures MM-AQ/GHG (ATMP)-3 through 7 and MM-T (ATMP)-1, significant impacts associated with operational emissions would be reduced, but not to a level that would be less than significant. Specifically, even with implementation of all feasible operations-related mitigation measures, the Project-related estimated incremental increases in daily operations-related emissions of NOX, SOX, PM10, and PM2.5 would exceed the daily emission thresholds established by SCAQMD. No other feasible mitigation measures have been identified at this time that would further reduce impacts to air quality. Therefore,

² "CalEEMod User Guide." available at: <http://www.caleemod.com/>, p. 2.

³ "CalEEMod User Guide." available at: <http://www.caleemod.com/>, p. 44, 46.

impacts to air quality from Project-related operational emissions would be ***significant and unavoidable***” (p. 4.1.1-50).

However, while we agree that the Project’s construction-related and operational criteria air pollutant emissions would result in significant air quality impacts, the DEIR’s conclusion that these impacts are “significant and unavoidable” is incorrect. According to CEQA Guidelines § 15096(g)(2):

“When an EIR has been prepared for a project, the Responsible Agency shall not approve the project as proposed if the agency finds any feasible alternative or feasible mitigation measures within its powers that would substantially lessen or avoid any significant effect the project would have on the environment.”

As you can see, an impact can only be labeled as significant and unavoidable after all available, feasible mitigation is considered. However, while the DEIR includes MM-AQ/GHG (ATMP)-1 through 7, as well as MM-T (ATMP)-1, the DEIR fails to implement all feasible mitigation (p. 4.1.1-43, 4.1.1-49). Therefore, the DEIR’s conclusion that the Project’s air quality impacts are significant and unavoidable is unsubstantiated. To reduce the Project’s air quality impacts to the maximum extent possible, additional feasible mitigation measures should be incorporated, such as those suggested in the section of this letter titled “Feasible Mitigation Measures Available to Reduce Emissions.”⁴ Thus, the Project should not be approved until an updated EIR is prepared, including updated, accurate air modeling, as well as incorporating all feasible mitigation to reduce emissions to less-than-significant levels.

Diesel Particulate Matter Health Risk Emissions Inadequately Evaluated

The DEIR concludes that the Project’s health risk impacts would be less-than-significant as a result of quantitative construction and operational health risk assessments (“HRAs”) (p. 4.1.2-14, 4.1.2-16). Specifically, the DEIR estimates the following cumulative cancer risks (see excerpt below) (p. 4.1.2-14, Table 4.1.2-2):

Table 4.1.2-2 Incremental Cancer Risks for Maximally Exposed Individuals during Combined With Project Construction and Operational Periods			
Receptor Type	Cancer Risks ^{1,2,3,4} (per million people)	Threshold (per million people)	Equal to or Exceeds Threshold?
Off-Airport Worker, 25 years	5	10	No
Adult Resident, 70 years	-2	10	No
Adult Resident, 30 years	-1	10	No
Child Resident, 9 years	-0.1	10	No
School Child, 12 years	-0.2	10	No

However, the DEIR’s analysis of the Project’s health risk impacts, as well as the subsequent less-than-significant impact conclusion, is incorrect for three reasons.

⁴ See section titled “Feasible Mitigation Measures Available to Reduce Emissions” on p. 12 of this comment letter. These measures would effectively reduce construction-related and operational criteria air pollutant emissions.

First, the DEIR's analysis of the Project's toxic air contaminant ("TAC") emissions is incorrect, as it relies upon a flawed analysis of the Project's emissions. As previously discussed, when we reviewed the DEIR's analysis of the Project's emissions, provided in the AQ & GHG Report as Appendix C to the DEIR, we found several inadequacies, as well as inconsistencies with the information disclosed in the DEIR and associated documents. As a result, the DEIR's HRA utilizes underestimated TAC emissions estimates to calculate the cancer risk associated with Project construction and operation. As a result, the DEIR may underestimate the Project's construction-related and operational cancer risks and should not be relied upon to determine Project significance.

Second, the Human Health Risk Assessment Technical Report ("HRA Report"), provided as Appendix C.6 to the DEIR, provides the total emissions used in the dispersion analysis of construction sources (see excerpt below) (Appendix C.6, p. 3-2).

Table 3-1 On-Airport Construction TOG and PM₁₀ Emissions for the Proposed Project

Averaging Period	PM ₁₀				TOG			Comments
	Diesel Engine Exhaust	Gasoline Engine Exhaust	Fugitive Dust	Tire & Brake Wear	Diesel Engine Exhaust	Gasoline Engine Exhaust	Paving & Coating	
Peak Daily (lbs)	5.84	0.05	18.78	0.72	36.25	1.26	47.64	Used for Acute Non-Cancer Health Hazard
Peak Annual (tons)	0.53	0.01	1.88	0.07	3.24	0.13	4.33	Used for Chronic Non-Cancer Health Hazard
Average for 14-year Construction Period (tons/year)	0.21	<0.01	0.62	0.03	NA	0.05	1.08	Used for Cancer Risk

However, the HRA Report fails to provide the total emissions used in the dispersion analysis of operational sources. As a result, we cannot verify the DEIR's operational HRA, and the DEIR's less-than-significant impact conclusion should not be relied upon.

Third, in order to evaluate the Project's criteria air pollutant emissions, the DEIR compares the 2028 Project scenario with the 2018 baseline scenario, as well as the 2028 with Project scenario to the 2028 without Project scenario (p. 4.1.1-34). However, in order to evaluate the Project's TAC emissions, the DEIR compares the 2028 Project scenario with the 2018 baseline scenario, as well as the 2028 without Project scenario to the 2018 baseline scenario (see excerpt below) (p. 4.1.2-19, Table 4.1.2-4).

Table 4.1.2-4 Incremental Cancer Risks for Maximally Exposed Individuals for 2028 With Project Operations Compared to 2018 Baseline and 2028 Without Project Compared to 2018 Baseline		
Receptor Type	Incremental Cancer Risks ^{1,2,3,4} (per million people)	
	2028 With Project Operations Compared to 2018 Baseline	2028 Without Project Operations Compared to 2018 Baseline
Off-Airport Worker, 25 years	5	-0.2
Adult Resident, 70 years	-4	-4
Adult Resident, 30 years	-4	-3
Child Resident, 9 years	-3	-2
School Child, 12 years	-1	-0.9
Source: Appendix C.6 of this EIR.		
Notes:		
¹ It was assumed that for operations, receptors are exposed to operations-related TAC beginning in 2028 and continuing through the remainder of the receptors' exposure periods.		
² Maximally Exposed Individual (MEI) locations are shown on Figure 4.1.2-4.		
³ The MEI value for the school child cancer risk is at a residential/commercial grid location and not at an existing school location. The highest estimated cancer risk for school children at an existing school is estimated to be -1 in 1 million at Cowan Avenue Elementary School (the school at grid point 176).		
⁴ Negative values indicate a beneficial impact.		

As demonstrated in the table above, the DEIR compares the 2028 Project scenario with the 2018 baseline scenario, as well as the 2028 without Project scenario to the 2018 baseline scenario, and ultimately concludes that Project operation would result in a negative cancer risk (i.e. a beneficial impact). Furthermore, the estimated 70-year adult resident, 30-year adult resident, 9-year child resident, and 12-year school child cancer risks are negative regardless of whether or not the Project is approved. Given that the majority of estimated cancer risks are negative with or without the proposed Project, the use of the 2018 baseline scenario may be misleading. According to the Association of Environmental Professionals ("AEP") *CEQA Portal Topic Paper* on "Baseline and Environmental Setting":

"For projects that may be implemented over a period of years, or even decades, simply comparing the effects of such a project to a baseline representing existing conditions may not provide a full and accurate picture of the project's impacts."⁵

As the proposed Project would be implemented over a period of 7 years, the DEIR should have compared the TAC emissions associated with the 2028 With Project Operations scenario to the 2028 Without Project Operations scenario, consistent with the DEIR's analysis of the Project's operational criteria air pollutant emissions. By failing to consider a baseline scenario that provides a full and accurate picture of the Project's impacts, the DEIR may underestimate the Project's operational health risk impacts and should not be relied upon.

⁵ "Baseline and Environmental Setting." AEP, August, 2016, available at: <https://ceqaportal.org/tp/Baseline%20and%20Environmental%20Setting%20Topic%20Paper%2008-23-16.pdf>, p. 3.

Failure to Consider Long-Term Impacts

The DEIR fails to consider the full extent of the Project's operational air quality impacts by failing to analyze long-term conditions. The buildout year analyzed in the DEIR's air quality analysis is 2028 (see excerpt below) (p. 4.1.2-19, Table 4.1.2-4).

Table 4.1.2-4 Incremental Cancer Risks for Maximally Exposed Individuals for 2028 With Project Operations Compared to 2018 Baseline and 2028 Without Project Compared to 2018 Baseline		
Receptor Type	Incremental Cancer Risks ^{1,2,3,4} (per million people)	
	2028 With Project Operations Compared to 2018 Baseline	2028 Without Project Operations Compared to 2018 Baseline
Off-Airport Worker, 25 years	5	-0.2
Adult Resident, 70 years	-4	-4
Adult Resident, 30 years	-4	-3
Child Resident, 9 years	-3	-2
School Child, 12 years	-1	-0.9
Source: Appendix C.6 of this EIR.		
Notes:		
¹ It was assumed that for operations, receptors are exposed to operations-related TAC beginning in 2028 and continuing through the remainder of the receptors' exposure periods.		
² Maximally Exposed Individual (MEI) locations are shown on Figure 4.1.2-4.		
³ The MEI value for the school child cancer risk is at a residential/commercial grid location and not at an existing school location. The highest estimated cancer risk for school children at an existing school is estimated to be -1 in 1 million at Cowan Avenue Elementary School (the school at grid point 176).		
⁴ Negative values indicate a beneficial impact.		

However, as demonstrated in the Activity Forecasts and Operational Analyses, provided as Appendix B to the DEIR, the Project is expected to generate an additional 165,316 annual aircraft operations in 2045, when compared to 2028 (see excerpt below) (p. 3-12, Table 3-7).

TABLE 3-7 HISTORICAL AND UNCONSTRAINED FORECAST TOTAL UNSCHEDULED OPERATIONS

FISCAL YEAR ¹	AIRCRAFT OPERATIONS		SHARE
	UNSCHEDULED ²	TOTAL ³	UNSCHEDULED ⁴
Unconstrained Forecast ⁵			
2018	71,454	714,543	10.0%
2023	75,190	751,901	10.0%
2028	79,984	799,843	10.0%
2033	85,347	853,471	10.0%
2038	90,240	902,401	10.0%
2043	94,735	947,345	10.0%
2045	96,516	965,159	10.0%

Thus, the DEIR's Activity Forecasts and Operational Analyses indicates a significant amount of planned growth, which was not accounted for in the DEIR's air quality analysis. By failing to analyze the Project's long-term operational air quality impacts, the DEIR fails to consider the full extent of the Project's operational air quality impacts and should not be relied upon.

Greenhouse Gas

Failure to Adequately Evaluate Greenhouse Gas Impacts

The DEIR estimates that the Project would generate net annual GHG emissions of 204,877 metric tons of carbon dioxide equivalents per year ("MT CO₂e/year"), or an increase of 9.5% from baseline conditions, which indicates a significant GHG impact (see excerpt below) (p. 4.4-29, Table 4.4-5).

Table 4.4-5 Construction (Amortized) and Operational GHG Emissions for the Proposed Project as Compared to 2018 Baseline Conditions						
Emission Source	Baseline Conditions (2018)		Proposed Project (2028)		Incremental Difference	
	MT/Yr CO ₂ e	Percent of Total	MT/Yr CO ₂ e	Percent of Total	MT/Yr CO ₂ e	Percent Change
Aircraft	930,589	43	1,142,950	48	212,362	22.8
APUs	45,135	2	48,941	2	3,806	8.4
GSE	27,723	1	19,626	1	(8,098)	(29.2)
Stationary	97,397	5	107,490	5	10,093	10.4
Autos	1,020,793	47	1,005,382	43	(15,410)	(1.5)
Parking	30,186	1	28,742	1	(1,444)	(4.8)
Construction ¹	--	--	3,568	<1	3,568	100
TOTALS²	2,151,823	100	2,356,700	100	204,877	9.5

As a result, the DEIR includes MM-AQ/GHG (ATMP)-1 through MM-AQ/GHG (ATMP)-6 and MM-GHG (ATMP)-1 through MM-GHG (ATMP)-5 (p. 4.4-31 - 4.4-32). However, after the implementation of these mitigation measures, the DEIR concludes that the Project's GHG emissions would be significant and unavoidable, stating:

"The proposed Project would generate GHG emissions directly and indirectly that would have a significant impact on the environment. Mitigation Measures MM-AQ/GHG (ATMP)-1 through MM-AQ/GHG (ATMP)-6, MM-GHG (ATMP)-1 through MM-GHG (ATMP)-5, and MM-T (ATMP)-1 would reduce GHG emissions associated with construction and operation of the proposed Project. However, the vast majority of GHG emissions associated with operation of the proposed Project in 2028 would occur with or without Project implementation and are from aircraft, which LAWA does not own and has no authority to control (i.e., Scope 3 GHG emissions). As described in Section 4.1.1, Air Quality, the USEPA establishes the overall policies and regulations for protecting air quality nationwide, which include setting standards for stationary (e.g., power plants, industrial boilers, incinerators) and mobile (e.g., motor vehicles, off/non-road vehicles, aircraft engines) sources of pollutant emissions, including GHG emissions. Section 233 of the federal Clean Air Act exclusively vests the authority to promulgate emission standards for

aircraft and aircraft engines with the USEPA; states and other municipalities are preempted from adopting or enforcing any standard with respect to aircraft engine emissions unless such standard is identical to the USEPA's standards. Implementation of the proposed mitigation measures would reduce Project-related GHG emissions, but not to a level that would be less than significant. No other feasible mitigation measures have been identified that would further reduce GHG impacts. Therefore, impacts associated with Project-related GHG emissions would remain ***significant and unavoidable***" (p. 4.4-33 - 4.4-34).

Furthermore, the DEIR evaluates the Project's consistency with Executive Orders S-3-05, B-30-15, and B-55-18; CARB's 2017 Climate Change Scoping Plan and the City of Los Angeles' Sustainable City pLAn/Green New Deal (p. 4.4-38). However, based on numerous conflicts with these plans, the DEIR concludes that the Project's GHG impact would be significant and unavoidable, stating:

"Implementation of Mitigation Measures MM-AQ/GHG (ATMP)-1 through MM-AQ/GHG (ATMP)-6, MM-GHG (ATMP)-1 through MM-GHG (ATMP)-5, and MM-T (ATMP)-1, presented above in the discussion of Impact 4.4-1, would reduce GHG emissions associated with construction and operation of the proposed Project. However, as noted in that discussion, even with implementation of these mitigation measure, Project-related GHG emissions would be significant and unavoidable. The reduction in emissions resulting from Mitigation Measures MM-AQ/GHG (ATMP)-1 through MM-AQ/GHG (ATMP)-6, MM-GHG (ATMP)-1 through MM-GHG (ATMP)-5, and MM-T (ATMP)-1 would reduce the severity of Project-related conflicts with certain applicable plans, policies, and regulations adopted for the purpose of reducing emissions of GHG, but would not eliminate these conflicts. Therefore, impacts of the proposed Project with respect to applicable plans, policies, and regulations adopted for the purpose of reducing the emissions of GHGs would remain ***significant and unavoidable***" (p. 4.4-38).

However, the DEIR's analysis of the Project's GHG impact, as well as the subsequent significant-and-unavoidable GHG impact conclusion, is incorrect for three reasons.

- (1) The DEIR's quantitative GHG analysis relies upon an unsubstantiated analysis of emissions;
- (2) The DEIR fails to implement all feasible mitigation to reduce the Project's GHG emissions; and
- (3) The DEIR fails to consider the performance-based standards under CARB's 2017 *Scoping Plan*.

(1) Incorrect and Unsubstantiated Quantitative GHG Analysis

As discussed above, the DEIR estimates that the Project would generate net annual GHG emissions of 204,877 MT CO₂e/year (p. 4.4-29, Table 4.4-5). However, the DEIR's quantitative GHG analysis should not be relied upon, as it relies upon an unsubstantiated analysis of the Project's emissions. As previously discussed, when we reviewed the DEIR's analysis of the Project's emissions, provided in the AQ & GHG Report as Appendix C to the DEIR, we found several inadequacies, as well as inconsistencies with the information disclosed in the DEIR and associated documents. As a result, the DEIR's quantitative GHG analysis may underestimate the Project's GHG emissions and should not be relied upon to determine Project significance. An updated EIR should be prepared that adequately assesses the potential GHG

impacts that construction and operation of the proposed Project may have on the surrounding environment.

(2) Failure to Implement All Feasible Mitigation to Reduce GHG Emissions

As discussed above, the DEIR's GHG analysis relies upon a flawed analysis of the Project's emissions. However, despite the DEIR's flawed air model, the DEIR's GHG emissions estimates indicate a significant GHG impact. As a result, the DEIR concludes that the proposed Project's GHG emissions would be significant and unavoidable (p. 4.4-33 - 4.4-34). However, while we agree that the Project's GHG emissions would be significant, the DEIR's conclusion that these impacts are "significant and unavoidable" is incorrect. According to CEQA Guidelines § 15096(g)(2):

"When an EIR has been prepared for a project, the Responsible Agency shall not approve the project as proposed if the agency finds any feasible alternative or feasible mitigation measures within its powers that would substantially lessen or avoid any significant effect the project would have on the environment."

As you can see, an impact can only be labeled as significant and unavoidable after all available, feasible mitigation is considered. However, while the DEIR implements Mitigation Measures MM-AQ/GHG (ATMP)-1 through MM-AQ/GHG (ATMP)-6, MM-GHG (ATMP)-1 through MM-GHG (ATMP)-5, and MM-T (ATMP)-1, the DEIR fails to implement all feasible mitigation (p. 4.4-31- 4.4-33). Therefore, the DEIR's conclusion that the Project's GHG impact is significant and unavoidable is unsubstantiated. To reduce the Project's GHG emissions to the maximum extent possible, additional feasible mitigation measures should be incorporated, such as those suggested in the section of this letter titled "Feasible Mitigation Measures Available to Reduce Emissions."⁶ Thus, the Project should not be approved until an updated EIR is prepared, including updated, accurate air modeling, as well as incorporating all feasible mitigation to reduce emissions to less-than-significant levels.

(3) Failure to Consider Performance-Based Standards Under CARB's 2017 Scoping Plan

As previously mentioned, the Project relies upon the Project's consistency with CARB's 2017 *Scoping Plan* in order to determine Project significance. However, review of the Project documents demonstrates that the DEIR fails to consider the performance-based standards under the CARB's 2017 *Scoping Plan*.

i. Passenger & Light Duty VMT Per Capita Benchmarks per SB 375

In reaching the State's long-term GHG emission reduction goals, CARB's 2017 *Scoping Plan* explicitly cites to SB 375 and the VMT reductions anticipated under the implementation of Sustainable Community Strategies.⁷ CARB has identified the population and daily VMT from passenger autos and light-duty vehicles at the state and county level for each year between 2010 to 2050 under a "baseline scenario" that includes "current projections of VMT included in the existing Regional Transportation

⁶ See section titled "Feasible Mitigation Measures Available to Reduce Emissions" on p. 12 of this comment letter. These measures would effectively reduce the Project's GHG emissions.

⁷ "California's 2017 Climate Change Scoping Plan." CARB, November 2017, *available at*: https://ww3.arb.ca.gov/cc/scopingplan/scoping_plan_2017.pdf, p. 25, 98, 101-103.

Plans/Sustainable Communities Strategies (RTP/SCSs) adopted by the State’s 18 Metropolitan Planning Organizations (MPOs) pursuant to SB 375 as of 2015.”⁸ By dividing the projected daily VMT by the population, we calculated the daily VMT per capita at the county level for 2030 (target year under SB 32) (see table below and Attachment A).

2017 Scoping Plan Daily VMT Per Capita			
Los Angeles County			
Year	Population	LDV VMT Baseline	VMT Per Capita
2030	10,868,614	215,539,586	19.83

The DEIR implements MM-T (ATMP)-1, which requires the implementation of a VMT reduction program resulting in a 20.4 VMT per employee value (p. 4.8-56). The below table compares the 2017 *Scoping Plan* daily VMT per capita value against the DEIR’s daily VMT per capita value (see table below and Attachment A).

Daily VMT Per Capita from Passenger & Light-Duty Trucks, Exceedances under 2017 Scoping Plan Performance-Based SB 375 Benchmarks	
Sources	DEIR Modeling
Daily VMT Per Capita	20.40
2017 Scoping Plan Benchmarks, Los Angeles County Specific	
19.83 VMT (2030 Projected) Exceed?	Yes

As shown above, the DEIR’s daily VMT per capita exceeds the CARB 2017 *Scoping Plan* projection for Los Angeles County for 2030. Because the exceeds the CARB 2017 *Scoping Plan* performance-based daily VMT per capita projection, the Project conflicts with the CARB 2017 *Scoping Plan*. As such, a Project-specific EIR should be prepared for the proposed Project to provide additional information and analysis evaluating the Project’s consistency with CARB’s 2017 *Scoping Plan*.

(4) Failure to Consider Performance-based Standards under SCAG’s RTP/SCS

The DEIR fails to consider the Project’s consistency with SCAG’s 2020-2045 *RTP/SCS* in order to determine the significance of the Project’s GHG impact. Specifically, review of the Project documents demonstrates that the DEIR fails to consider the performance-based standards under SCAG’s 2020-2045 *RTP/SCS*, such as daily vehicle miles traveled (“VMT”) per capita benchmarks.

⁸ “Supporting Calculations for 2017 Scoping Plan-Identified VMT Reductions,” Excel Sheet “Readme.” CARB, January 2019, available at: https://ww2.arb.ca.gov/sites/default/files/2019-01/sp_mss_vmt_calculations_jan19_0.xlsx.

i. SB 375 RTP/SCS Daily VMT Per Capita Target

Under the SCAG's 2020 RTP/SCS, daily VMT per capita in Los Angeles County should decrease to 19.2 VMT by 2045.⁹ Here, however, the DEIR fails to consider any of the abovementioned performance-based VMT targets.

As previously stated, the DEIR implements MM-T (ATMP)-1, which requires the implementation of a VMT reduction program resulting in a 20.4 VMT per employee value (p. 4.8-56). The below table compares the SCAG's 2020 RTP/SCS daily VMT per capita value for 2045 against the DEIR's daily VMT per capita value (see table below and Attachment A).

Daily VMT Per Capita from Passenger & Light-Duty Trucks,	
Exceedances under RTP/SCS Performance-Based SB 375 Target	
DEIR Modeling	
Daily VMT Per Capita	20.40
2020 RTP/SCS Benchmark, Los Angeles County	
19.2 VMT (2045 Target) Exceed?	Yes

As shown in the above table, the DEIR's daily VMT per capita value of 20.40 exceeds the Los Angeles County-specific target for 2045 under SCAG's 2020-2045 RTP/SCS. Thus, based on the DEIR's estimate, the Project would exceed the 2045 target VMT per capita value for Los Angeles County, indicating that the Project conflicts with the SCAG's RTP/SCS and SB 375.

Feasible Mitigation Measures Available to Reduce Emissions

As previously described, the Project may result in potentially significant air quality, health risk, and GHG impacts that should be mitigated further. In an effort to reduce the Project's emissions, we identified several mitigation measures that are applicable to the proposed Project.

First, feasible mitigation measures can be found in the September 2019 Recirculated Draft Environmental Impact Report for the San Diego International Airport's Airport Development Plan.¹⁰ Therefore, to reduce the Project's emissions, consideration of the following measures should be made:

- Ground Support Equipment Conversion:
 - Transition all baggage tugs, belt loaders, lifts, pushback tractors, and utility carts at SDIA that are owned and operated by airlines and their ground handling contractors to service aircraft, shall be transitioned to alternative fuels (i.e., electric, natural gas, renewable diesel, biodiesel).

⁹ "Connect SoCal." SCAG, September 2020, available at: https://scag.ca.gov/sites/main/files/file-attachments/0903fconnectsocal-plan_0.pdf?1606001176, pp. 138.

¹⁰ "Recirculated Draft EIR for the Airport Development Plan." San Diego International Airport, September 2019, available at: https://files.ceqanet.opr.ca.gov/139992-3/attachment/Qtt7xl7P481vzOyukUOROq593qavlrooz53GfKek3lFply_keeUYEp6nyhlsQfRUIXqzJ7Td9R8gU_Xw0, p. 36-37, Table ES-3.

- Renewable Electricity:
 - Power project-related buildings with 100 percent renewable electricity.
- Clean Vehicle Parking:
 - Designate 10 percent of new parking stalls for a combination of low-emitting, fuel-efficient, and carpool/vanpool vehicle.
- Electric Vehicle Chargers:
 - Install electric vehicle charging ports at three percent of new parking stalls and another three percent would be “EVSE-ready.”
- Ground Transportation Clean Vehicle Program:
 - Implement a Commercial Ground Transportation Clean Vehicle Program.
- Bicycle Facilities:
 - Install shower stalls and lockers, as well as covered bicycle storage for employees.
- Employee Parking Cash-Out Program:
 - Implement a parking cash-out program for employees.

Second, feasible mitigation measures can be found in the February 2021 Nevada County Planning Commission Staff Report for the amendment to expand the existing Truckee Tahoe Airport District Administration Building and off-street parking area.¹¹ Therefore, to reduce the Project’s emissions, consideration of the following measures should be made:

- Diesel engines, whether for off-road or on-road equipment, shall not be left idling for more than two minutes, at any location, except as provided in exceptions to the applicable state regulations regarding idling for off-road and on-road equipment (e.g., traffic conditions, safe operating conditions).
- Instruct construction workers and equipment operators on the maintenance and tuning of construction equipment and require that such workers and operators properly maintain and tune equipment in accordance with manufacturer specifications.
- Before starting onsite ground disturbance, demolition, or construction activities, submit a Construction Emissions Minimization Plan for review and approval. The plan shall include estimates of the construction timeline, with a description of each piece of off-road equipment required. The description may include, but is not limited to, equipment type, equipment manufacturer, engine model year, engine certification (Tier rating), horsepower, and expected fuel usage and hours of operation. For off-road equipment using alternative fuels, the description shall also specify the type of alternative fuel being used. Make the Construction Emissions Minimization Plan available to the public for review onsite during working hours. Post at the construction site a legible and visible sign summarizing the plan. State that the public may ask to inspect the plan for the project at any time during working hours and shall explain how to request to inspect the plan. Post at least one copy of the sign in a visible location on each side of the construction site facing a public right-of-way.

¹¹ “NEVADA COUNTY PLANNING COMMISSION STAFF REPORT.” County of Nevada, February 2021, *available at*: <https://www.mynevadacounty.com/DocumentCenter/View/37474/Truckee-Tahoe-Airport-Staff-Report-PLN20-0130--AAP20-0006-EIS20-0008PDF>, p. 28-29.

- Develop and implement a phased carbon management program that is consistent with the standards of ACI “Level 3+” Airport Carbon Accreditation Program, or equivalent, including calculation of annual carbon emissions from airport activity, identifying emissions reduction targets, tracking progress toward achieving effective carbon management procedures, and publishing an annual biennial carbon footprint report as a component of the Airport’s broader environmental sustainability program.

Finally, feasible mitigation measures can be found in CAPCOA’s *Quantifying Greenhouse Gas Mitigation Measures*.¹² Therefore, to reduce the Project’s emissions, consideration of the following measures should be made:

CAPCOA’s Quantifying Greenhouse Gas Mitigation Measures	
Measures – Energy	
<i>Building Energy Use</i>	
Obtain Third-party HVAC Commissioning and Verification of Energy Savings	
<i>Lighting</i>	
Install Higher Efficacy Public Street and Area Lighting	
Limit Outdoor Lighting Requirements	
<i>Alternative Energy Generation</i>	
Establish Onsite Renewable or Carbon-Neutral Energy Systems	
Establish Onsite Renewable Energy System – Solar Power	
Utilize a Combined Heat and Power System	
Measures – Transportation	
<i>Land Use/Location</i>	
Increase Destination Accessibility	
Increase Transit Accessibility	
Orient Project Toward Non-Auto Corridor	
Locate Project near Bike Path/Bike Lane	
<i>Neighborhood/Site Enhancements</i>	
Provide Pedestrian Network Improvements, such as:	
<ul style="list-style-type: none"> • Compact, mixed-use communities • Interconnected street network • Narrower roadways and shorter block lengths • Sidewalks • Accessibility to transit and transit shelters • Traffic calming measures and street trees • Parks and public spaces • Minimize pedestrian barriers 	

¹² <http://www.capcoa.org/wp-content/uploads/2010/11/CAPCOA-Quantification-Report-9-14-Final.pdf>

<p>Provide Traffic Calming Measures, such as:</p> <ul style="list-style-type: none"> • Marked crosswalks • Count-down signal timers • Curb extensions • Speed tables • Raised crosswalks • Raised intersections • Median islands • Tight corner radii • Roundabouts or mini-circles • On-street parking • Planter strips with trees • Chicanes/chokers
Incorporate Bike Lane Street Design (on-site)
Provide Bike Parking in Non-Residential Projects
Provide Electric Vehicle Parking
<i>Commute Trip Reduction Programs</i>
<p>Implement Commute Trip Reduction (CTR) Program – Voluntary</p> <ul style="list-style-type: none"> • Carpooling encouragement • Ride-matching assistance • Preferential carpool parking • Flexible work schedules for carpools • Half time transportation coordinator • Vanpool assistance • Bicycle end-trip facilities (parking, showers and lockers) • New employee orientation of trip reduction and alternative mode options • Event promotions and publications • Flexible work schedule for employees • Transit subsidies • Parking cash-out or priced parking • Shuttles • Emergency ride home
<p>Implement Commute Trip Reduction (CTR) Program – Required Implementation/Monitoring</p> <ul style="list-style-type: none"> • Established performance standards (e.g. trip reduction requirements) • Required implementation • Regular monitoring and reporting
Implement Subsidized or Discounted Transit Program
<p>Provide Ent of Trip Facilities, including:</p> <ul style="list-style-type: none"> • Showers • Secure bicycle lockers • Changing spaces
<p>Implement Commute Trip Reduction Marketing, such as:</p> <ul style="list-style-type: none"> • New employee orientation of trip reduction and alternative mode options • Event promotions

<ul style="list-style-type: none"> • Publications
Implement Preferential Parking Permit Program
Price Workplace Parking, such as: <ul style="list-style-type: none"> • Explicitly charging for parking for its employees; • Implementing above market rate pricing; • Validating parking only for invited guests; • Not providing employee parking and transportation allowances; and • Educating employees about available alternatives.
Implement Employee Parking “Cash-Out”
<i>Transit System Improvements</i>
Transit System Improvements, including: <ul style="list-style-type: none"> • Grade-separated right-of-way, including bus only lanes (for buses, emergency vehicles, and sometimes taxis), and other Transit Priority measures. Some systems use guideways which automatically steer the bus on portions of the route. • Frequent, high-capacity service • High-quality vehicles that are easy to board, quiet, clean, and comfortable to ride. • Pre-paid fare collection to minimize boarding delays. • Integrated fare systems, allowing free or discounted transfers between routes and modes. • Convenient user information and marketing programs. • High quality bus stations with Transit Oriented Development in nearby areas. • Modal integration, with BRT service coordinated with walking and cycling facilities, taxi services, intercity bus, rail transit, and other transportation services.
Implement Transit Access Improvements, such as: <ul style="list-style-type: none"> • Sidewalk/crosswalk safety enhancements • Bus shelter improvements
Expand Transit Network
Increase Transit Service Frequency/Speed
Provide Bike Parking Near Transit
Provide Local Shuttles
<i>Road Pricing/Management</i>
Implement Area or Cordon Pricing
Improve Traffic Flow, such as: <ul style="list-style-type: none"> • Signalization improvements to reduce delay; • Incident management to increase response time to breakdowns and collisions; • Intelligent Transportation Systems (ITS) to provide real-time information regarding road conditions and directions; and • Speed management to reduce high free-flow speeds.
Required Project Contributions to Transportation Infrastructure Improvement Projects
<i>Vehicles</i>
Utilize Alternative Fueled Vehicles, such as: <ul style="list-style-type: none"> • Biodiesel (B20)

<ul style="list-style-type: none"> • Liquefied Natural Gas (LNG) • Compressed Natural Gas (CNG)
Measures – Water
<i>Water Supply</i>
Use Gray Water
Use Locally Sourced Water Supply
<i>Water Use</i>
Adopt a Water Conservation strategy
Design Water-Efficient Landscapes (see California Department of Water Resources Model Water Efficient Landscape Ordinance), such as: <ul style="list-style-type: none"> • Planting vegetation with minimal water needs, such as native species; • Choosing vegetation appropriate for the climate of the project site; • Choosing complimentary plants with similar water needs or which can provide each other with shade and/or water.
Plant Native Trees and Vegetation
Measures – Vegetation
<i>Vegetation</i>
Urban Tree Planting
Create New Vegetated Open Space
Measures – Construction
<i>Construction</i>
Use Alternative Fuels for Construction Equipment
Urban Tree Planting
Use Electric and Hybrid Construction Equipment
Limit Construction Equipment Idling Beyond Regulation Requirements
Institute a Heavy-Duty Off-Road Vehicle Plan, including: <ul style="list-style-type: none"> • Construction vehicle inventory tracking system; • Requiring hour meters on equipment; • Document the serial number, horsepower, manufacture age, fuel, etc. of all onsite equipment; and • Daily logging of the operating hours of the equipment.
Implement a Construction Vehicle Inventory Tracking System
Measures – Miscellaneous
<i>Miscellaneous</i>
Establish a Carbon Sequestration Project, such as: <ul style="list-style-type: none"> • Geologic sequestration or carbon capture and storage techniques, in which CO₂ from point sources is captured and injected underground; • Terrestrial sequestration in which ecosystems are established or preserved to serve as CO₂ sinks; • Novel techniques involving advanced chemical or biological pathways; or

<ul style="list-style-type: none"> Technologies yet to be discovered.
Establish Off-Site Mitigation
Use Local and Sustainable Building Materials
Require Environmentally Responsible Purchasing, such as: <ul style="list-style-type: none"> Purchasing products with sustainable packaging; Purchasing post-consumer recycled copier paper, paper towels, and stationary; Purchasing and stocking communal kitchens with reusable dishes and utensils; Choosing sustainable cleaning supplies; Leasing equipment from manufacturers who will recycle the components at their end of life; Choosing ENERGY STAR appliances and Water Sense-certified water fixtures; Choosing electronic appliances with built in sleep-mode timers; Purchasing 'green power' (e.g. electricity generated from renewable or hydropower) from the utility; and Choosing locally-made and distributed products.

These measures offer a cost-effective, feasible way to incorporate lower-emitting design features into the proposed Project, which subsequently, reduce emissions released during Project construction and operation. An updated EIR should be prepared to include all feasible mitigation measures, as well as include an updated GHG analysis to ensure that the necessary mitigation measures are implemented to reduce emissions to below thresholds. The updated EIR should also demonstrate a commitment to the implementation of these measures prior to Project approval, to ensure that the Project's significant emissions are reduced to the maximum extent possible.

Disclaimer

SWAPE has received limited discovery regarding this project. Additional information may become available in the future; thus, we retain the right to revise or amend this report when additional information becomes available. Our professional services have been performed using that degree of care and skill ordinarily exercised, under similar circumstances, by reputable environmental consultants practicing in this or similar localities at the time of service. No other warranty, expressed or implied, is made as to the scope of work, work methodologies and protocols, site conditions, analytical testing results, and findings presented. This report reflects efforts which were limited to information that was reasonably accessible at the time of the work, and may contain informational gaps, inconsistencies, or otherwise be incomplete due to the unavailability or uncertainty of information obtained or provided by third parties.

Sincerely,



Matt Hagemann, P.G., C.Hg.

A handwritten signature in blue ink that reads "Paul Rosenfeld". The script is cursive and fluid.

Paul E. Rosenfeld, Ph.D.

Attachment A: Paul Rosenfeld CV
Attachment B: Matt Hagemann CV

Daily VMT Per Capita from Passenger & Light-Duty Trucks,	
Exceedances under RTP/SCS Performance-Based SB 375 Target	
DEIR Modeling	
Daily VMT Per Capita	20.40
2020 RTP/SCS Benchmark, Los Angeles County	
19.2 VMT (2045 Target) Exceed?	Yes

2017 Scoping Plan Daily VMT Per Capita			
Los Angeles County			
Year	Population	LDV VMT Baseline	VMT Per Capita
2030	10,868,614	215,539,586	19.83

Daily VMT Per Capita from Passenger & Light-Duty Trucks, Exceedances under 2017 Scoping Plan Performance-Based SB 375 Benchmarks	
Sources	DEIR Modeling
Daily VMT Per Capita	20.40
2017 Scoping Plan Benchmarks, Los Angeles County Specific	
19.83 VMT (2030 Projected) Exceed?	Yes



Technical Consultation, Data Analysis and
Litigation Support for the Environment

SOIL WATER AIR PROTECTION ENTERPRISE

2656 29th Street, Suite 201
Santa Monica, California 90405
Attn: Paul Rosenfeld, Ph.D.
Mobil: (310) 795-2335
Office: (310) 452-5555
Fax: (310) 452-5550

Email: prosenfeld@swape.com

Paul Rosenfeld, Ph.D.

Principal Environmental Chemist

Chemical Fate and Transport & Air Dispersion Modeling

Risk Assessment & Remediation Specialist

Education

Ph.D. Soil Chemistry, University of Washington, 1999. Dissertation on volatile organic compound filtration.

M.S. Environmental Science, U.C. Berkeley, 1995. Thesis on organic waste economics.

B.A. Environmental Studies, U.C. Santa Barbara, 1991. Thesis on wastewater treatment.

Professional Experience

Dr. Rosenfeld has over 25 years' experience conducting environmental investigations and risk assessments for evaluating impacts to human health, property, and ecological receptors. His expertise focuses on the fate and transport of environmental contaminants, human health risk, exposure assessment, and ecological restoration. Dr. Rosenfeld has evaluated and modeled emissions from unconventional oil drilling operations, oil spills, landfills, boilers and incinerators, process stacks, storage tanks, confined animal feeding operations, and many other industrial and agricultural sources. His project experience ranges from monitoring and modeling of pollution sources to evaluating impacts of pollution on workers at industrial facilities and residents in surrounding communities.

Dr. Rosenfeld has investigated and designed remediation programs and risk assessments for contaminated sites containing lead, heavy metals, mold, bacteria, particulate matter, petroleum hydrocarbons, chlorinated solvents, pesticides, radioactive waste, dioxins and furans, semi- and volatile organic compounds, PCBs, PAHs, perchlorate, asbestos, per- and poly-fluoroalkyl substances (PFOA/PFOS), unusual polymers, fuel oxygenates (MTBE), among other pollutants. Dr. Rosenfeld also has experience evaluating greenhouse gas emissions from various projects and is an expert on the assessment of odors from industrial and agricultural sites, as well as the evaluation of odor nuisance impacts and technologies for abatement of odorous emissions. As a principal scientist at SWAPE, Dr. Rosenfeld directs air dispersion modeling and exposure assessments. He has served as an expert witness and testified about pollution sources causing nuisance and/or personal injury at dozens of sites and has testified as an expert witness on more than ten cases involving exposure to air contaminants from industrial sources.

Professional History:

Soil Water Air Protection Enterprise (SWAPE); 2003 to present; Principal and Founding Partner
UCLA School of Public Health; 2007 to 2011; Lecturer (Assistant Researcher)
UCLA School of Public Health; 2003 to 2006; Adjunct Professor
UCLA Environmental Science and Engineering Program; 2002-2004; Doctoral Intern Coordinator
UCLA Institute of the Environment, 2001-2002; Research Associate
Komex H₂O Science, 2001 to 2003; Senior Remediation Scientist
National Groundwater Association, 2002-2004; Lecturer
San Diego State University, 1999-2001; Adjunct Professor
Anteon Corp., San Diego, 2000-2001; Remediation Project Manager
Ogden (now Amec), San Diego, 2000-2000; Remediation Project Manager
Bechtel, San Diego, California, 1999 – 2000; Risk Assessor
King County, Seattle, 1996 – 1999; Scientist
James River Corp., Washington, 1995-96; Scientist
Big Creek Lumber, Davenport, California, 1995; Scientist
Plumas Corp., California and USFS, Tahoe 1993-1995; Scientist
Peace Corps and World Wildlife Fund, St. Kitts, West Indies, 1991-1993; Scientist

Publications:

Remy, L.L., Clay T., Byers, V., **Rosenfeld P. E.** (2019) Hospital, Health, and Community Burden After Oil Refinery Fires, Richmond, California 2007 and 2012. *Environmental Health*. 18:48

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Paul Rosenfeld Ph.D. (October 24-25, 2005). Fate, Transport and Persistence of PFOA and Related Chemicals. Mealey's C8/PFOA. *Science, Risk & Litigation Conference*. Lecture conducted from The Rittenhouse Hotel, Philadelphia, PA.

Paul Rosenfeld Ph.D. (September 19, 2005). Brominated Flame Retardants in Groundwater: Pathways to Human Ingestion, *Toxicology and Remediation PEMA Emerging Contaminant Conference*. Lecture conducted from Hilton Hotel, Irvine California.

Paul Rosenfeld Ph.D. (September 19, 2005). Fate, Transport, Toxicity, And Persistence of 1,2,3-TCP. *PEMA Emerging Contaminant Conference*. Lecture conducted from Hilton Hotel in Irvine, California.

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Paul Rosenfeld, Ph.D. (April 7, 2004). A National Damage Assessment Model For PCE and Dry Cleaners. *Drycleaner Symposium. California Ground Water Association*. Lecture conducted from Radison Hotel, Sacramento, California.

Rosenfeld, P. E., Grey, M., (June 2003) Two stage biofilter for biosolids composting odor control. *Seventh International In Situ And On Site Bioremediation Symposium Battelle Conference* Orlando, FL.

Paul Rosenfeld, Ph.D. and James Clark Ph.D. (February 20-21, 2003) Understanding Historical Use, Chemical Properties, Toxicity and Regulatory Guidance of 1,4 Dioxane. *National Groundwater Association. Southwest Focus Conference. Water Supply and Emerging Contaminants..* Lecture conducted from Hyatt Regency Phoenix Arizona.

Paul Rosenfeld, Ph.D. (February 6-7, 2003). Underground Storage Tank Litigation and Remediation. *California CUPA Forum*. Lecture conducted from Marriott Hotel, Anaheim California.

Paul Rosenfeld, Ph.D. (October 23, 2002) Underground Storage Tank Litigation and Remediation. *EPA Underground Storage Tank Roundtable*. Lecture conducted from Sacramento California.

Rosenfeld, P.E. and Suffet, M. (October 7- 10, 2002). Understanding Odor from Compost, *Wastewater and Industrial Processes. Sixth Annual Symposium On Off Flavors in the Aquatic Environment. International Water Association*. Lecture conducted from Barcelona Spain.

Rosenfeld, P.E. and Suffet, M. (October 7- 10, 2002). Using High Carbon Wood Ash to Control Compost Odor. *Sixth Annual Symposium On Off Flavors in the Aquatic Environment. International Water Association*. Lecture conducted from Barcelona Spain.

Rosenfeld, P.E. and Grey, M. A. (September 22-24, 2002). Biocycle Composting For Coastal Sage Restoration. *Northwest Biosolids Management Association*. Lecture conducted from Vancouver Washington..

Rosenfeld, P.E. and Grey, M. A. (November 11-14, 2002). Using High-Carbon Wood Ash to Control Odor at a Green Materials Composting Facility. *Soil Science Society Annual Conference*. Lecture conducted from Indianapolis, Maryland.

Rosenfeld, P.E. (September 16, 2000). Two stage biofilter for biosolids composting odor control. *Water Environment Federation*. Lecture conducted from Anaheim California.

Rosenfeld, P.E. (October 16, 2000). Wood ash and biofilter control of compost odor. *Biofest*. Lecture conducted from Ocean Shores, California.

Rosenfeld, P.E. (2000). Bioremediation Using Organic Soil Amendments. *California Resource Recovery Association*. Lecture conducted from Sacramento California.

Rosenfeld, P.E., C.L. Henry, R. Harrison. (1998). Oat and Grass Seed Germination and Nitrogen and Sulfur Emissions Following Biosolids Incorporation With High-Carbon Wood-Ash. *Water Environment Federation 12th Annual Residuals and Biosolids Management Conference Proceedings*. Lecture conducted from Bellevue Washington.

Rosenfeld, P.E., and C.L. Henry. (1999). An evaluation of ash incorporation with biosolids for odor reduction. *Soil Science Society of America*. Lecture conducted from Salt Lake City Utah.

Rosenfeld, P.E., C.L. Henry, R. Harrison. (1998). Comparison of Microbial Activity and Odor Emissions from Three Different Biosolids Applied to Forest Soil. *Brown and Caldwell*. Lecture conducted from Seattle Washington.

Rosenfeld, P.E., C.L. Henry. (1998). Characterization, Quantification, and Control of Odor Emissions from Biosolids Application To Forest Soil. *Biofest*. Lecture conducted from Lake Chelan, Washington.

Rosenfeld, P.E., C.L. Henry, R. Harrison. (1998). Oat and Grass Seed Germination and Nitrogen and Sulfur Emissions Following Biosolids Incorporation With High-Carbon Wood-Ash. Water Environment Federation 12th Annual Residuals and Biosolids Management Conference Proceedings. Lecture conducted from Bellevue Washington.

Rosenfeld, P.E., C.L. Henry, R. B. Harrison, and R. Dills. (1997). Comparison of Odor Emissions From Three Different Biosolids Applied to Forest Soil. *Soil Science Society of America*. Lecture conducted from Anaheim California.

Teaching Experience:

UCLA Department of Environmental Health (Summer 2003 through 20010) Taught Environmental Health Science 100 to students, including undergrad, medical doctors, public health professionals and nurses. Course focused on the health effects of environmental contaminants.

National Ground Water Association, Successful Remediation Technologies. Custom Course in Sante Fe, New Mexico. May 21, 2002. Focused on fate and transport of fuel contaminants associated with underground storage tanks.

National Ground Water Association; Successful Remediation Technologies Course in Chicago Illinois. April 1, 2002. Focused on fate and transport of contaminants associated with Superfund and RCRA sites.

California Integrated Waste Management Board, April and May, 2001. Alternative Landfill Caps Seminar in San Diego, Ventura, and San Francisco. Focused on both prescriptive and innovative landfill cover design.

UCLA Department of Environmental Engineering, February 5, 2002. Seminar on Successful Remediation Technologies focusing on Groundwater Remediation.

University Of Washington, Soil Science Program, Teaching Assistant for several courses including: Soil Chemistry, Organic Soil Amendments, and Soil Stability.

U.C. Berkeley, Environmental Science Program Teaching Assistant for Environmental Science 10.

Academic Grants Awarded:

California Integrated Waste Management Board. \$41,000 grant awarded to UCLA Institute of the Environment. Goal: To investigate effect of high carbon wood ash on volatile organic emissions from compost. 2001.

Synagro Technologies, Corona California: \$10,000 grant awarded to San Diego State University. Goal: investigate effect of biosolids for restoration and remediation of degraded coastal sage soils. 2000.

King County, Department of Research and Technology, Washington State. \$100,000 grant awarded to University of Washington: Goal: To investigate odor emissions from biosolids application and the effect of polymers and ash on VOC emissions. 1998.

Northwest Biosolids Management Association, Washington State. \$20,000 grant awarded to investigate effect of polymers and ash on VOC emissions from biosolids. 1997.

James River Corporation, Oregon: \$10,000 grant was awarded to investigate the success of genetically engineered Poplar trees with resistance to round-up. 1996.

United State Forest Service, Tahoe National Forest: \$15,000 grant was awarded to investigating fire ecology of the Tahoe National Forest. 1995.

Kellogg Foundation, Washington D.C. \$500 grant was awarded to construct a large anaerobic digester on St. Kitts in West Indies. 1993

Deposition and/or Trial Testimony:

In the United States District Court For The Southern District of Illinois

Duarte et al, *Plaintiffs*, vs. United States Metals Refining Company et. al. *Defendant*.

Case No.: 3:19-cv-00302-SMY-GCS

Rosenfeld Deposition. 2-19-2020

In the Circuit Court of Jackson County, Missouri

Karen Cornwell, *Plaintiff*, vs. Marathon Petroleum, LP, *Defendant*.

Case No.: 1716-CV10006

Rosenfeld Deposition. 8-30-2019

In the United States District Court For The District of New Jersey

Duarte et al, *Plaintiffs*, vs. United States Metals Refining Company et. al. *Defendant*.

Case No.: 2:17-cv-01624-ES-SCM

Rosenfeld Deposition. 6-7-2019

In the United States District Court of Southern District of Texas Galveston Division

M/T Carla Maersk, *Plaintiffs*, vs. Conti 168., Schiffahrts-GMBH & Co. Bulker KG MS “Conti Perdido” *Defendant*.

Case No.: 3:15-CV-00106 consolidated with 3:15-CV-00237

Rosenfeld Deposition. 5-9-2019

In The Superior Court of the State of California In And For The County Of Los Angeles – Santa Monica

Carole-Taddeo-Bates et al., vs. Ifran Khan et al., Defendants

Case No.: No. BC615636

Rosenfeld Deposition, 1-26-2019

In The Superior Court of the State of California In And For The County Of Los Angeles – Santa Monica

The San Gabriel Valley Council of Governments et al. vs El Adobe Apts. Inc. et al., Defendants

Case No.: No. BC646857

Rosenfeld Deposition, 10-6-2018; Trial 3-7-19

In United States District Court For The District of Colorado

Bells et al. Plaintiff vs. The 3M Company et al., Defendants

Case: No 1:16-cv-02531-RBJ

Rosenfeld Deposition, 3-15-2018 and 4-3-2018

In The District Court Of Regan County, Texas, 112th Judicial District

Phillip Bales et al., Plaintiff vs. Dow Agrosiences, LLC, et al., Defendants

Cause No 1923

Rosenfeld Deposition, 11-17-2017

In The Superior Court of the State of California In And For The County Of Contra Costa

Simons et al., Plaintiffs vs. Chevron Corporation, et al., Defendants

Cause No C12-01481

Rosenfeld Deposition, 11-20-2017

In The Circuit Court Of The Twentieth Judicial Circuit, St Clair County, Illinois

Martha Custer et al., Plaintiff vs. Cerro Flow Products, Inc., Defendants

Case No.: No. 0i9-L-2295

Rosenfeld Deposition, 8-23-2017

In United States District Court For The Southern District of Mississippi
Guy Manuel vs. The BP Exploration et al., Defendants
Case: No 1:19-cv-00315-RHW
Rosenfeld Deposition, 4-22-2020

In The Superior Court of the State of California, For The County of Los Angeles
Warrn Gilbert and Penny Gilber, Plaintiff vs. BMW of North America LLC
Case No.: LC102019 (c/w BC582154)
Rosenfeld Deposition, 8-16-2017, Trail 8-28-2018

In the Northern District Court of Mississippi, Greenville Division
Brenda J. Cooper, et al., *Plaintiffs*, vs. Meritor Inc., et al., *Defendants*
Case Number: 4:16-cv-52-DMB-JVM
Rosenfeld Deposition: July 2017

In The Superior Court of the State of Washington, County of Snohomish
Michael Davis and Julie Davis et al., Plaintiff vs. Cedar Grove Composting Inc., Defendants
Case No.: No. 13-2-03987-5
Rosenfeld Deposition, February 2017
Trial, March 2017

In The Superior Court of the State of California, County of Alameda
Charles Spain., Plaintiff vs. Thermo Fisher Scientific, et al., Defendants
Case No.: RG14711115
Rosenfeld Deposition, September 2015

In The Iowa District Court In And For Poweshiek County
Russell D. Winburn, et al., Plaintiffs vs. Doug Hoksbergen, et al., Defendants
Case No.: LALA002187
Rosenfeld Deposition, August 2015

In The Iowa District Court For Wapello County
Jerry Dovico, et al., Plaintiffs vs. Valley View Sine LLC, et al., Defendants
Law No.: LALA105144 - Division A
Rosenfeld Deposition, August 2015

In The Iowa District Court For Wapello County
Doug Pauls, et al., et al., Plaintiffs vs. Richard Warren, et al., Defendants
Law No.: LALA105144 - Division A
Rosenfeld Deposition, August 2015

In The Circuit Court of Ohio County, West Virginia
Robert Andrews, et al. v. Antero, et al.
Civil Action N0. 14-C-30000
Rosenfeld Deposition, June 2015

In The Third Judicial District County of Dona Ana, New Mexico
Betty Gonzalez, et al. Plaintiffs vs. Del Oro Dairy, Del Oro Real Estate LLC, Jerry Settles and Deward
DeRuyter, Defendants
Rosenfeld Deposition: July 2015

In The Iowa District Court For Muscatine County
Laurie Freeman et. al. Plaintiffs vs. Grain Processing Corporation, Defendant
Case No 4980
Rosenfeld Deposition: May 2015



Technical Consultation, Data Analysis and
Litigation Support for the Environment

2656 29th Street, Suite 201
Santa Monica, CA 90405

Matt Hagemann, P.G., C.Hg.
(949) 887-9013
mhagemann@swape.com

Matthew F. Hagemann, P.G., C.Hg., QSD, QSP

**Geologic and Hydrogeologic Characterization
Investigation and Remediation Strategies
Litigation Support and Testifying Expert
Industrial Stormwater Compliance
CEQA Review**

Education:

M.S. Degree, Geology, California State University Los Angeles, Los Angeles, CA, 1984.

B.A. Degree, Geology, Humboldt State University, Arcata, CA, 1982.

Professional Certifications:

California Professional Geologist

California Certified Hydrogeologist

Qualified SWPPP Developer and Practitioner

Professional Experience:

Matt has 30 years of experience in environmental policy, contaminant assessment and remediation, stormwater compliance, and CEQA review. He spent nine years with the U.S. EPA in the RCRA and Superfund programs and served as EPA's Senior Science Policy Advisor in the Western Regional Office where he identified emerging threats to groundwater from perchlorate and MTBE. While with EPA, Matt also served as a Senior Hydrogeologist in the oversight of the assessment of seven major military facilities undergoing base closure. He led numerous enforcement actions under provisions of the Resource Conservation and Recovery Act (RCRA) and directed efforts to improve hydrogeologic characterization and water quality monitoring. For the past 15 years, as a founding partner with SWAPE, Matt has developed extensive client relationships and has managed complex projects that include consultation as an expert witness and a regulatory specialist, and a manager of projects ranging from industrial stormwater compliance to CEQA review of impacts from hazardous waste, air quality and greenhouse gas emissions.

Positions Matt has held include:

- Founding Partner, Soil/Water/Air Protection Enterprise (SWAPE) (2003 – present);
- Geology Instructor, Golden West College, 2010 – 2014, 2017;
- Senior Environmental Analyst, Komex H₂O Science, Inc. (2000 -- 2003);

- Executive Director, Orange Coast Watch (2001 – 2004);
- Senior Science Policy Advisor and Hydrogeologist, U.S. Environmental Protection Agency (1989–1998);
- Hydrogeologist, National Park Service, Water Resources Division (1998 – 2000);
- Adjunct Faculty Member, San Francisco State University, Department of Geosciences (1993 – 1998);
- Instructor, College of Marin, Department of Science (1990 – 1995);
- Geologist, U.S. Forest Service (1986 – 1998); and
- Geologist, Dames & Moore (1984 – 1986).

Senior Regulatory and Litigation Support Analyst:

With SWAPE, Matt’s responsibilities have included:

- Lead analyst and testifying expert in the review of over 300 environmental impact reports and negative declarations since 2003 under CEQA that identify significant issues with regard to hazardous waste, water resources, water quality, air quality, greenhouse gas emissions, and geologic hazards. Make recommendations for additional mitigation measures to lead agencies at the local and county level to include additional characterization of health risks and implementation of protective measures to reduce worker exposure to hazards from toxins and Valley Fever.
- Stormwater analysis, sampling and best management practice evaluation at more than 150 industrial facilities.
- Expert witness on numerous cases including, for example, perfluorooctanoic acid (PFOA) contamination of groundwater, MTBE litigation, air toxins at hazards at a school, CERCLA compliance in assessment and remediation, and industrial stormwater contamination.
- Technical assistance and litigation support for vapor intrusion concerns.
- Lead analyst and testifying expert in the review of environmental issues in license applications for large solar power plants before the California Energy Commission.
- Manager of a project to evaluate numerous formerly used military sites in the western U.S.
- Manager of a comprehensive evaluation of potential sources of perchlorate contamination in Southern California drinking water wells.
- Manager and designated expert for litigation support under provisions of Proposition 65 in the review of releases of gasoline to sources drinking water at major refineries and hundreds of gas stations throughout California.

With Komex H2O Science Inc., Matt’s duties included the following:

- Senior author of a report on the extent of perchlorate contamination that was used in testimony by the former U.S. EPA Administrator and General Counsel.
- Senior researcher in the development of a comprehensive, electronically interactive chronology of MTBE use, research, and regulation.
- Senior researcher in the development of a comprehensive, electronically interactive chronology of perchlorate use, research, and regulation.
- Senior researcher in a study that estimates nationwide costs for MTBE remediation and drinking water treatment, results of which were published in newspapers nationwide and in testimony against provisions of an energy bill that would limit liability for oil companies.
- Research to support litigation to restore drinking water supplies that have been contaminated by MTBE in California and New York.

- Expert witness testimony in a case of oil production-related contamination in Mississippi.
- Lead author for a multi-volume remedial investigation report for an operating school in Los Angeles that met strict regulatory requirements and rigorous deadlines.
- Development of strategic approaches for cleanup of contaminated sites in consultation with clients and regulators.

Executive Director:

As Executive Director with Orange Coast Watch, Matt led efforts to restore water quality at Orange County beaches from multiple sources of contamination including urban runoff and the discharge of wastewater. In reporting to a Board of Directors that included representatives from leading Orange County universities and businesses, Matt prepared issue papers in the areas of treatment and disinfection of wastewater and control of the discharge of grease to sewer systems. Matt actively participated in the development of countywide water quality permits for the control of urban runoff and permits for the discharge of wastewater. Matt worked with other nonprofits to protect and restore water quality, including Surfrider, Natural Resources Defense Council and Orange County CoastKeeper as well as with business institutions including the Orange County Business Council.

Hydrogeology:

As a Senior Hydrogeologist with the U.S. Environmental Protection Agency, Matt led investigations to characterize and cleanup closing military bases, including Mare Island Naval Shipyard, Hunters Point Naval Shipyard, Treasure Island Naval Station, Alameda Naval Station, Moffett Field, Mather Army Airfield, and Sacramento Army Depot. Specific activities were as follows:

- Led efforts to model groundwater flow and contaminant transport, ensured adequacy of monitoring networks, and assessed cleanup alternatives for contaminated sediment, soil, and groundwater.
- Initiated a regional program for evaluation of groundwater sampling practices and laboratory analysis at military bases.
- Identified emerging issues, wrote technical guidance, and assisted in policy and regulation development through work on four national U.S. EPA workgroups, including the Superfund Groundwater Technical Forum and the Federal Facilities Forum.

At the request of the State of Hawaii, Matt developed a methodology to determine the vulnerability of groundwater to contamination on the islands of Maui and Oahu. He used analytical models and a GIS to show zones of vulnerability, and the results were adopted and published by the State of Hawaii and County of Maui.

As a hydrogeologist with the EPA Groundwater Protection Section, Matt worked with provisions of the Safe Drinking Water Act and NEPA to prevent drinking water contamination. Specific activities included the following:

- Received an EPA Bronze Medal for his contribution to the development of national guidance for the protection of drinking water.
- Managed the Sole Source Aquifer Program and protected the drinking water of two communities through designation under the Safe Drinking Water Act. He prepared geologic reports, conducted

public hearings, and responded to public comments from residents who were very concerned about the impact of designation.

- Reviewed a number of Environmental Impact Statements for planned major developments, including large hazardous and solid waste disposal facilities, mine reclamation, and water transfer.

Matt served as a hydrogeologist with the RCRA Hazardous Waste program. Duties were as follows:

- Supervised the hydrogeologic investigation of hazardous waste sites to determine compliance with Subtitle C requirements.
- Reviewed and wrote "part B" permits for the disposal of hazardous waste.
- Conducted RCRA Corrective Action investigations of waste sites and led inspections that formed the basis for significant enforcement actions that were developed in close coordination with U.S. EPA legal counsel.
- Wrote contract specifications and supervised contractor's investigations of waste sites.

With the National Park Service, Matt directed service-wide investigations of contaminant sources to prevent degradation of water quality, including the following tasks:

- Applied pertinent laws and regulations including CERCLA, RCRA, NEPA, NRDA, and the Clean Water Act to control military, mining, and landfill contaminants.
- Conducted watershed-scale investigations of contaminants at parks, including Yellowstone and Olympic National Park.
- Identified high-levels of perchlorate in soil adjacent to a national park in New Mexico and advised park superintendent on appropriate response actions under CERCLA.
- Served as a Park Service representative on the Interagency Perchlorate Steering Committee, a national workgroup.
- Developed a program to conduct environmental compliance audits of all National Parks while serving on a national workgroup.
- Co-authored two papers on the potential for water contamination from the operation of personal watercraft and snowmobiles, these papers serving as the basis for the development of nation-wide policy on the use of these vehicles in National Parks.
- Contributed to the Federal Multi-Agency Source Water Agreement under the Clean Water Action Plan.

Policy:

Served senior management as the Senior Science Policy Advisor with the U.S. Environmental Protection Agency, Region 9.

Activities included the following:

- Advised the Regional Administrator and senior management on emerging issues such as the potential for the gasoline additive MTBE and ammonium perchlorate to contaminate drinking water supplies.
- Shaped EPA's national response to these threats by serving on workgroups and by contributing to guidance, including the Office of Research and Development publication, *Oxygenates in Water: Critical Information and Research Needs*.
- Improved the technical training of EPA's scientific and engineering staff.
- Earned an EPA Bronze Medal for representing the region's 300 scientists and engineers in negotiations with the Administrator and senior management to better integrate scientific

principles into the policy-making process.

- Established national protocol for the peer review of scientific documents.

Geology:

With the U.S. Forest Service, Matt led investigations to determine hillslope stability of areas proposed for timber harvest in the central Oregon Coast Range. Specific activities were as follows:

- Mapped geology in the field, and used aerial photographic interpretation and mathematical models to determine slope stability.
- Coordinated his research with community members who were concerned with natural resource protection.
- Characterized the geology of an aquifer that serves as the sole source of drinking water for the city of Medford, Oregon.

As a consultant with Dames and Moore, Matt led geologic investigations of two contaminated sites (later listed on the Superfund NPL) in the Portland, Oregon, area and a large hazardous waste site in eastern Oregon. Duties included the following:

- Supervised year-long effort for soil and groundwater sampling.
- Conducted aquifer tests.
- Investigated active faults beneath sites proposed for hazardous waste disposal.

Teaching:

From 1990 to 1998, Matt taught at least one course per semester at the community college and university levels:

- At San Francisco State University, held an adjunct faculty position and taught courses in environmental geology, oceanography (lab and lecture), hydrogeology, and groundwater contamination.
- Served as a committee member for graduate and undergraduate students.
- Taught courses in environmental geology and oceanography at the College of Marin.

Matt is currently a part time geology instructor at Golden West College in Huntington Beach, California where he taught from 2010 to 2014 and in 2017.

Invited Testimony, Reports, Papers and Presentations:

Hagemann, M.F., 2008. Disclosure of Hazardous Waste Issues under CEQA. Presentation to the Public Environmental Law Conference, Eugene, Oregon.

Hagemann, M.F., 2008. Disclosure of Hazardous Waste Issues under CEQA. Invited presentation to U.S. EPA Region 9, San Francisco, California.

Hagemann, M.F., 2005. Use of Electronic Databases in Environmental Regulation, Policy Making and Public Participation. Brownfields 2005, Denver, Colorado.

Hagemann, M.F., 2004. Perchlorate Contamination of the Colorado River and Impacts to Drinking Water in Nevada and the Southwestern U.S. Presentation to a meeting of the American Groundwater Trust, Las Vegas, NV (served on conference organizing committee).

Hagemann, M.F., 2004. Invited testimony to a California Senate committee hearing on air toxins at schools in Southern California, Los Angeles.

Brown, A., Farrow, J., Gray, A. and **Hagemann, M.**, 2004. An Estimate of Costs to Address MTBE Releases from Underground Storage Tanks and the Resulting Impact to Drinking Water Wells. Presentation to the Ground Water and Environmental Law Conference, National Groundwater Association.

Hagemann, M.F., 2004. Perchlorate Contamination of the Colorado River and Impacts to Drinking Water in Arizona and the Southwestern U.S. Presentation to a meeting of the American Groundwater Trust, Phoenix, AZ (served on conference organizing committee).

Hagemann, M.F., 2003. Perchlorate Contamination of the Colorado River and Impacts to Drinking Water in the Southwestern U.S. Invited presentation to a special committee meeting of the National Academy of Sciences, Irvine, CA.

Hagemann, M.F., 2003. Perchlorate Contamination of the Colorado River. Invited presentation to a tribal EPA meeting, Pechanga, CA.

Hagemann, M.F., 2003. Perchlorate Contamination of the Colorado River. Invited presentation to a meeting of tribal representatives, Parker, AZ.

Hagemann, M.F., 2003. Impact of Perchlorate on the Colorado River and Associated Drinking Water Supplies. Invited presentation to the Inter-Tribal Meeting, Torres Martinez Tribe.

Hagemann, M.F., 2003. The Emergence of Perchlorate as a Widespread Drinking Water Contaminant. Invited presentation to the U.S. EPA Region 9.

Hagemann, M.F., 2003. A Deductive Approach to the Assessment of Perchlorate Contamination. Invited presentation to the California Assembly Natural Resources Committee.

Hagemann, M.F., 2003. Perchlorate: A Cold War Legacy in Drinking Water. Presentation to a meeting of the National Groundwater Association.

Hagemann, M.F., 2002. From Tank to Tap: A Chronology of MTBE in Groundwater. Presentation to a meeting of the National Groundwater Association.

Hagemann, M.F., 2002. A Chronology of MTBE in Groundwater and an Estimate of Costs to Address Impacts to Groundwater. Presentation to the annual meeting of the Society of Environmental Journalists.

Hagemann, M.F., 2002. An Estimate of the Cost to Address MTBE Contamination in Groundwater (and Who Will Pay). Presentation to a meeting of the National Groundwater Association.

Hagemann, M.F., 2002. An Estimate of Costs to Address MTBE Releases from Underground Storage Tanks and the Resulting Impact to Drinking Water Wells. Presentation to a meeting of the U.S. EPA and State Underground Storage Tank Program managers.

Hagemann, M.F., 2001. From Tank to Tap: A Chronology of MTBE in Groundwater. Unpublished report.

Hagemann, M.F., 2001. Estimated Cleanup Cost for MTBE in Groundwater Used as Drinking Water. Unpublished report.

Hagemann, M.F., 2001. Estimated Costs to Address MTBE Releases from Leaking Underground Storage Tanks. Unpublished report.

Hagemann, M.F., and VanMouwerik, M., 1999. Potential Water Quality Concerns Related to Snowmobile Usage. Water Resources Division, National Park Service, Technical Report.

VanMouwerik, M. and **Hagemann, M.F.** 1999, Water Quality Concerns Related to Personal Watercraft Usage. Water Resources Division, National Park Service, Technical Report.

Hagemann, M.F., 1999, Is Dilution the Solution to Pollution in National Parks? The George Wright Society Biannual Meeting, Asheville, North Carolina.

Hagemann, M.F., 1997, The Potential for MTBE to Contaminate Groundwater. U.S. EPA Superfund Groundwater Technical Forum Annual Meeting, Las Vegas, Nevada.

Hagemann, M.F., and Gill, M., 1996, Impediments to Intrinsic Remediation, Moffett Field Naval Air Station, Conference on Intrinsic Remediation of Chlorinated Hydrocarbons, Salt Lake City.

Hagemann, M.F., Fukunaga, G.L., 1996, The Vulnerability of Groundwater to Anthropogenic Contaminants on the Island of Maui, Hawaii. Hawaii Water Works Association Annual Meeting, Maui, October 1996.

Hagemann, M. F., Fukunaga, G. L., 1996, Ranking Groundwater Vulnerability in Central Oahu, Hawaii. Proceedings, Geographic Information Systems in Environmental Resources Management, Air and Waste Management Association Publication VIP-61.

Hagemann, M.F., 1994. Groundwater Characterization and Cleanup at Closing Military Bases in California. Proceedings, California Groundwater Resources Association Meeting.

Hagemann, M.F. and Sabol, M.A., 1993. Role of the U.S. EPA in the High Plains States Groundwater Recharge Demonstration Program. Proceedings, Sixth Biennial Symposium on the Artificial Recharge of Groundwater.

Hagemann, M.F., 1993. U.S. EPA Policy on the Technical Impracticability of the Cleanup of DNAPL-contaminated Groundwater. California Groundwater Resources Association Meeting.

Hagemann, M.F., 1992. Dense Nonaqueous Phase Liquid Contamination of Groundwater: An Ounce of Prevention... Proceedings, Association of Engineering Geologists Annual Meeting, v. 35.

Other Experience:

Selected as subject matter expert for the California Professional Geologist licensing examinations, 2009-2011.

ATTACHMENT 2

GIDEON KRACOV

Attorney at Law

801 South Grand Avenue
11th Floor
Los Angeles, California 90017

(213) 629-2071
Fax: (213) 623-7755

gk@gideonlaw.net
www.gideonlaw.net

September 14, 2021

VIA EMAIL & BOAC WEB-PORTAL: <https://online.lawa.org/boac>

Board of Airport Commissioners
c/o Evelyn Quintanilla
Los Angeles International Airport
1 World Way
Los Angeles, CA 90045
laxboac@lawa.org
equintanilla@lawa.org

RE: ITEM 1, BOARD OF AIRPORT COMMISSIONERS HEARING SCHEDULED SEPTEMBER 14, 2021 FINAL EIR/SPECIFIC PLAN COMPLIANCE LAX AIRFIELD AND TERMINAL MODERNIZATION PROJECT

Dear Board of Airport Commissioners:

On behalf of Service Employees International Union United Service Workers West (“**USWW**”) and UNITE HERE Local 11 (“**Local 11**”) (collectively “**Commenters**”), this Office provides the City of Los Angeles (“**City**”) Los Angeles World Airports (“**LAWA**”) the following comments¹ regarding the Environmental Impact Report (SCH No. 2019049020) (“**EIR**”) ² for the above-referenced Airfield and Terminal Modernization Project (“**ATMP**” or “**Project**”) located at the Los Angeles International Airport (“**LAX**”).

In short, the Response to Comments (“**RTC**”) contained in the Final EIR fails to address Commenters’ prior concerns with the EIR’s analysis of Project impacts, including but not limited to the ATMP’s impacts and mitigation related to traffic, vehicle miles traveled (“**VMT**”), noise, air quality, and greenhouse gas (“**GHG**”) emissions; as well as the fundamentally flawed Project description and deficient overriding consideration findings. Unless these errors are cured, the City cannot make the required findings for California Environmental Quality Act (“**CEQA**”) ³ compliance or the LAX Specific Plan Compliance Determination (collectively “**Project Approvals**”). As such, Commenters urge BOAC to stay action on the Project Approvals until the issues identified below and in prior comment letters are fixed in a recirculated, CEQA-compliant Draft EIR.

¹ Please note that pages cited herein are either to the page’s stated pagination (referenced herein as “**p. ##**”) or the page’s location in the referenced PDF document (referenced herein as “**PDF p. ##**”).

² Inclusive of the Draft EIR (“**DEIR**”, Final EIR (“**FEIR**”), and all appendices referenced herein as (“**APP-##**”).

³ Inclusive of 14 Cal. Code Regs. § 15000, *et seq.* (“**CEQA Guidelines**”).



This Project can and must do better. Rising inequality threatens Los Angeles' prosperity. There are serious challenges in the region concerning affordable housing and living wage jobs — and COVID has made things even more difficult for Commenters' members. USWW and Local 11 work to stem this rising tide of inequality and fight to make our region a place of opportunity for all—a place where their members can work and afford to live. USWW represents more than 40 thousand property service workers across California, including approximately 3,700 employees at LAX (pre-COVID) with an additional 1,300 security/janitorial workers living within approximately six miles of LAX. Local 11 represents more than 25,000 workers employed in hotels, restaurants, airports, sports arenas, and convention centers throughout Southern California and Phoenix, Arizona—including more than 5,600 workers at LAX. LAWA must better consider to what extent this Project will ensure better permanent service jobs for airline service/hospitality workers near LAX who will endure the significant air quality, noise, and other impacts caused by the Project. True community and worker benefits—as identified below—are needed if this Project is to be approved.

This comment letter incorporates by this reference in their entirety all comments made on the ATMP and EIR, including but not limited to those attached hereto (Exhibits A through F).

A. THE ATMP EIR IS FATALLY FLAWED WITH AN INACCURATE PROJECT DESCRIPTION

Here, a chief criticism made by Commenters, experts, and other commenting parties is the DEIR's project description, which characterizes the ATMP as merely a "modernization" of LAX to accommodate continued growth in airline passengers over "several decades." (DEIR, p. 2-18.) This self-serving description is directly inconsistent with DEIR statements that make clear that current airport configuration is a "constraint on growth [] after 2028" (DEIR, p. 2-17 [emph. added]). This Project is growth inducing, plain and simple.

In clear and unambiguous terms, the EIR shows that current "constraint" conditions limit LAX to 127.9 million annual passengers ("MAP") in 2045, but that the Project would serve an "unconstrained" condition allowing 155.6 MAP in 2045. (See DEIR, APP-B [Tbls. 4-1 & 3-8, respectively]; see also figures on following pages). Not only does the Project significantly increase overall capacity by 27.7 MAP in 2045, but so too it hastens the intensification of activity at LAX by reaching 127.9 MAP sometime around 2034-2035 (as compared to 2045 under the current constrained conditions) (id.). This MAP increase/intensification is a direct and foreseeable consequence of this massive LAX expansion project, which will reach its full potential well beyond 2028 and 2033, and which therefore needs impact analysis out to 2045:

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TABLE 4-1 CONSTRAINED DEMAND SCENARIO FORECAST TOTAL ANNUAL PASSENGERS AND OPERATIONS – FISCAL YEARS 2018-2045

FISCAL YEAR ¹	MILLION ANNUAL PASSENGERS	ANNUAL OPERATIONS
2018	86.1	715,000
2019	88.3	722,000
2020	90.6	729,000
2021	92.9	736,000
2022	95.3	744,000
2023	97.7	752,000
2024	100.3	760,000
2025	102.9	769,000
2026	105.5	778,000
2027	108.1	789,000
2028	110.8	800,000
2029	113.4	809,000
2030	115.6	813,000
2031	116.6	817,000
2032	117.6	821,000
2033	118.5	824,500
2034	119.5	828,000
2035	120.3	831,000
2036	121.2	834,000
2037	122	837,000
2038	122.9	840,000
2039	123.7	842,500
2040	124.5	845,000
2041	125.3	847,500
2042	126.1	849,500
2043	126.8	851,500
2044	127.4	852,500
2045	127.9	853,000
CAGR		
2018–2045	1.5%	0.7%

TABLE 3-8 UNCONSTRAINED ACTIVITY FORECAST TOTAL ANNUAL PASSENGERS AND OPERATIONS –
FISCAL YEARS 2018-2045

FISCAL YEAR ¹	MILLION ANNUAL PASSENGERS	ANNUAL OPERATIONS
2018	86.1	715,000
2019	88.3	722,000
2020	90.6	729,000
2021	92.9	736,000
2022	95.3	744,000
2023	97.7	752,000
2024	100.3	760,000
2025	102.9	769,000
2026	105.5	778,000
2027	108.1	789,000
2028	110.8	800,000
2029	113.4	811,000
2030	116.0	822,000
2031	118.6	833,000
2032	121.2	843,000
2033	123.8	853,000
2034	126.5	864,000
2035	129.1	874,000
2036	131.7	883,000
2037	134.3	893,000
2038	137.0	902,000
2039	139.6	912,000
2040	142.2	921,000
2041	144.8	930,000
2042	147.5	939,000
2043	150.1	947,000
2044	152.8	956,000
2045	155.6	965,000
CAGR		
2018–2045	2.2%	1.1%

Like the Draft EIR, the RTC and Final EIR attempts to mask the unmistakable growth-inducing result of the ATMP Project (i.e., remove constraints to allow additional growth at LAX) through wordsmithing and contradictory arguments.

First, as a threshold matter, the Final EIR does provide a new discussion of 2033 impacts only because it was required per a separate review process under the National Environmental Protection Act (“NEPA”). Nevertheless, increasing the analysis horizon by merely five years is not sufficient because the increase in capacity from this Project would not manifest until after 2033 when the impacts of the increase capacity at LAX from the Project would just start to be realized. These post-2033 impacts need to be studied in a recirculated Draft EIR.

Second, the RTC repeatedly claims that 2028 is an appropriate time horizon to cut off analysis because that is when the Project would finish construction and be “fully operational.” (See e.g., F2-14, F2-15, -16.) But the ATMP is not like a typical project that will operate at, or even close to, full capacity upon final construction (e.g., mixed-use building, hotel, single-family subdivision).⁴ The ATMP is increasing capacity in outlier years (see fig above). In reality, the EIR is ignoring the impacts from this increased activity merely because it is delayed to future years—not because the impacts are not real and foreseeable.

Third, the RTC claims that increased impacts in post-2028 and 2033 are the result of “changes in the environmental setting in which the impacts occur” and that passenger demand would “occur independent of the proposed Project.” (See F2-17; see also F2-18, F2-20.) This is clearly erroneous, when the EIR states that LAX is currently constrained and cannot reach 127.9 MAP until 2045—much less reach that level of volume nearly ten years earlier by 2034/2035 or 155.6 MAP by 2045. There is no explanation why this increase/acceleration of growth would not (without this Project) occur at other airports in a manner consistent with SCAG’s RTP/SCS. (See DEIR, Tbl. 2-1 [LAX’s regional passenger share anticipated to drop from 76.75 % to 64.42% (from 2017 to 2045)].⁵

Fourth, the RTC claims impacts would be too “speculative” and with too many “uncertainties.” (See e.g., F2-14, -15, -16.) Yet, the EIR ignores clear examples of other airport and port CEQA reviews that find it quite feasible and non-speculative to do impact analysis 20-years out. (See F2-16 [referencing EIRs at the San Jose International Airport Master Plans and the Port of Los Angeles].) Hence, the RTC’s blanket claim that long-term impact analysis is infeasible does not square with the facts—particularly when the City’s other proprietary-agency has been able to do so (i.e., the LA Port). Moreover, the EIR shows that the Project will increase and accelerate growth at LAX—27.7 MAP and 112,000 annual operations at LAX by 2045 (a 21.6% and 13.1% increase over

⁴ Whether constructed all at once or in phases, projects are typically reviewed under CEQA at full capacity regardless of when that full capacity is in fact reached. As a useful analogy, assume a waste facility operates at 80 tons per day (“tpd”) with an existing capacity of 100 tpd that is sufficient for the next five years of growth, but seeks approval that would allow 120 tpd capacity. CEQA would require consideration of the entire expansion of the facility (i.e., 120 tpd) because that is what would be allowed at the facility. Under the ATMP EIR’s logic, however, it needs only look at the 100 tpd and could ignore the substantial increase in capacity to 120 tpd that allowed and is foreseeable in outlying years.

⁵ See also SCAG Connect SoCal, Appendix Aviation and Airport Ground Access, p. 33, https://scag.ca.gov/sites/main/files/file-attachments/0903fconnectsocial_aviation-and-airport-ground-access.pdf?1606001540.

current constrained conditions). These activities are reasonably foreseeable and included in the EIR's own numbers. Why then is it infeasible to determine the air, GHG, noise, VMT, and other associated impacts stemming from this same increased activity?⁶

Fifth, the RTC repeats the conclusion that impacts would be the same with or without the Project in 2028 and there would be no increase in aviation/passenger activity from the Project. (See e.g., F2-569; F2-21 ["no appreciable difference" in total emissions between "With Project and Without Project for 2033 or 2028"].) Again, this is a red herring because the EIR fails to look at the increased capacity in outlier years made available only by approving the ATMP. It stretches credulity to suggest increasing/accelerating capacity will not have significant impacts.

There are numerous other comparisons and analysis more meaningful for the public and decisionmakers to describe Project impacts. For example, in 2045, the With Project has 27.7 MAP more than the Without Project alternative. Alternatively, between 2030-2045, the With Project has a total 214.9 MAP more than the Without Project alternative (see figure below), which will substantially increase LAX's overall impact in the intermediate and long-term. Lastly, because regulations tend to become more stringent in the future, permitting the MAP now allows activity under the With Project scenario that will be subject to less stringent standards allowing for greater emissions now. In every case, the increase MAP inherently increases impacts that have been ignored and/or downplayed in the EIR.

Year	Without Project	With Project	Increase
2030	115.6	116.0	0.4
2031	116.6	118.6	2.0
2032	117.6	121.2	3.6
2033	118.5	123.8	5.3
2034	119.5	126.5	7.0
2035	120.3	129.1	8.8
2036	121.2	131.7	10.5
2037	122.0	134.3	12.3
2038	122.9	137.0	14.1
2039	123.7	139.6	15.9
2040	124.5	142.2	17.7
2041	125.3	144.8	19.5
2042	126.1	147.5	21.4
2043	126.8	150.1	23.3
2044	127.4	152.8	25.4
2045	127.9	155.6	27.7
TOTAL			214.9

⁶ These are the type of reasonably foreseeable growth-inducing impacts that must be evaluated when directly related to the ATMP approval. (See *City of Carmel-by-the-Sea v. U.S. Dep't of Transp.* (9th Cir. 1997) 123 F3d 1142, 1165)

Sixth, the RTC suggests that while its aviation forecast is appropriate for long-term regional planning efforts (i.e., Southern California Association of Governments (“SCAG”) Regional Transportation Plan/Sustainable Communities Strategy (“RTP/SCS”)), these same long-term projections cannot be used for long-term environmental impact analysis—only for analysis of “near-term” impacts. (FEIR, p. F2-15.) This is nonsense. It is entirely inconsistent for the RTC to adamantly defend the EIR’s forecast projections as accurate for one context (e.g., demand forecast) yet on the other hand say they are too speculative for considering foreseeable environmental impacts caused by that same increase in LAX operations.

Unlike the SCAG’s RTP/SCS and associated Program EIR, the ATMP EIR is project-specific and not required to be updated when more certain information is available in 2028 or 2033, or beyond.⁷ Hence, the EIR is not merely deferring analysis of this increase in activities, but rather means that the City does not need to even examine them.⁸ Here, the Project will foreseeably increase capacity at the Project site (based on the EIR’s own numbers), with known impacts (e.g., increased noise, air/GHG emissions, traffic, etc.) that must be considered within this EIR because they are foreseeable and can be quantified in a meaningful manner.⁹ (See e.g., *Muzzy Ranch Co. v. Colano County Airport Land Use Comm’n* (2007) 41 Cal.4th 372, 383.)

Seventh, the RTC suggests shutting down analysis by 2028/2033 is within its discretion in selecting “methodology” (see FEIR, p. F2-14) and characterizes the request for post-2028/2033 analysis as merely “unsupported speculation” based on lay “opinion” (id., at F2-16). However, CEQA requires any methodology be supported with substantial evidence with explanation of its limitations.¹⁰ Here, a glaring flaw in the EIR’s methodology is that it allows reasonable and foreseeable activities (i.e., increased capacity) and their associated impacts to go unanalyzed or mitigated (mentioned above). This is not a case of building a road in rural areas that may lead to future sprawl development at an unknown location but nevertheless will be subject to subsequent approval and environmental review. Here, the ATMP will allow foreseeable increase/acceleration of MAP activity, which admittedly will have emissions and other impacts that are capable of being analyzed. Additionally, the RTC ignores the fact that numerous expert commenters urging for long-term analysis, which is substantial evidence under CEQA.¹¹

⁷ If approved, the Project would make way for increased capacity beyond current constrained conditions of 127.9 MAP. There is no mechanism referenced in the EIR that would require additional review of the ATMP when current capacity is reached, or consideration of the impacts caused by the increase/acceleration of activity at LAX beyond the 2033 study year.

⁸ This is not a case where increasing capacity will have unknowable impacts in other areas subject to future discretionary projects. (See e.g., *Napa Citizens for honest Gov’t v. Napa County Bd. of Supervisors* (2001) 91 Cal.App.4th 342, 371 & 372 n8.) Here, the increase in capacity will have foreseeable activities that have air/GHG emissions, generate VMT, noise, and other impacts at the Project site. It is not a matter of will they occur, but rather when they will occur.

⁹ Ibid.

¹⁰ See e.g., *Cleveland II*, 3 Cal.5th at 515, 519 [quoting CEQA Guidelines § 15064(b)].).

¹¹ See e.g., Pub. Res. Code §§ 21080(e), 21082.2(c); CEQA Guidelines §§ 15064(f)(5), 15384.

In sum, the DEIR's project description and truncated analysis is inaccurate and misleading, which distorts the public decisionmaking process—which violates CEQA. (See *Citizens for a Sustainable Treasure Island*, 227 Cal.App.4th at 1052.) To say post-2028/2033 growth is limited without the Project (on the one hand), and then failing to analyze the impacts of post-2028/2033 growth as an impact of the ATMP (on the other) is a fatal flaw. This fatal flaw infects the entire EIR impact analysis and must be cured in a recirculated Draft EIR.

B. OTHER AIR QUALITY/ GHG ISSUES

In addition to the above issue, Commenters raised other significant air quality and GHG concerns with the EIR, which are also unaddressed in the Final EIR, such as the following:

First, Commenters raised concerns that the truncated 2028 review fails to consider how air emissions from post-2028 growth will comport with the emissions anticipated for the air basin in a manner consistent with the Clean Air Act (“CAA”) and applicable State Implementation Plan (“SIP”). (See FEIR, p. F2-568.) The RTC claims that this was adequately addressed in the Project's Draft Environmental Assessment (“DEA”) and General Conformity Determination (“GCD”) (done under NEPA), where the FAA proposes a conclusion that the Project conforms to the SIP. (See FEIR, p. F2-570.) However, Commenters and experts identified significant concerns with that NEPA air quality/GHG analysis, including but not limited to an unsubstantiated conformity determination with the applicable SIP by relying on “set-aside budgets.” (See DEA, APP-I, PDF p. 132; see also Commenter's DEA Letter, p. 15 [attached hereto as “**Exhibit A**”].) As pointed out by Commenter's air quality experts, the DEA/GCD relies on a letter from South Coast Air Quality Management District (“SCAQMD”) stating Project's emissions “together with all other emissions in the non-attainment or maintenance area, would not exceed the emissions budget in the SIP” (See SWAPE DEA Letter, pp. 4-5 [attached hereto as “**Exhibit B**”]; see also excerpt below.) Yet, unstated are the emissions from other projects in the non-attainment or maintenance area that have already sought set-asides. (See DEA, APP-E, PDF pp. 277-279).

Furthermore, the Draft GCD states:

“The conformity determination for NO_x and VOC will be based on the availability of conformity set-aside budgets in the currently approved SIP and coordination with SCAQMD to allow LAWA to apply a portion of those budgets to the Proposed Project emissions. As previously mentioned, a written determination from the State/local air quality agency stating that the project emissions, together with all other emissions in the non-attainment or maintenance area, would not exceed the emissions budget in the SIP would demonstrate conformity” (emphasis added) (Appendix I, pp. 132).

As demonstrated above, there is written determination from the SCAQMD stating that the Project, together with all other emissions in the non-attainment or maintenance area, would not exceed the emissions budget. However, review of the letter from the SCAQMD dated April 21, 2021, confirming that the anticipated emissions from the Project are within the AQMP/SIP emissions budget for general conformity purposes, demonstrates that the SCAQMD fails to mention or discuss the emissions from other projects in the non-attainment or maintenance area (Appendix E, pp. 277-279). As such, while the Project's emissions individually can be accommodated within the general conformity budgets established in the 2016 AQMP, we cannot verify that the total emissions within the South Coast Air Basin can be accommodated by the emissions budget. As such, until LAWA and the SCAQMD provide

Furthermore, no documents have been provided showing—in addition to total set-aside budgets under the 2012 and 2016 Air Quality Management Plans (“**AQMP(s)**”)—all the various projects that have requested and secured set-asides. For example, in a November 2020 email from the ATMP EIR/DEA preparers (i.e., CDM Smith), the Project requested NO_x and VOC set-asides for 2023 and 2024 citing an attachment with very limited data, including: i) total set-asides under the 2012 and 2016 AQMPs; ii) previously assigned set-asides requested from a single LAWA project (i.e., LAX LAMP); and iii) the additional set-aside requested for the ATMP project. (See CPRA Document, PDF pp. 1, 5 [attached hereto as “**Exhibit C**”]; see also excerpt on following page.) Critically missing from this data is any tracking or reference to other projects that may have already sought significant set asides. Hence, it is entirely unknown how many remaining set-asides are left under the 2012 and 2016 AQMD for NO_x or VOCs. For example, in 2019, the FAA approved an expansion of the San Bernardino Int. Airport (“**SBIA**”) where emissions exceed de minimis levels and sought set aside budgets for NO_x and VOC emissions. (See SBIA Draft DEA/GCD Excerpts [attached hereto as “**Exhibit D**”].)¹² This begs the question; how many other projects have already been approved seeking set-aside credits like LAWA’s ATMP? Absent a full accounting of previously secured credits with currently requested credits, it is entirely speculative to assume there are adequate set-asides for the ATMP increase emissions. Thus, there still remains a live question whether this Project will conform to CAA and SIP.

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¹² See full letter of SBIA Eastgate Air Cargo Facility Draft General Conformity Determination, PDF pp. 95-114, https://www.dropbox.com/s/qjz4b8j1iom4v4b/9_Draft_SBD_Eastgate_General_Conformity_Determination.pdf?dl=0; see also excerpts attached hereto as “**Exhibit C**”).

LAX Airfield & Terminal Modernization Project
Request for NOx and VOC Budget from Conformity Set-Aside Accounts

NOx		2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028
Emissions in tons per year.												
General Conformity Set Aside for LAX LAMP		164.00	194.00	198.00	122.00	63.00	53.00					
LAX LAMP Construction Emissions (Final EA)		18.00	36.00	35.00	20.00	11.00	7.00	2.00	0.00			
LAX ATMP Aggressive Constr Emissions (EIR)				0.00	3.21	7.66	56.87	57.80	8.20	2.74	1.47	0.00
Total LAX Projects with NOx > 10 tpy		18.00	36.00	35.00	23.21	18.66	63.87	59.80	(a)	(a)	(a)	(a)
Remaining from LAMP Set Aside		146.00	158.00	163.00	98.79	44.34	-10.87	-59.80	(a)	(a)	(a)	(a)
2016 AQMP Conformity Set-Aside		730.00	730.00	730.00	730.00	730.00	730.00	730.00	730.00	730.00	730.00	730.00
2012 AQMP Conformity Set-Aside		365.00	365.00	365.00	365.00	365.00	365.00	365.00	365.00	365.00	365.00	365.00
REQUESTED ADDITIONAL SET ASIDE BUDGETS FOR ATMP							10.9	59.8				

VOC		2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028
Emissions in tons per year.												
General Conformity Set Aside for LAX LAMP		32.00	41.00	42.00	37.00	23.00	21.00					
LAX LAMP Construction Emissions (Final EA)		5.00	4.00	4.00	2.00	1.00	0.50	0.50	0.00			
LAX ATMP Aggressive Constr Emissions (EIR)				0.00	0.90	2.01	25.78	28.40	6.21	2.01	0.42	0.00
Total LAX Projects		5.00	4.00	4.00	2.90	3.01	26.28	28.90	(a)	(a)	(a)	(a)
Remaining from LAMP Set Aside		27.00	37.00	38.00	34.10	19.99	-5.28	-28.90	(a)	(a)	(a)	(a)
2016 AQMP Conformity Set-Aside		182.50	182.50	182.50	182.50	182.50	182.50	182.50	182.50	182.50	182.50	182.50
2012 AQMP Conformity Set-Aside		73.00	73.00	73.00	73.00	73.00	73.00	73.00	73.00	73.00	73.00	73.00
REQUESTED ADDITIONAL SET ASIDE BUDGETS FOR ATMP							5.3	28.9				

(a) Emissions from each airport project is less than the general conformity de minimis thresholds for NOx (10 tpy) and VOC (10 tpy) in the South Coast Air Basin

Second, also raised by Commenters' experts was the DEA's failure to evaluate the potential emission from environmental remediation activities (e.g., demolition of buildings that may contain asbestos and/or lead paint) (See SWAPE DEA Letter, p. 5 [Exhibit B]) as well as other unsubstantiated input parameters (e.g., architectural coating emissions, construction trips, all operational sources, etc.) (see FEIR, pp. F2-633 – F2-637.) While the RTP cures some of these errors, others were left unresolved. (Id.) The failure to include all air emissions from these remedial activities, and the various input errors are serious, and can lead to significantly underreporting of impacts. The City is keenly aware of this issue, given the City itself just made similar arguments in its recent legal challenge to the NEPA Environmental Impact Statement ("EIS") prepared for the Burbank Airport's project including the mere replacement of an existing terminal building.¹³ Like Commenters here, there the City made similar arguments that the air modeling failed to account for all construction trips, lot acreage, environmental justice issues, as well as the failure to consider other reasonable range of alternatives.¹⁴ We trust the City, after passionately raising similar issues with a relatively small Burbank Airport project, will not turn a blind eye to these similar issues for its own significantly larger LAX project.¹⁵

Third, the mitigation measures proposed in the Final EIR's Mitigation Monitoring and Reporting Program ("MMRP") are inadequate. CEQA generally requires mitigations measures to be enforceable,¹⁶ of certain efficacy,¹⁷ and not deferred to post-approval absent performance standards to guide mitigation.¹⁸ Here, the proposed air quality and GHG mitigations suffer many

¹³ *City of Los Angeles v. FAA et al.*, (CD Cal. Case No. 21-71170), Time Schedule Order, PDF p. 5 (Petition for review, p. 1), https://www.dropbox.com/s/zapdzgpija7b835/US_APP_CA9_21-71170_FILED_PETITION_FOR_REVIEW_DOCKETED_CAUSE_AND_ENTER%20%28002%29_burbank%20lawsuit.pdf?dl=0.

¹⁴ *Ibid.*, at PDF pp. 90-93, 99-104, 111, 121-122; see also Commenter's DEA Letter, pp. 20-22 (Exhibit A).

¹⁵ Noteworthy, despite being considerably smaller than the ATMP project, the Burbank Airport project went through a full-blown EIS as compared to the less demanding DEA done for the ATMP's NEPA review. Yet, the City still sued Burbank. The double-standards are obvious.

¹⁶ See e.g., CEQA Guidelines §§ 15126.4(a)(2), 15097 (mitigation must be "fully enforceable through permit conditions, agreements, or other legally-binding instruments."); *Lincoln Place Tenants Ass'n v. City of Los Angeles* (2005) 130 Cal.App.4th 1491, 1508 ("Mitigating conditions are not mere expressions of hope."); *Federation of Hillside & Canyon Ass'ns v. City of Los Angeles* (2000) 83 Cal.App.4th 1252, 1261 ("feasible mitigation measures will actually be implemented as a condition of development.").

¹⁷ See e.g., *Cleveland III*, 17 Cal.App.5th at 433 ("none of these measures had any probability of implementation, their inclusion in the EIR was illusory."); *Californians for Alternatives to Toxics v. Department of Food and Agriculture* (2005) 136 Cal.App.4th 1, 17 ("[c]ompliance with the law is not enough to support a finding of no significant impact under the CEQA."); *Kings County Farm Bureau*, 221 Cal.App.3d at 727 (finding groundwater purchase agreement inadequate mitigation because there was no evidence that replacement water was available).

¹⁸ See e.g., CEQA Guidelines § 15126.4(a)(1)(B) (CEQA disfavors formulation of MMs to post-approval studies with no performance standards to guide the mitigation); *Communities for a Better Environment v. City of Richmond* (2010) 184 Cal.App.4th 70, 92-93; *Oro Fino Gold Mining Corp. v. County of El Dorado* (1990) 225 Cal.App.3d 872, 884 ("There cannot be meaningful scrutiny [of an environmental review document] when the mitigation measures are not set forth at the time of project approval."). *Sundstrom v. County of Mendocino*

shortcomings in violation of these requirements (see MMRP [Tbl. 1]), for example (with emphasis added):

- MM-AQ/GHG (ATMP)-2 states “renewable diesel fuel in proposed Project construction off-road equipment and on-site, on-road trucks (i.e., on-site water trucks), as feasible based on commercial renewable fuel availability. For purposes of this measure, commercially-available renewable fuel is defined as renewable fuel that is available in the regional area at a comparable price (i.e., without a substantial premium) and not incurring substantial transportation costs (i.e., higher costs associated with having to transport it to the Project site over substantially longer distances from the supplier[s] of renewable diesel fuel) ... The requirement for each construction project shall include a target goal of the percentage of renewable diesel fuel demand that will be used ... If the contractor believes the target goal cannot be met, a detailed explanation of that determination must be provided and the contractor will specify the highest percentage of renewable diesel fuel that will be utilized, as well as an alternate target goal” (Emphasis added.) However, there is no metric to objectively determine what is and is not a “substantial premium.” So too, it leaves the discretion almost entirely up to the contractor to determine the appropriate “target goal” or “alternative target goal.” Arguably, any increase in costs could be characterized as higher and substantial premium.
- MM-AQ/GHG (ATMP)-3 calls for cool roof or solar to be installed but fails to determine how much GHG reduction should be achieved.
- MM-AQ/GHG (ATMP)-4 requires at least five-percent more electrical vehicle (“EV”) parking spaces, but is not tethered to any associated offsets of significant Project air/GHG emissions. There is no explanation why a mere five percent is all that is feasible.
- MM-AQ/GHG (ATMP)-5 requires “100 percent of LAWA's light-duty vehicle fleet to be all-electric by 2031” but fails to explain why sooner is not feasible, or at least explain why it cannot be required for Terminal 0 and 9 to be all-electric immediately on day-one of operations.
- MM-AQ/GHG (ATMP)-6 calls for solar panels on ATMP buildings and facilities only “where feasible” based on costs, and other factors. Yet again, no meaningful guidepost is provided of what is considered feasible or what costs would be considered prohibitive—instead these performance standards are deferred. Nor is there any explanation why non-ATMP buildings could not be retro-fitted with solar. The ATMP is part-and-parcel of LAWA operations and, thus, where the Project’s new buildings cannot be equipped with solar, there is no reason solar elsewhere at the Project site is infeasible to reduce LAX’s overall GHG footprint (which is expanded by the ATMP expansion).

(1988) 202 Cal.App.3d 296, 308 (A lead agency may only defer the formulation of mitigation measures when it possesses “meaningful information’ reasonably justifying an expectation of compliance.”); *Sacramento Old City Association v. City Council of Sacramento* (1991) 229 Cal.App.3d 1011, 1028-29 (mitigation measures may be deferred only “for kinds of impacts for which mitigation is known to be feasible”).

- MM-GHG (ATMP)-3 calls for the development/adoption of an airport-wide Green Procurement Policy, but no details are provided, timeline for its adoption, or even any performance goal of GHG reductions targeted by these measures.
- MM-GHG (ATMP)-4 calls for enhanced recycling but is in effect only after the Green Procurement Policy is adopted (again to an unknown future date).

Fourth, Commenters raised various proposed mitigation measures to reduce admitted significant air quality and GHG impacts as well as those impacts masked by the EIR. Generally, decisionmakers generally may not approve a project when feasible mitigation measures can substantially lessen or avoid such impacts. (See Pub. Res. Code § 21002; CEQA Guidelines § 15092(b)(2).) Here, however, the RTC dismisses numerous various mitigations measures (see FEIR, pp. F2-32 – F-2-51), for example:

- ATMP-PC035-86 was dismissed because the RTC claims LAWA does not own baggage tugs, belt loaders and alike. Yet, there is no explanation why such a requirement could not be included in any lease agreement at the new terminals.
- ATMP-PC035-87 was dismissed because the RTC claims the Project's energy consumption is not significant. Yet, this would off-set Project GHG emissions from other sources (i.e., airside emissions), and ultimately bring down the Project's overall GHG emission profile—the whole point of mitigation.
- ATMP-PC035-88 was dismissed because the RTC claims the Code may require more EV spaces. Yet, this ignores the measure aims to designate a percentage for actual EV carpool/vanpool vehicles, which is distinct from merely EV stalls.
- ATMP-PC035-91 was dismissed because the RTC ignores the need for shower/stalls and lockers at Terminal 0 and 9, which would further incentivize biking for employees and passengers.
- ATMP-PC035-93 was dismissed because the RTC claims reducing idling from five to two minutes would have negligible impact on construction emissions. Yet, there is no quantification or data to support this conclusory claim.
- ATMP-PC035-93 was dismissed because, in part, the RTC claims the Project would achieve LEED Silver. Yet, no explanation why LEED Gold or Platinum is not feasible to off-set the Project's GHG emission stemming from sources (e.g., air/mobile-sources) that are more difficult to mitigate.
- Furthermore, there is no discussion of the potential of purchasing Carbon Offsets, preferably to fund local and regional GHG-reduction projects, that would otherwise offset the Project's significant GHG emissions.

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C. EXPERTS SHOW EIR'S NOISE & TRAFFIC ANALYSIS IS FLAWED

Similarly, the RTC fails to adequately address Commenters' concerns with noise and traffic. As pointed out in the expert noise and traffic letters (see RK Engineering Letter [attached hereto as "**Exhibit E**"]; see also excerpts below [highlighted for your convenience]), the RTC's (see FEIR, p. F2-14 – F2-28, F2-594 – F2-600) noise analysis is flawed, such as:

The FEIR's Topical Response TR-ATMP-G-3 is insufficient for addressing the issue of analyzing project impacts beyond year 2028. The primary issue at hand is that neither the DEIR nor the FEIR disclose the full amount of additional growth in aircraft and passenger operations that will occur beyond Year 2028 as a result of the project. The DEIR is very clear that the purpose of the project is to "help LAX to prepare early for the continued aviation growth that is projected by LAWA, SCAG and the FAA to occur at LAX over the next several decades".¹ The project is needed because "future growth in aircraft operations at LAX is anticipated to be constrained by the operational limitations of LAX's four-runway airfield system; in turn, those operational constraints would also constrain future passenger growth."² The constrained conditions at LAX are expected to result in 112,159 fewer aircraft operations 27.7 million fewer annual passengers in year 2045, compared to unconstrained conditions.³ Yet airfield congestion is not projected to be a constraint on growth until after year 2028.⁴ Therefore, the full extent of project impacts will not be realized until after year 2028. Thus, questions remain unanswered, such as how much additional aircraft and passenger operation will occur as a result of the project in year 2045 and what are the impacts from the additional growth?

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Topical Response TR-ATMP-G-3, Page F2-16 states that, "it would be speculative to estimate environmental impacts of the proposed project some 25 years out (i.e. 17 years beyond when full operation of the project would occur [2028]). CEQA does not require this kind of speculation". This statement is not accurate. The long-range projections in the SCAG RTP are regularly used as the basis for CEQA analysis and have been developed in manner that is supported by substantial evidence. As has the FAA's Terminal Area Forecasts (TAF). The FEIR notes that CEQA does not require technical perfection in an EIR, but rather adequacy, completeness and a good-faith effort at full disclosure. Yet the FEIR continues to dismiss the prevalent issue of long-term impacts in Year 2045. Sufficient forecasting data is available to provide a reasonable assessment of future impacts and failure to do so does not constitute a good-faith effort.

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Topical Response TR-ATMP-G-3, Page F2-27 states that, "in 2033 the number of (passenger) trips would be the same as Without Project scenario." This statement contradicts the project description which indicates that the project will help accommodate future growth in aircraft operations over the next several decades. The FEIR has not provided any supplemental analysis to support the claim that number of trips would be the same in 2033. Hence, the VMT analysis for 2033 conditions is not supported by substantial evidence. As discussed in comment #2 above, the project trip generation would likely be substantially higher in year 2045 than year 2028 given the increased demand. Failing to disclose the full extent of project trip generation and project VMT results in under-reported impacts.

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ATMP-PC035-63. The FIER has not adequately addressed the issue of Classroom Disturbances. The issue remains that the FEIR inappropriately uses a blanket assumption of 29 dBA for reducing exterior-to-interior noise levels at all schools in the study area. The FEIR provides a reference to the LAWA Final EIR for LAX Specific Plan Amendment Study (SCH 1997061047), Section 4.10, Noise, January 2013. However, upon review of this study, no data was presented that showed the measured exterior-to-interior noise levels at any school. All that was found in this document was another unsubstantiated and unverifiable reference to noise measurements done by LAWA. By using an unverifiable assumption of 29 dBA for exterior-to-interior environments, the FEIR has not substantiated the screening criteria of 84 and 94 dBA exterior exposure for schools to be below 55 dBA and 65 dBA in the classroom, respectively. Absent substantial evidence, the FEIR should have assumed a maximum exterior-to-interior building noise reduction of 20 dBA with windows closed. The result is that not all schools exposed to noise levels above 55 dBA are identified.

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ATMP-PC-035-67. The FEIR does not consider the full extent of project noise impacts by not analyzing long-term conditions (i.e. year 2045). The FEIR's claim that it would be speculative to estimate environmental impacts in year 2045 goes against the intent of CEQA to provide a good-faith effort at full disclosure. The long-range projections in the SCAG RTP are regularly used as the basis for CEQA analysis and have been developed using substantial evidence. As has the FAA's Terminal Area Forecasts (TAF). Sufficient forecasting data is available to provide a reasonable assessment of future impacts. Furthermore, the FEIR continues to make the claim that the forecasted aircraft operations and passenger demand would not change as a result of the project. This claim is misleading because the FEIR is only basing this statement on the forecasted projections for year 2028, not year 2045, as described in Appendix B-2. Hence, it has not been demonstrated that the project will not change aircraft operations and passenger demand out to year 2045. If the project were to result in additional aircraft operations, then it would have a direct impact on noise to the surrounding community.

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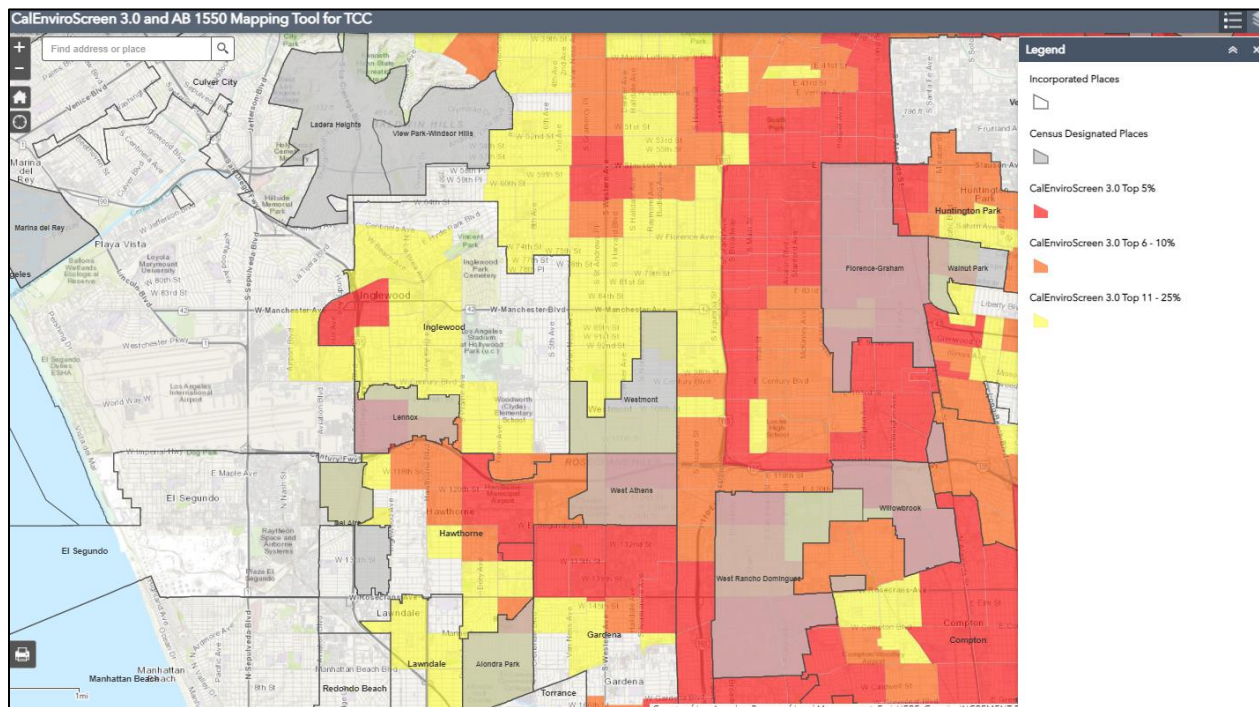
ATMP-PC035-71. The FEIR identifies potentially significant impacts from construction activities, which are expected to occur during the nighttime hours. Yet, the FEIR claims that active construction noise monitoring during nighttime hours is unwarranted and contrary to the noise metric that is the basis for determining significant impacts. This is inaccurate. The project's construction CNEL noise level can and should be calculated based on measured noise levels during all hours when construction activity is occurring, including nighttime hours. Active nighttime noise monitoring would help ensure actual construction noise levels (not based on computer models) do not exceed the nighttime noise standards in the City of Los Angeles or exceed existing ambient nighttime noise levels by more 5 dBA. The monitoring program should monitor and establish the adequate baseline noise levels for each receptor prior to commencing any activity. The monitoring program should also notify construction management personnel when noise levels approach and/or exceed the applicable thresholds. Construction activity should cease or be modified in order to ensure violations do not occur. Repeated violations should result in fines or other penalties.

D. INADEQUATE MITIGATION & OVERRIDING CONSIDERATIONS

Commenters raised concerns about the adequacy of any statement of overriding considerations. (See FEIR, pp. 549.) In response, the RTC merely cites to existing programs in place entirely independent of the ATMP (e.g., living wage requirements under Los Angeles Administrative Code § 10.37 et seq., LAWA's First Source Hiring Program, Certified Service Provider Program, etc.), which would occur with or without this new massive LAX expansion program. (See FEIR, pp. F2-549 – F2-551.) Essentially, the Project relies on existing benefits secured by existing programs entirely divorced from the new significant impacts caused by the ATMP expansion project.

The issues discussed herein indicate the EIR's truncated analysis relies on a misleading project description, abbreviated analysis, and ignores substantial evidence of significant impacts on air quality, climate change, VMT/traffic, noise and others. These flaws only subvert the ability of decision-makers to consider feasible mitigation measures and/or a reasonable range of alternatives that reduce the Project's impacts and the cumulative impact thereof. These effects will have an acute impact on disadvantaged communities within and near the LAX (see CalEnviroScreen figure following page).¹⁹

¹⁹ See also CalEnviroScreen, <https://www.arcgis.com/apps/webappviewer/index.html?id=ba698dc09c824da1b1ab3d0dd7f5bd54>.



To this end, we request LAWA consider mitigation measures that would reduce Project impacts suffered by EJ communities, which is documented in SEIU’s white paper (see Turbulence Ahead [attached hereto as “**Exhibit F**”) which contextualizes the Project impacts—whether admitted or masked by the ATMP’s environmental review—that will have real, long-term impacts on workers, families, and communities (particularly communities of color) well beyond 2028 or 2033. As explained in further detail in SEIU’s white paper, airport development has historically come at the expense of airline essential workers, which must not be repeated here for the LAWA’s ATMP—a historic expansion of LAX.

Commenters renew their call for the City to consider and explain how this Project will ensure better permanent service jobs for contracted airline service/hospitality workers—beyond those requirements or standards that already exist—as overriding considerations for the Project’s additional significant impacts caused by yet another massive expansion project at LAX. To this end, decisionmakers (i.e., the City, LAWA, FAA) should establish a stakeholders table that includes workers (and/or their representatives), environmental organizations, and other impacted communities to develop a set of firm commitments related to community benefit standards. These mitigation measures must include improved labor standards for airport workers to ensure economic benefits reach impacted communities, public transit commitments, and that revisit the Airport’s noise contour. Furthermore, decisionmakers should consider the following measures that ultimately serve to reduce the Project’s significant VMT, GHG, and mobile-emissions impacts:

- Expanded public transit service from neighborhoods where service/hospitality workers live to LAX at times needed for all shifts of work;
- Free or reduced transit passes for LAX workers;

- Free or reduced parking at LAX for workers (often parking is too expensive for them) who cannot take transit, as well as formulating incentives to carpool;
- Quality job creation for LAX workers that include:
 - Operational jobs that provide real living wages able to afford an apartment in Los Angeles, which housing experts estimate must be \$33/hour in 2015²⁰—LAX’s current living wage of \$17.00/hour is not enough—even when healthcare costs are not considered. This is necessary for workers to be able to afford to live near LAX and not commute longer distance that increase VMT and mobile-emissions; and
 - Operational jobs that provide real healthcare, which must be increased from the current LAX living wage law requiring merely \$5.55/hour for healthcare.²¹

E. SPECIFIC PLAN COMPLIANCE DETERMINATION FINDINGS CANNOT BE MADE

Under the LAX Specific Plan compliance Review, the City must find that: i) that the Project complies with the LAX Plan,²² including all design guidelines and standards under the LAX Specific Plan;²³ and ii) the environmental effects of the Project have been assessed in compliance with CEQA. (See LAX Specific Plan § 7.D.) Here, the abovementioned environmental shortcomings directly conflict with several goals and policies under the LAX Plan, for example:

- Goal 1.4: “Encourage other airports in the region to absorb growth in commercial service that is not essential to LAX’s international gateway role.” Here, the ATMP is expanding and accelerating growth at LAX out of proportion to regional goals.
- Goal 3.2: “Maximize, where feasible, the public benefits of airport development to adjacent land uses, such as direct economic benefits to local business districts, (i.e., Westchester Central Business District, Century Boulevard, El Segundo, Inglewood, etc.).” Here, the Project impacts these communities and lacks adequate/commensurate public benefits.

²⁰ Southern California Public Radio (89.3KPPC) (1/15/15) LA Residents Need To Make \$33 An Hour To Afford The Average Apartment (“You need to earn at least \$33 an hour — \$68,640 a year — to be able to afford the average apartment in Los Angeles County, according to Matt Schwartz, president and chief executive of the California Housing Partnership, which advocates for affordable housing.”), <https://www.scpr.org/blogs/economy/2015/01/15/17806/la-residents-need-to-make-34-an-hour-to-afford-ave/>.

²¹ California USSW service employee’s health and welfare trust fund has been quoted healthcare costs for a family Kaiser plan for LAX employees that cost up to \$9.40/hour for family coverage.

²² <https://www.lawa.org/-/media/lawa-web/lawa-our-lax/plan-and-ordiance/2017-lax-plan.ashx>.

²³ https://planning.lacity.org/odocument/8c371dd7-15a2-4d05-a8ee-25a78a6362d4/13-0285_ord_182542.pdf.

- Goal 4.2 – 4.4: “Where feasible, implement measures to improve air quality or limit the extent to which air quality is degraded by auto, aircraft, and construction equipment emissions. Incorporate applicable mitigation measures and master plan commitments from environmental analyses into project design and operation. Become a global leader in airport sustainability by integrating and reflecting sustainable practices into all aspects of airport operations and airport projects.” Here, the EIR fails to incorporate numerous mitigation measures to reduce said impacts as set forth in this letter.
- Goal 5.1- 5.3: “Minimize negative impacts to surrounding residential land uses. Maximize the public benefits of airport development, particularly to adjacent land uses. Provide opportunities for community participation in Master Plan Program decisions that could affect stakeholders by consultation with an LAX Master Plan Stakeholder Liaison who will communicate with stakeholders, including: adjacent residential and business communities; airline representatives; airport concessionaires; cargo and freight forwarders; labor representatives; business organizations and neighborhood councils.” Again, the EIR and Project Approvals here fail to incorporate numerous mitigation measures or provide a stakeholder working group to better craft adequate public benefits.

Until the issues discussed herein and elsewhere in the administrative record for this Project, the ATMP is inconsistent with LAX Plan goals and, thus, BOAC cannot make the findings required under the LAX Specific Plan.

F. CONCLUSION

In closing, Commenters urge BOAC and the City to stay all action on the Project until the issues discussed herein are resolved in a recirculated, CEQA-compliant Draft EIR. Faults in the current EIR include incomplete analysis and mitigation of air quality, GHG impacts, VMT, noise, and the EIR’s inadequate project description and absence of adequate overriding considerations.

This Project can and must do better. Rising inequality threatens Los Angeles’ prosperity. There are serious challenges in the region concerning affordable housing and living wage jobs — and COVID has made things even more difficult for our members. USWW and Local 11 work to stem this rising tide of inequality and fight to make our region a place of opportunity for all—a place where their members can work and afford to live. LAWA must better consider to what extent this Project will ensure better permanent service jobs for airline service workers who will feel the significant air quality, GHG, and other impacts caused by the Project. True community and worker benefits are needed if this Project is to be approved.

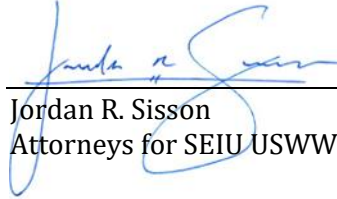
On behalf of Commenters, this office requests, to the extent not already on the notice list, all notices of CEQA actions and any approvals, determinations, or public hearings to be held on the Project under state or local law requiring local agencies to mail such notices to any person who has filed a written request for them. (Pub. Res. Code §§ 21092.2, 21167(f) and Gov. Code § 65092 and LAMC § 197.01.F.) Please send notice by electronic and regular mail to: Jordan R. Sisson, Esq., 801 S. Grand Avenue, 11th Fl., Los Angeles, CA 90017, jordan@gideonlaw.net.

/ / /

Thank you for your consideration of these comments. Commenters reserve the right to supplement these comments at future hearings and proceedings for this Project. (See *Galante Vineyards v. Monterey Peninsula Water Management Dist.* (1997) 60 Cal.App.4th 1109, 1120 [CEQA litigation not limited only to claims made during EIR comment period].) We ask that this letter and attachments are placed in the administrative record for the Project.

Sincerely,

LAW OFFICE OF GIDEON KRACOV



Jordan R. Sisson
Attorneys for SEIU USWW and UNITE HERE Local 11

Attachments:

Exhibit A:	Commenter's DEA Letter (7/27/21)
Exhibit B:	SWAPE DEA Letter (7/27/21)
Exhibit C:	CPRA Document Excerpt (email dated 11/13/20, SCAQMD Letter dated (4/12/21)
Exhibit D:	SBIA Draft DEA/GCD Excerpts (Jul. 2019)
Exhibit E:	RK Engineering Noise & Traffic Letters (9/13/21)
Exhibit F:	Turbulence Ahead (Jun. 2021)

EXHIBIT A

GIDEON KRACOV

Attorney at Law

801 South Grand Avenue
11th Floor
Los Angeles, California 90017

(213) 629-2071
Fax: (213) 623-7755

gk@gideonlaw.net
www.gideonlaw.net

March 15, 2021

VIA EMAIL & LAWA WEB-PORTAL:

Evelyn Quintanilla
Los Angeles World Airports
P.O. Box 92216
Los Angeles, California 90009-2216
equintanilla@lawa.org
<https://www.lawa.org/atmp/documents>

RE: DRAFT NEPA COMMENTS; LAX AIRFIELD AND TERMINAL MODERNIZATION PROJECT

Dear Ms. Quintanilla:

On behalf of Service Employees International Union, United Service Workers West (“**USWW**”) and UNITE HERE Local 11 (“**Local 11**”) (collectively “**Commenters**”), this Office provides the Federal Aviation Administration (“**FAA**”) and Los Angeles World Airports (“**LAWA**”) the following comments¹ regarding the Draft Environmental Assessment (“**DEA**”) and General Conformity Determination (“**GCD**”) for the above-referenced Airfield and Terminal Modernization Project (“**ATMP**” or “**Project**”) located at the Los Angeles International Airport (“**LAX**”).

In furtherance of the Project, the DEA/GCD is subject to environmental review under the National Environmental Protection Act, 42 U.S.C. § 4321 *et seq.* (“**NEPA**”), NEPA regulations,² and FAA guidelines³ – all obligations that are independent of the Project’s prior Draft Environmental Impact Report (“**DEIR**”) prepared pursuant the California Environmental Quality Act (“**CEQA**”).

In short, Commenters find that the DEA/GCD fails to provide an accurate project description or adequately analyze Project impacts and mitigation related to air quality, greenhouse gas (“**GHG**”) emissions, traffic impacts (including vehicle miles traveled [“**VMT**”]), noise, and the cumulative impacts thereof. Critically missing here is any post-2033 analysis, which masks direct impacts caused by the Project. So too, it is inherently inconsistent for LAWA to admit significant impacts under CEQA, but not here in this NEPA review. How is the public supposed to reconcile this blatant inconsistency?

¹ Please note that pages cited herein are either to the page’s stated pagination (referenced herein as “**p. ##**”) or the page’s location in the referenced PDF document (referenced herein as “**PDF p. ##**”).

² Regulations implementing NEPA, prepared by the Council of Environmental Quality (“**CEQ**”), are in Title 40 of Code of Federal Regulations (“**C.F.R.**”) § 1500 *et seq.*

³ Including FAA Order 1050.1.F Guidelines for Compliance with NEPA (“**Order 1050.1.F**”) and its respective Desk Reference (“**1050.1F Desk Reference**”), and FAA Order 5050.4B NEPA Implementing Instructions for Airport Actions (“**Order 5050.4B**”) and its respective Desk Reference (“**Airport Desk Reference**”), all incorporated herein in their entirety.

The issues discussed herein underscore Commentors' principal concern that LAWA and FAA have reviewed the Project under an abbreviated Environmental Assessment ("EA") rather than under a more comprehensive Environmental Impact Statement ("EIS"). As such, Commenters urge FAA to stay action on any Project approvals until the issues identified below have been addressed in a NEPA-compliant EIS.

This Project can and must do better. Rising inequality threatens Los Angeles' prosperity. There are serious challenges in the region concerning affordable housing and living wage jobs — and COVID has made things even more difficult for our members. USWW and Local 11 work to stem this rising tide of inequality and fight to make our region a place of opportunity for all—a place where their members can work and afford to live. LAWA must better consider to what extent this Project will ensure better permanent service jobs for airline service/hospitality workers near LAX who will feel the significant air quality, GHG, traffic, and other impacts caused by the Project. True community and worker benefits—as identified below—are needed if this Project is to be approved. These concerns directly relate to Environmental Justice ("EJ") issues, which are discussed at length in SEIU's white paper attached hereto.

This comment letter incorporates by this reference in their entirety Commenters' prior comment letter dated March 15, 2021 (attached hereto as "**Attachment 1**"), inclusive of expert traffic, noise, and air quality/GHG comment letters (attached thereto as Exhibits A through C, respectively). Additionally, Commenters' incorporates expert air quality/GHG comments by SWAPE dated July 27, 2021 (attached hereto as "**Attachment 2**"), as well as the SEIU's EJ white paper (attached hereto as "**Attachment 3**").

I. STANDING OF COMMENTERS

USWW represents more than 40 thousand property service workers across California, including approximately 3,700 employees at LAX (pre-COVID) with an additional 1,300 security/janitorial workers living within approximately six miles of LAX. USWW and its sister local unions have many members, including public sector and healthcare workers, who reside and work in Los Angeles where this Project is located.

Local 11 represents more than 25,000 workers employed in hotels, restaurants, airports, sports arenas, and convention centers throughout Southern California and Phoenix, Arizona—including more than 5,600 workers at LAX and 900 in the Airport Hospitality Enhancement Zone ("**AHEZ**") (pre-COVID).

Members of USWW and Local 11 join together to fight for improved living standards and working conditions. Making these comments to public officials in connection with matters of public concern compliance with applicable zoning rules and compliance with environmental laws A is protected by the First Amendment, the *Noerr-Pennington* doctrine, and are within the core functions of the unions.

II. THE DEA FAILS TO SATISFY NEPA REQUIREMENTS

A. NEPA'S PURPOSE

NEPA is "our basic national charter for protection of the environment." 40 C.F.R. § 1500.1(a). As such, NEPA requires federal agencies to consider environmental harms and the

means of preventing them in an EIS before approving “major Federal actions significantly affecting the quality of the human environment.” 42 U.S.C. § 4332(2)(C). NEPA “emphasizes the importance of coherent and comprehensive up-front environmental analysis to ensure informed decisionmaking to the end that the agency will not act on incomplete information, only to regret its decision after it is too late to correct.” *Blue Mountains Biodiversity Project v. Blackwood*, 161 F.3d 1208, 1216 (9th Cir. 1998) (internal citations omitted); *see also* FAA’s own Order 5050.4B ¶ 2 (“In approving the Federal actions necessary to support an airport development proposal, the approving FAA official must consider environmental effects as fully and as fairly as it does technical, economic, and other non-environmental considerations.”). Only after thoroughly evaluating a reasonable range of alternatives and the environmental impacts associated with each in compliance with NEPA may an agency determine its preferred course of action. This serves NEPA’s broad purpose “to promote efforts which will prevent or eliminate damage to the environment.” 42 U.S.C. § 4321. As explained by the *Kern v. Bureau of Land Mgmt.* court:

“[NEPA] has ‘twin aims. First, it places upon [a federal] agency the obligation to consider every significant aspect of the environmental impact of a proposed action. Second, it ensures that the agency will inform the public that it has indeed considered environmental concerns in its decisionmaking process.’” *Kern v. Bureau of Land Mgmt.*, 284 F.3d 1062, 1066 (9th Cir. 2002) (quoting *Balt. Gas & Elec. Co. v. Natural Res. Def. Council, Inc.*, 462 U.S. 87, 97 (1983)).

The purpose of an environmental assessment is to determine whether the federal action is significant enough to require an environmental impact statement. If found significant, an environmental impact statement must be prepared. *See* 40 C.F.R. § 1508.22. As explained by the *Anderson v. Evans* court:

“ ... girth is not a measure of the analytical soundness of an environmental assessment. No matter how thorough, an [environmental assessment] can never substitute for preparation of an [environmental impact statement], if the proposed action could significantly affect the environment.” *Anderson v. Evans*, 371 F.3d 475, 494 (9th Cir. 2002).

To this end, courts reviewing the adequacy of NEPA documents apply the “hard look” doctrine, asking whether “the agency [took] a ‘hard look’ at the problem” before taking action. *Maryland-National Capital Park & Planning Com. v. U. S. Postal Service*, 487 F.2d 1029, 1040 (D.C. Cir. 1973). As recently explained by the Ninth Circuit:

“Taking a ‘hard look’ includes ‘considering all foreseeable direct and indirect impacts. Furthermore, a “hard look” should involve a discussion of adverse impacts that does not improperly minimize negative side effects.’ [Citation]. ‘[G]eneral statements about possible effects and some risk do not constitute a hard look absent a justification regarding why more definitive information could not be provided.’ [Citation].” *League of Wilderness Defenders-Blue Mts. Biodiversity Project v. United States Forest Serv.*, 689 F.3d 1060, 1075 (9th Cir. 2012) (emph. added).

This “hard look” doctrine is also embodied in applicable FAA guidelines, which clearly states that the “EA must show that FAA took the required ‘hard look’ at these impacts to support an FAA decision to prepare a [Finding of No Significant Impact [(“FONSI”)] or an EIS.” Order 5050.4B ¶ 706.f; *see also id.*, Intro, p. 2 (an EA or EIS must show that “FAA officials have taken ‘a hard look’ at the environmental impacts a proposed action and its reasonable

alternatives would cause.”). Hence, before adopting a mitigated FONSI, FAA must take a “‘hard look’ at the problem” after it has “identified the relevant areas of environmental concern” Order 1050.1F ¶ 6-2.3.

B. FAA SHOULD CONSIDER THIS PROJECT UNDER AN EIS

NEPA requires FAA to prepare a full EIS rather than an EA where the proposed major federal action would “significantly affect[] the quality of the human environment.” 42 U.S.C. § 4332(C). Such is the case here.

Under NEPA regulations, the significance of an action is determined by evaluating both the context of the action and the intensity of the impact, requiring agencies to consider “several contexts such as society as a whole (human, national), the affected region, the affected interests, and the locality ... [including] [b]oth short- and long-term effects are relevant.” 40 C.F.R. § 1508.27(a). To this end, 40 C.F.R. § 1508.27(b) provides ten factors to be considered in evaluating significance, including but not limited to:

“(1) Impacts that may be both beneficial and adverse. A significant effect may exist even if the Federal agency believes that on balance the effect will be beneficial.

(2) The degree to which the proposed action affects public health or safety.

* * *

(4) The degree to which the effects on the quality of the human environment are likely to be highly controversial.

(5) The degree to which the possible effects on the human environment are highly uncertain or involve unique or unknown risks.

(6) The degree to which the action may establish a precedent for future actions with significant effects or represents a decision in principle about a future consideration.

(7) Whether the action is related to other actions with individually insignificant but cumulatively significant impacts. Significance exists if it is reasonable to anticipate a cumulatively significant impact on the environment. Significance cannot be avoided by terming an action temporary or by breaking it down into small component parts.”

* * *

(10) Whether the action threatens a violation of Federal, State, or local law or requirements imposed for the protection of the environment.” 40 C.F.R. § 1508.27(b) (emph. added)

If any one or more of these factors are present, an EIS is required. See *Public Citizen v. Department of Transportation*, 316 F.3d 1002, 1023 (9th Cir. 2003) (“If [the agency’s] action is environmentally ‘significant’ according to any of these criteria, then [the agency] erred in failing to prepare an EIS.”); *Ocean Advocates v. U.S. Army Corps of Eng’rs*, 402 F.3d 846, 865 (9th Cir. 2004). “If any ‘significant’ environmental impacts might result from the proposed agency action then an

EIS must be prepared *before* agency action is taken.” *Grand Canyon Trust v. Federal Aviation Administration*, 290 F.3d 339, 340 (D.C.Cir. 2002) (emph. original).

Here, the issues discussed in this comment letter implicate many of the above-listed factors. As a threshold matter, LAWA has already taken the position that, for purposes of its CEQA review, the Project would have “significant unavoidable impacts” on air quality, GHGs, noise, and transportation (see Draft EIR,⁴ pp. 1-24 – 1-25; see also figure below). *This admission of significant impacts in the CEQA context at minimum establishes a significant impact “may” exist by the Project and “highly controversial” under the above-mentioned factors.* Additionally, as discussed further below (infra Section II.C & II.D), this Project may have cumulative impacts that are masked but for FAA’s failure to examine the full extent of Project impact in post-2033 years. Hence, because multiple significance factors listed under the NEPA regulations are present here, the Project’s impacts may be significant and, thus, an EIS is appropriate here. See 42 U.S.C. § 4332(C).

1.4.1 Significant Unavoidable Impacts

Air Quality

- Construction emissions (Project-related and cumulatively considerable contributions) of the following pollutants:
 - Carbon monoxide (CO) (for two 4.5-month periods)
 - Volatile organic compounds (VOC) (for two 4.5-month periods)
 - Nitrogen oxides (NO_x)
 - Sulfur oxides (SO_x) (for two 4.5-month periods)
- Operational emissions (Project-related and cumulatively considerable contributions) of the following pollutants:
 - NO_x
 - SO_x
 - Respirable particulate matter (PM₁₀)
 - Fine particulate matter (PM_{2.5})
- Operational concentrations (Project-related and cumulatively considerable contributions) of the following pollutants:
 - PM₁₀

* * *

Greenhouse Gas Emissions

- Net increase in GHG emissions from construction and operations, combined
- Cumulatively considerable contribution to GHG emissions
- Project-related inconsistency with plans/policies related to GHG emission reductions

Noise

- Aircraft Noise
 - Construction
 - Increased noise levels at exterior use areas of noise-sensitive uses to 65 CNEL or above (for two 4.5-month periods)
 - Temporary increase in aircraft noise levels of 1.5 dBA or more within the 65 CNEL contour compared to baseline conditions (for two 4.5-month periods)
 - Operations
 - Increased noise levels at exterior use areas of noise-sensitive uses to 65 CNEL or above

Transportation

- Passenger VMT
- Short-term and Long-term induced VMT
- Cumulatively considerable contribution to VMT impacts

⁴ See, <https://cloud1lawa.app.box.com/s/4bt0hi96rbp3syg5topyhuuecbq5mtnx>.

C. THE FAA MUST PROVIDE ALL RELEVANT DOCUMENTS AND SUFFICIENT INFORMATION ABOUT THE ENTIRE PROJECT

A NEPA document must provide adequate information for decision-makers or the public to accurately assess the environmental impact of a proposed project. *Natural Res. Def. Council v. U.S. Forest Serv.*, 421 F.3d 797, 811 (9th Cir. 2005), citing *Animal Def. Council v. Hodel*, 840 F.2d 1432, 1439 (9th Cir. 1988) (“Where the information in the initial EIS was so incomplete or misleading that the decisionmaker and the public could not make an informed comparison of the alternatives, revision of an EIS [was] necessary to provide a reasonable, good faith, and objective presentation of the subjects required by NEPA.”). As the court in *Trout Unlimited v. Morton* found:

“... an EIS is in compliance with NEPA when its form, content, and preparation substantially (1) provide decision-makers with an environmental disclosure sufficiently detailed to aid in the substantive decision whether to proceed with the project in the light of its environmental consequences, and (2) make available to the public, information of the proposed project’s environmental impact and encourage public participation in the development of that information.” *Trout Unlimited v. Morton*, 509 F.2d 1276, 1283 (9th Cir. 1974) (emph. added).

To this end, NEPA documents must disclose all referenced or underlying documents, and such documents need to be made available for public review. 5 U.S.C. § 4332(2)(C) (stating that “Copies of such statement . . . shall be made available . . . to the public.”); 40 C.F.R. § 1502.21 (“No material may be incorporated by reference unless it is reasonably available for inspection by potentially interested persons within the time allowed for comment.”); 40 C.F.R. § 1506.6(f) (“environmental impact statements, the comments received, and any underlying documents available to the public”); 43 C.F.R. § 1610.2 (“Supporting documents to a resource management plan shall be available for public review at the office where the plan was prepared.”). Thus, supporting materials that were not made readily available to the public cannot be relied upon to defend the adequacy of a NEPA document. *California v. Block*, 690 F.2d 753, 765 (9th Cir. 1982) (“Given this inaccessibility, the worksheets may not be considered in determining the . . . Final EIS’s adequacy.”). Quite simply, agencies must provide the “hard data” on which the NEPA documents bases its conclusions. *Idaho Sporting Congress v. Thomas*, 137 F.3d 1146 (9th Cir. 1998). Failure to do so only circumvents public scrutiny of the project, which is “essential to implementing NEPA.” 40 C.F.R. § 1500.1(b).

So too, the FAA guidelines stress adequate disclosure of critical documents relied upon in a NEPA document. See Order 5050.4B ¶ 1007.m (“Circulation and review are important parts of NEPA’s attempt to ensure informed decisionmaking. Appendices improve reader understanding of the analyses and make the document easier to review. Since information in an appendix is extremely relevant to the EIS and FAA’s decision process, the responsible FAA official must circulate the material with the EIS or make the appendices available to the public (40 C.F.R. 1502.18(d)) ... Such material should be made reasonably available to the public for inspection during the comment period (40 C.F.R. § 1502.2).”)

Here, a reoccurring criticism in LAWA’s CEQA review was its narrow, self-serving timeline of assessing the Project’s impacts to only 2028. There, the DEIR anticipates that the current airport configuration is a “constraint on growth” until after 2028 (DEIR, p. 2-17), but the ATMP’s

improvements (e.g., extending Terminal 1 and constructing a new passenger terminal with additional gates) (DEIR, pp. 2-1, 2-9, Fig. 2-1) were characterized as merely “modernization” of LAX to accommodate continued growth in airline passengers over “several decades” (DEIR, p. 2-18). There, by arbitrarily using 2028 as the study year (i.e., when project construction is to end), the DEIR ignored the impacts associated with nearly 45 million annual passengers (“MAP”) anticipated post-2028 (see DEIR, APP-B [110.8 MAP in 2028 to 155.6 MAP in year 2045]). Essentially, the DEIR ignored the entire operational and longer-term impacts of the Project (i.e., post-2028).⁵ As pointed out by our experts in the CEQA process, the failure to consider longer-term impacts of the 2028 masked Project impacts on traffic, noise, air quality, and GHGs (see Attachment 1 [Exhibits A-C]; see also excerpts below):

Figure 1: Expert Traffic Comments on CEQA DEIR (Att. 1, Exh. A)

2. The DEIR does not disclose the full extent of the project’s transportation impact by failing to analyze long-term conditions (i.e. year 2045). The transportation analysis is based on project impacts in year 2028, yet as discussed in Section 2.3.1.2.2, and supported by the data in Appendix B, “airfield congestion is not projected to be a constraint on growth until after year 2028”. Hence, one of the primary purposes of the project is to reduce potential constraints on growth after year 2028. This is evident when looking at the Activity Forecast Report, provided in Appendix B, Table 3-5, which shows that the total unconstrained annual passengers at LAX will grow from 110.8 Million Annual Passengers in year 2028 to 155.6 Million Annual Passengers in year 2045. The result is that the project would cause a substantially greater increase in VMT and traffic generation, compared to “without” project conditions, after year 2028. Yet the DEIR conceals the long term impacts of the project by only analyzing near-term conditions in year 2028. The final EIR should address all reasonably foreseeable long term impacts (i.e. year 2045) from the project, as is reported elsewhere in the DEIR.

Figure 2: Expert Noise Comments on CEQA DEIR (Att. 1, Exh. B)

5. Section 4.7.1.5, Project Impacts. The DEIR fails to consider the full extent of project noise impacts by not analyzing long-term conditions (i.e. year 2045). The buildout noise analysis year in the DEIR is year 2028, yet as shown in Appendix B, Table 3-7, LAX is expected to generate an additional 165,316 annual aircraft operations in Year 2045, as compared to Year 2028. This would result in substantially higher noise levels and additional impacts beyond what has been analyzed in the EIR. To put it into perspective, the Hollywood Burbank Airport, which is one of the top 10 busiest airports in the State of California², generated approximately 146,095 total annual aircraft operations last year³. Thus, a significant amount of planned growth, which can be directly and/or cumulatively attributed to the project, was not accounted for in the DEIR.

⁵ See e.g., DEIR, p. 4.1.1-34 & 36 (air impacts associated only for 2028 modeled).

Figure 3: AQ/GHG Expert Comments on CEQA DEIR (Att. 1, Exh. C)**Failure to Consider Long-Term Impacts**

The DEIR fails to consider the full extent of the Project's operational air quality impacts by failing to analyze long-term conditions. The buildout year analyzed in the DEIR's air quality analysis is 2028 (see excerpt below) (p. 4.1.2-19, Table 4.1.2-4).

Table 4.1.2-4 Incremental Cancer Risks for Maximally Exposed Individuals for 2028 With Project Operations Compared to 2018 Baseline and 2028 Without Project Compared to 2018 Baseline		
Receptor Type	Incremental Cancer Risks ^{1,2,3,4} (per million people)	
	2028 With Project Operations Compared to 2018 Baseline	2028 Without Project Operations Compared to 2018 Baseline
Off-Airport Worker, 25 years	5	-0.2
Adult Resident, 70 years	-4	-4
Adult Resident, 30 years	-4	-3
Child Resident, 9 years	-3	-2
School Child, 12 years	-1	-0.9

Source: Appendix C.6 of this EIR.

Notes:

- ¹ It was assumed that for operations, receptors are exposed to operations-related TAC beginning in 2028 and continuing through the remainder of the receptors' exposure periods.
- ² Maximally Exposed Individual (MEI) locations are shown on Figure 4.1.2-4.
- ³ The MEI value for the school child cancer risk is at a residential/commercial grid location and not at an existing school location. The highest estimated cancer risk for school children at an existing school is estimated to be -1 in 1 million at Cowan Avenue Elementary School (the school at grid point 176).
- ⁴ Negative values indicate a beneficial impact.

However, as demonstrated in the Activity Forecasts and Operational Analyses, provided as Appendix B to the DEIR, the Project is expected to generate an additional 165,316 annual aircraft operations in 2045, when compared to 2028 (see excerpt below) (p. 3-12, Table 3-7).

TABLE 3-7 HISTORICAL AND UNCONSTRAINED FORECAST TOTAL UNSCHEDULED OPERATIONS

FISCAL YEAR ¹	AIRCRAFT OPERATIONS		SHARE
	UNSCHEDULED ²	TOTAL ³	UNSCHEDULED ⁴
Unconstrained Forecast ⁵			
2018	71,454	714,543	10.0%
2023	75,190	751,901	10.0%
2028	79,984	799,843	10.0%
2033	85,347	853,471	10.0%
2038	90,240	902,401	10.0%
2043	94,735	947,345	10.0%
2045	96,516	965,159	10.0%

This flaw is largely repeated in the DEA, which equally characterizes the Project as merely "enhancing the safety and operational management of aircraft movement ... providing a new concourse and terminal to improve the quality of the passenger experience and efficiency of passenger processing ... improving the roadway system ..." (DEA, p. 1-13; see also p. 1-6 [characterizing Project as being needed for safety and meet FAA airport design standards]). Under

the DEA, current airport configuration is a “constraint” on growth maxing out to 127.9 MAP in 2045 (see DEA, Appendix A, Tbl. 4-1; see also figure below). However, under the unconstrained forecast, this level of activity will not be reached until around 2034-2035 (id., at Tbl. 3-8; see also figure below).

Figure 4: Constrained Demand Scenario Forecast Total Annual Passengers And Operations – Fiscal Years 2018-2045 (DEA, App. A, Tbl. 4-1)

FISCAL YEAR ¹	MILLION ANNUAL PASSENGERS	ANNUAL OPERATIONS
2018	86.1	715,000
2019	88.3	722,000
2020	90.6	729,000
2021	92.9	736,000
2022	95.3	744,000
2023	97.7	752,000
2024	100.3	760,000
2025	102.9	769,000
2026	105.5	778,000
2027	108.1	789,000
2028	110.8	800,000
2029	113.4	809,000
2030	115.6	813,000
2031	116.6	817,000
2032	117.6	821,000
2033	118.5	824,500
2034	119.5	828,000
2035	120.3	831,000
2036	121.2	834,000
2037	122	837,000
2038	122.9	840,000
2039	123.7	842,500
2040	124.5	845,000
2041	125.3	847,500
2042	126.1	849,500
2043	126.8	851,500
2044	127.4	852,500
2045	127.9	853,000
CAGR		
2018–2045	1.5%	0.7%

NOTES:

CAGR – Compound Annual Growth Rate

1 The fiscal year is July 1 through June 30.

SOURCE: Ricondo & Associates, Inc., May 2019 (based on results of forecast analyses).

Figure 5: Unconstrained Activity Forecast Total Annual Passengers And Operations – Fiscal Years 2018- 2045 (DEA, App. A, Tbl. 3-8)

FISCAL YEAR ¹	MILLION ANNUAL PASSENGERS	ANNUAL OPERATIONS
2018	86.1	715,000
2019	88.3	722,000
2020	90.6	729,000
2021	92.9	736,000
2022	95.3	744,000
2023	97.7	752,000
2024	100.3	760,000
2025	102.9	769,000
2026	105.5	778,000
2027	108.1	789,000
2028	110.8	800,000
2029	113.4	811,000
2030	116.0	822,000
2031	118.6	833,000
2032	121.2	843,000
2033	123.8	853,000
2034	126.5	864,000
2035	129.1	874,000
2036	131.7	883,000
2037	134.3	893,000
2038	137.0	902,000
2039	139.6	912,000
2040	142.2	921,000
2041	144.8	930,000
2042	147.5	939,000
2043	150.1	947,000
2044	152.8	956,000
2045	155.6	965,000
CAGR		
2018–2045	2.2%	1.1%

NOTES:

CAGR: Compound Annual Growth Rate

¹ The fiscal year is July 1 through June 30.

SOURCE: Ricondo & Associates, Inc., January 2018 (based on results of forecast analyses).

Thus, while the DEA marginally increases the analysis horizon year to 2033 (see DEA, p. 3-2), it still fails to consider the additional volume of air travel that the Project will allow (i.e., 27.7 MAP above the constraint volume in the year 2045). This analysis of additional passenger volume by releasing “constraints” under the Project improvements is entirely missing, which masks long-term air quality and GHG impacts of the Project, as noted by expert comments (See Attachment 2, pp. 2-3; see also excerpts provided below).

Failure to Consider Long-Term Air Quality Impacts

The Draft EA fails to consider the full extent of the Project’s operational air quality impacts by failing to analyze long-term conditions. The buildout years analyzed in the Draft EA’s air quality analysis is 2028 and 2033 (see excerpts below) (p. 4-8, Table 4.1-5, Table 4.1-6).

Table 4.1-5
2028 Proposed Project Total Emissions Inventory

Scenario	CO (tpy)	VOC (tpy)	NO _x (tpy)	SO _x (tpy)	PM ₁₀ (tpy)	PM _{2.5} (tpy)
Aircraft & APU	5,594	607	5,513	488	52	52
GSE	730	8	69	<1	1	1
Traffic & Parking	2,385	67	283	9	490	149
Stationary	1	1	1	<1	<1	<1
Construction in 2028 ¹	8	1	3	<1	<1	<1
Total²	8,718	684	5,869	497	543	202
2028 No Action Alternative Emissions	8,670	678	5,868	498	535	200
2028 Net Emissions ³	48	6	2	(1)	8	2
General Conformity <i>de minimis</i> Threshold	100	10	10	70	100	70
Exceeds <i>de minimis</i> Threshold?	No	No	No	No	No	No

* * *

Table 4.1-6
2033 Proposed Project Operational Emissions Inventory

Scenario	CO (tpy)	VOC (tpy)	NO _x (tpy)	SO _x (tpy)	PM ₁₀ (tpy)	PM _{2.5} (tpy)
Aircraft & APU	5,795	622	6,189	533	58	58
GSE	355	4	30	<1	1	<1
Traffic & Parking	2,268	64	259	9	522	158
Stationary	1	1	1	<1	<1	<1
Total¹	8,419	691	6,479	542	581	216
2033 No Action Alternative Emissions	8,396	682	6,493	545	576	217
2033 Net Emissions ²	23	9	(13)	(3)	5	(1)
General Conformity <i>de minimis</i> Threshold	100	10	10	70	100	70
Exceeds <i>de minimis</i> Threshold?	No	No	No	No	No	No

Source: **Appendix E** of this EA.

Notes:

¹ Totals may not add exactly because of rounding.

² Net emissions shown in parentheses are negative values.

Key:

APU – auxiliary power unit GSE – ground support equipment tpy – tons per year
CO – carbon monoxide NO_x – nitrogen oxides PM₁₀ – respirable particulate matter
PM_{2.5} – fine particulate matter SO_x – sulfur oxides

However, as demonstrated in the Activity Forecasts and Operational Analyses, provided as Appendix B to the DEIR, the Project is expected to generate an additional 165,316 annual aircraft operations in 2045, when compared to 2028 (see excerpt below) (p. 3-12, Table 3-7).

TABLE 3-7 HISTORICAL AND UNCONSTRAINED FORECAST TOTAL UNSCHEDULED OPERATIONS

FISCAL YEAR ¹	AIRCRAFT OPERATIONS		SHARE
	UNSCHEDULED ²	TOTAL ³	UNSCHEDULED ⁴
Unconstrained Forecast ⁵			
2018	71,454	714,543	10.0%
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2028	79,984	799,843	10.0%
2033	85,347	853,471	10.0%
2038	90,240	902,401	10.0%
2043	94,735	947,345	10.0%
2045	96,516	965,159	10.0%

Furthermore, the Draft EA states:

* * *

“Over the long-term (such as the 2018-2045 forecast period analyzed in the LAX Airfield and Terminal Modernization Project Forecast Activity Report), demand for air travel and airline activity is expected to grow” (p. 1-4).

Thus, the Draft EA and the DEIR’s Activity Forecasts and Operational Analyses indicate a significant amount of planned growth, which was not accounted for in the Draft EA’s air quality analysis. By failing to analyze the Project’s long-term operational air quality impacts, the Draft EA fails to consider the full extent of the Project’s operational air quality impacts and should not be relied upon.

In sum, due to the unique nature of the Project, the selection of 2028 and 2033 as a horizon analysis year is entirely arbitrary because the operational impacts will continue far longer in the future. By failing to provide this post-2033 analysis, the DEA violates NEPA’s requirement of providing adequate and sufficiently detailed information to decision-makers that accurately assess the environmental impacts of the Project that is intended to guide the wisdom of proceeding with the ATMP. *See Natural Res. Def. Council, supra*, 421 F.3d at 811; *see also Trout Unlimited, supra*, 509 F.2d at 1283. LAWA and FAA must take a hard look at the Project’s longer-term environmental impacts directly resulting from approval of the ATMP.

D. THE FAA CANNOT IGNORE CUMULATIVE IMPACTS

“The importance of analyzing cumulative impacts in [environmental assessments] is apparent[,]” and courts will find NEPA review deficient if it fails to include an adequate cumulative impact analysis. *Kern v. United States Blm.*, 284 F.3d 1062, 1076 (9th Cir. 2002). A cumulative impact “is the impact on the environment which results from the incremental impact of the action when added to other past, present, and reasonably foreseeable future actions regardless of what agency (Federal or non-Federal) or person undertakes such other actions. Cumulative impacts can result from individually minor but collectively significant actions taking place over a period of time.” 40 C.F.R. § 1508.7 (emph. added).

Here, as discussed above, the DEA utilizes an arbitrarily narrow time period (i.e., up to 2033) that ignores the 27.7 MAP growth at LAX directly linked to this Project. Essentially, the DEA breaks the Project “into small component parts” that entirely ignores all post-2033 operations,⁶ which are reasonably anticipated and can lead to significant cumulative impacts. 40 C.F.R. § 1508.27(b). This is inconsistent with NEPA (see 40 C.F.R. §§ 1508.7, 1508.27(b)), which can only be cured by taking a hard look at the cumulative, longer-term impacts of approving the ATMP—including all of the direct/indirect air quality, GHG, traffic, noise, and other impacts associated with expanding operations by 27.7 MAP at LAX.

E. AIR QUALITY & GHG IMPACTS ARE UNDERESTIMATED IN THE DEA

During the EA review process, the FAA has the affirmative duty to consider “[w]hether the action threatens a violation of Federal, State, or local law or requirements imposed for the protection of the environment.” 40 C.F.R. § 1508.27(b)(10). Failure to consider these environmental laws in the NEPA process is “unreasonable” and requires the agency to prepare an EIS. *Sierra Club v. U.S. Forest Service*, 843 F.2d 1190, 1193 (9th Cir. 1988). The FAA’s own NEPA guidance shows that a Project’s environmental review must include an analysis whether “an action threatens a violation of Federal, state, or local law or requirements imposed for the protection of the environment.” FAA

⁶ See e.g., DEA, p. 4-8 – 4-10 (Tbls. 4.1-5 through & 4.1.8, failing to apply de minimis thresholds to increase air quality emissions in post-2033 or peak operational concentrations post-2033).

Order 1015.1F, at 4.3-2. In fact, the FAA's Desk Reference Guide to interpreting its Order 1015.1F includes the following guidance:

1.1.2. State/Local Air Quality Requirements: In addition to Federal requirements, there often are state and/or local air quality requirements that are applicable to a project. These requirements vary widely from location to location, and should be addressed on a project-by-project basis. Examples of state or local air quality requirements that may be applicable are more stringent state and local ambient air quality standards, Federally-approved state general conformity rules, and indirect source thresholds. Applicable state and local requirements should be identified as early as possible during the NEPA scoping process and described in the NEPA documentation.

Here, the air quality analysis in the DEA and GCD is flawed for several reasons. *First, the DEA concedes that violations of California Ambient Air Quality Standards ("CAAQS") will occur* (DEA, p. 4-3) *but wholly ignores assessing the impact of this Project on achieving these state standards* (see DEA, p. 4-6 [Tbl. 4.1-3]; see also figure below).

Pollutant and NAAQS or CAAQS ¹	Averaging Period	Construction ($\mu\text{g}/\text{m}^3$)	Background ($\mu\text{g}/\text{m}^3$)	Total ($\mu\text{g}/\text{m}^3$) ²	Threshold ($\mu\text{g}/\text{m}^3$) ³	Significant?
CO – NAAQS	1-hour	817	2,406	3,223	40,000	No
CO – NAAQS	8-hour	137	1,833	1,970	10,000	No
NO ₂ – NAAQS	1-hour	172	Included ³	172	188	No
NO ₂ – NAAQS	Annual	8	19	27	100	No
SO ₂ – NAAQS	1-hour	9	18	28	196	No
SO ₂ – NAAQS	3-hour	10 ⁴	31 ⁴	41	1,300	No
PM ₁₀ – NAAQS	24-hour	3	46	49	150	No
PM _{2.5} – NAAQS	24-hour	0.9	32.3	33.2	35	No
PM _{2.5} – NAAQS	Annual	0.3	10.9	11.2	12	No
CO – CAAQS	1-hour	817	2,406	3,223	23,000	--- ⁵
CO – CAAQS	8-hour	137	1,833	1,970	10,000	--- ⁵
NO ₂ – CAAQS	1-hour	110	154	264	339	--- ⁵
NO ₂ – CAAQS	Annual	8	19	27	57	--- ⁵
SO ₂ – CAAQS	1-hour	10	31	41	655	--- ⁵
SO ₂ – CAAQS	24-hour	2	10	13	105	--- ⁵
PM ₁₀ – CAAQS	24-hour	3.2	46.5	49.8	50	--- ⁵
PM ₁₀ – CAAQS	Annual	0.8	21.6	22.4	20	--- ⁵
PM _{2.5} – CAAQS	Annual	1.1	11	12.1	12	--- ⁵

Source: Appendix E of this EA.

Notes:

- NAAQS and CAAQS often have the same averaging period, but usually have different standard values and may have different methods of determining compliance with each standard.
- Values may not add due to rounding.
- Background NO₂ concentrations were included in the AERMOD input file. Thus, AERMOD directly calculated the total of Proposed Project plus background.
- The 3-hour SO₂ Proposed Project and background concentrations were assumed to be the same as the highest 1-hour SO₂ Proposed Project and background concentrations, respectively.
- As noted in Section 4.1.2, the significance determination is based on the NAAQS only, the CAAQS comparison is provided for informational purposes only.

Key:

$\mu\text{g}/\text{m}^3$ – micrograms per cubic meter
CO – carbon monoxide
NO₂ – nitrogen dioxide
PM_{2.5} – fine particulate matter
CAAQS – California Ambient Air Quality Standard
NAAQS – National Ambient Air Quality Standard
PM₁₀ – respirable particulate matter
SO₂ – sulfur dioxide

Admittedly, the Project will lead to excessive emissions in 2028 and 2033 for some CAAQS (see DEA, Tbls. 4.1-7 and 4.1-8; see also figures below). While the DEA attempts to explain where these emissions come from (DEA, p. 4-10), there is absolutely no explanation how the Project does not conflict with the State's ability to achieve these important standards, particularly California's two ozone CAAQS (i.e., 1-hour and 8-hour ozone standards). This violates NEPA because the DEA fails to take a hard look at an important aspect of the Project's air quality impacts.

Table 4.1-7 2028 Proposed Project Peak Operational Concentrations ($\mu\text{g}/\text{m}^3$)						
Pollutant and NAAQS or CAAQS ¹	Averaging Period	Operation ($\mu\text{g}/\text{m}^3$)	Background ($\mu\text{g}/\text{m}^3$)	Total ($\mu\text{g}/\text{m}^3$) ²	Threshold ($\mu\text{g}/\text{m}^3$) ³	Significant?
CO – NAAQS	1-hour	877	2,406	3,283	40,000	No
CO – NAAQS	8-hour	276	1,833	2,109	10,000	No
NO ₂ – NAAQS	1-hour	116	Included ³	116	188	No
NO ₂ – NAAQS	Annual	10	19	29	100	No
SO ₂ – NAAQS	1-hour	21	18	39	196	No
SO ₂ – NAAQS	3-hour	8	31 ⁴	39	1,300	No
PM ₁₀ – NAAQS	24-hour	4	46	50	150	No
PM _{2.5} – NAAQS	24-hour	1	32	33	35	No
PM _{2.5} – NAAQS	Annual	1	10.9	11.9	12	No
CO – CAAQS	1-hour	1,009 ⁶	2,406	3,415	23,000	... ⁵
CO – CAAQS	8-hour	277	1,833	2,110	10,000	... ⁵
NO ₂ – CAAQS	1-hour	96	154	250	339	... ⁵
NO ₂ – CAAQS	Annual	10	19	29	57	... ⁵
SO ₂ – CAAQS	1-hour	32	31	63	655	... ⁵
SO ₂ – CAAQS	24-hour	3	10	13	105	... ⁵
PM ₁₀ – CAAQS	24-hour	4.5	46.5	51	50	... ⁵
PM ₁₀ – CAAQS	Annual	2.8	21.6	24.4	20	... ⁵
PM _{2.5} – CAAQS	Annual	0.8	11	11.8	12	... ⁵

Source: Appendix E of this EA.

Notes:

- ¹ NAAQS and CAAQS often have the same averaging period, but usually have different standard values and may have different methods of determining compliance with each standard.
- ² Values may not add due to rounding.
- ³ Background NO₂ concentrations were included in the AERMOD input file. Thus, AERMOD directly calculated the total of Proposed Project plus background.
- ⁴ The 3-hour SO₂ background concentration was assumed to be the same as the highest 1-hour SO₂ background concentration.
- ⁵ As noted in Section 4.1.2, the significance determination is based on the NAAQS only, the CAAQS comparison is provided for informational purposes only.
- ⁶ CO 1-hour highest first-high concentration for CAAQS estimated as 15 percent above the CO 1-hour NAAQS (highest second-high concentration).

Key:

$\mu\text{g}/\text{m}^3$ – micrograms per cubic meter
CO – carbon monoxide
NO₂ – nitrogen dioxide
PM_{2.5} – fine particulate matter
CAAQS – California Ambient Air Quality Standard
NAAQS – National Ambient Air Quality Standard
PM₁₀ – respirable particulate matter
SO₂ – sulfur dioxide

Table 4.1-8
2033 Proposed Project Peak Operational Concentrations ($\mu\text{g}/\text{m}^3$)

Pollutant and NAAQS or CAAQS ¹	Averaging Period	Operation ($\mu\text{g}/\text{m}^3$)	Background ($\mu\text{g}/\text{m}^3$)	Total ($\mu\text{g}/\text{m}^3$) ²	Threshold ($\mu\text{g}/\text{m}^3$) ³	Significant?
CO – NAAQS	1-hour	603	2,406	3,009	40,000	No
CO – NAAQS	8-hour	312	1,833	2,145	10,000	No
NO ₂ – NAAQS	1-hour	126	Included ³	126	188	No
NO ₂ – NAAQS	Annual	10	19	29	100	No
SO ₂ – NAAQS	1-hour	15	18	33	196	No
SO ₂ – NAAQS	3-hour	10	31 ⁴	41	1,300	No
PM ₁₀ – NAAQS	24-hour	4	46	50	150	No
PM _{2.5} – NAAQS	24-hour	1	32	33	35	No
PM _{2.5} – NAAQS	Annual	0.9	10.9	11.8	12	No
CO – CAAQS	1-hour	663	2,406	3,069	23,000	... ⁵
CO – CAAQS	8-hour	301	1,833	2,134	10,000	... ⁵
NO ₂ – CAAQS	1-hour	80	154	234	339	... ⁵
NO ₂ – CAAQS	Annual	10	19	29	57	... ⁵
SO ₂ – CAAQS	1-hour	31	31	62	655	... ⁵
SO ₂ – CAAQS	24-hour	4	10	14	105	... ⁵
PM ₁₀ – CAAQS	24-hour	4	46.5	50.5	50	... ⁵
PM ₁₀ – CAAQS	Annual	3	21.6	24.6	20	... ⁵
PM _{2.5} – CAAQS	Annual	1.1	11.0	12.1	12	... ⁵

Source: Appendix E of this EA.

Notes:

- NAAQS and CAAQS often have the same averaging period, but usually have different standard values and may have different methods of determining compliance with each standard.
- Values may not add due to rounding.
- Background NO₂ concentrations were included in the AERMOD input file. Thus, AERMOD directly calculated the total of Project plus background.
- The 3-hour SO₂ background concentration was assumed to be the same as the highest 1-hour SO₂ background concentration.
- As noted in Section 4.1.2, the significance determination is based on the NAAQS only, the CAAQS comparison is provided for informational purposes only.

Key:

$\mu\text{g}/\text{m}^3$ – micrograms per cubic meter
CO – carbon monoxide
NO₂ – nitrogen dioxide
PM_{2.5} – fine particulate matter
CAAQS – California Ambient Air Quality Standard
NAAQS – National Ambient Air Quality Standard
PM₁₀ – respirable particulate matter
SO₂ – sulfur dioxide

Second, the DEA/GCD fails to substantiate conformity with SCAQMD's 2016 Air Quality Management Plan ("AQMP") and State Implementation Plan ("SIP"). While the DEA admits the Project exceeds de minimis thresholds established by South Coast Air Quality Management District ("SCAQMD") for NO_x and VOCs (see DEA, p. 4-5 [Tbl. 4.1-2]), the DEA concludes the Project would have less than significant impact because it would conform with the 2016 AQMP/SIP (id. at 4-7). This is premised on the claim that emissions are allowed under "set-aside budgets" planned by SCAQMD under the current SIP (see DEA, Appendix I, PDF p. 132). However, as pointed out by our experts (see Attachment 2, pp. 4-5; see also excerpts below), the SCAQMD letter provided in the DEA/GCD does not mention whether "other projects" have already claimed these set-aside emission budgets.⁷ Critical information missing is tracking of other projects that have claimed set-asides that ultimately reduce the availability of these set-asides for future projects, like LAWA's ATMP. This is critical information that must be disclosed under NEPA. See *California v. Block*, supra, 690 F.2d at 765 ("Given this inaccessibility, the worksheets may not be considered in determining the . . . Final EIS's adequacy."). Quite simply, FAA/LAWA must provide SCAQMD's "hard data" on which this DEA/GCD bases its conclusions that the Project's emissions will not conflict with the applicable AQMP/SIP. *Idaho Sporting Congress v. Thomas*, supra, 137 F.3d 1146. Failure to do so only circumvents public scrutiny of the Project, which is "essential to implementing NEPA." 40 C.F.R. § 1500.1(b). Consistent with Order 5050.4B ¶ 1007.m,⁸ an EIS should be circulated with this critical information included.

⁷ For example, in 2019, the San Bernardino Int. Airport Authority and Hillwood Enterprises, L.P. claimed set asides for its own airport project at the San Bernardino International Airport when conducting its NEPA review.

⁸

Unsubstantiated Conformity with the SCAQMD's 2016 AQMP/SIP

Review of the Draft EA demonstrates that the Project's construction-related VOC and NO_x emissions would exceed the General Conformity *de minimis* thresholds established by the SCAQMD (p. 4-5, Table 4.1-2). However, the Draft EA concludes that the Project would have a less-than-significant impact because the Project would conform with the 2016 Air Quality Management Plan ("AQMP") as emissions are within the State Implementation Plan ("SIP") emissions budget. Specifically, the Draft EA states:

"Based on coordination with the SCAQMD, who prepared the 2016 Air Quality Management Plan (AQMP) that is the current applicable SIP, SCAQMD has reviewed the construction emissions submitted for the Proposed Project and determined that the NO_x and VOC emissions from the Proposed Project construction activities can be accommodated within the General Conformity Budget established in the Final 2016 AQMP (see Appendix E.4 of this EA). Therefore, because construction emissions for the Proposed Project are included in the SIP budget, the Proposed Project would conform to the SIP that allows for attainment of the NAAQS and impacts would not be significant when compared to the No Action Alternative" (p. 4-7).

Furthermore, the Draft GCD states:

"The conformity determination for NO_x and VOC will be based on the availability of conformity set-aside budgets in the currently approved SIP and coordination with SCAQMD to allow LAWA to apply a portion of those budgets to the Proposed Project emissions. As previously mentioned, a written determination from the State/local air quality agency stating that the project emissions, together with all other emissions in the non-attainment or maintenance area, would not exceed the emissions budget in the SIP would demonstrate conformity" (emphasis added) (Appendix I, pp. 132).

As demonstrated above, there is written determination from the SCAQMD stating that the Project, together with all other emissions in the non-attainment or maintenance area, would not exceed the emissions budget. However, review of the letter from the SCAQMD dated April 21, 2021, confirming that the anticipated emissions from the Project are within the AQMP/SIP emissions budget for general conformity purposes, demonstrates that the SCAQMD fails to mention or discuss the emissions from other projects in the non-attainment or maintenance area (Appendix E, pp. 277-279). As such, while the Project's emissions individually can be accommodated within the general conformity budgets established in the 2016 AQMP, we cannot verify that the total emissions within the South Coast Air Basin can be accommodated by the emissions budget. As such, until LAWA and the SCAQMD provide

* * *

further documentation demonstrating that total emissions from all projects in the South Coast Air Basin do not exceed the general conformity budgets, the Project's significance determination should not be relied upon.

Third, similarly, the DEA failed to disclose several modeling inputs used to quantify construction/operational emissions necessary to substantiate its air quality and GHG determinations. As noted by our experts (see Attachment 2, p. 5; see also excerpts below), the public cannot verify whether Project's emissions estimates are accurate or consistent with the CEQA AQ Protocol. Again, this is critical information that must be disclosed under NEPA. See e.g., *California v. Block*, *supra*, 690 F.2d at 765, *Idaho Sporting Congress*, *supra*, 137 F.3d 1146; 40 C.F.R. § 1500.1(b).

Failure to Adequately Disclose Construction and Operational Assumptions

Review of the Draft EA and Draft GCD demonstrates the Project fails to disclose several modeling inputs used to quantify construction and operational emissions. Specifically, regarding the Project's construction-related modeling inputs, we reiterate the following comment by the SCAQMD:

"The analysis should provide detailed modeling inputs that will be used to quantify the Proposed Project's construction emissions, including, but not limited to, anticipated construction schedule for demolition, grading, building construction, paving, and architectural coating; assumptions for construction equipment in terms of types, numbers, and hours of operation; estimated number of construction workers on-site during each phase of construction activities; locations of construction staging areas, if any; and construction truck haul routes" (CEQA AQ Protocol, pp. 4).

Furthermore, regarding the Project's operational modeling inputs, we reiterate the following comment by the SCAQMD:

"Provide detailed modeling inputs that will be used to quantify the Proposed Project's operational emissions, including, but not limited to, CalEEMod modeling input (e.g., project size, square feet of buildings, employees information, number of parking spaces, water demand, ADT of passenger vehicles and trucks, if any)" (CEQA AQ Protocol, pp. 5).

Without detailed information regarding the Project's input parameters, we cannot verify that the Project's emissions estimates are accurate. As such, the Project should not be approved until an updated analysis is prepared that discloses and quantifies the above-mentioned construction-related and operational input parameters.

Fourth, as pointed out by our experts (see Attachment 2, pp. 1-2, 5-6; see also excerpts below), the *DEA/GCD included analytical gaps in its air analysis, including emissions from concurrent construction/operation phases and lead remediation efforts*. This analytical gap needs to be cured in a revised air quality analysis included in a NEPA-compliant EIS.

Air Quality & Greenhouse Gases

Failure to Evaluate Emissions from Concurrent Construction and Operational Phases

The Draft EA and Draft GCD fail to evaluate the potential emissions from concurrent construction and operational phases. Specifically, regarding the buildout of the Project, the Draft EA states:

"The development phasing for the Proposed Project, if approved would be broken down into four major elements:

* * *

- Airfield Improvements – Development of the airfield improvements (Runway 6L-24R exit taxiways, Taxiway D extension and Taxiway C extension), including construction of enabling projects and parallel, exit, and crossover taxiway relocations and improvements, would begin approximately early-2022 and would be completed around mid-2027.
- Concourse 0 – Development of Concourse 0, including construction of enabling projects, Concourse 0, and the associated apron, would begin around mid-2022 and would be completed around early-2027.
- Terminal 9 – Development of Terminal 9, including construction of enabling projects, Terminal 9, the associated apron, the Terminal 9 APM station, Terminal 9 access roads and the Terminal 9 parking facility, would begin around mid-2022 and would be completed early-2028.
- Roadways (Landside) Improvements – Development of the roadway improvements, including those involving S. Sepulveda Boulevard, 96th Street, W. Century Boulevard, the above roadway system, new ramps, and elevated roads, would begin around early-2022 and would be completed in mid-2028" (emphasis added) (p. 1-28).

As demonstrated above, the end dates of the different development phases vary from early-2027 to mid-2028. As such, the operation of some phases may overlap with the construction of other phases. Thus, the Draft EA and Draft GCD fail to account for the overlapping emissions that may be generated during this time period or consider the full extent of the Project's air quality impacts.

* * *

Failure to Evaluate Emissions from Lead Remediation

Review of the Draft EA demonstrates that the Project may require lead remediation. Specifically, the Draft EA states:

“Hazardous building materials including, but not limited to, asbestos-containing materials (ACM) and lead-based paint (LBP), could be present in existing structures to be demolished. Compliance with federal, state, and local regulations and programs (see Appendix D), and abatement of these materials prior to demolition would prevent their release into the environment and protect worker health and safety” (p. 4-17).

As such, the Project should have evaluated the potential emissions from remedial activities that would result from compliance with federal, state, and local regulations and programs. For example, there may be an increase in hauling, worker, and vendor trips and construction equipment. As such, the Project

* * *

should not be approved until an updated analysis is prepared to evaluate the emissions associated with remedial activities.

So too, this revised air quality analysis must avoid other methodological errors that were present in LAWA’s CEQA DEIR (as noted by our experts [see Attachment 1 [Exhibit C]], including but not limited to:

- Using incomplete/unsubstantiated input parameters for its air quality and GHG modeling (e.g., underestimates land uses, failure to analyze construction trips, underestimates off-road construction equipment emissions and underestimates architectural coating emissions, etc.);
- Failure to consider and implement numerous feasible mitigation measures;
- Using incomplete/unsubstantiated modeling parameters or failure to disclose total emissions from operational sources in any Health Risk Assessment (“HRA”) and toxic air contaminate (“TAC”) analysis.

Fifth, the *DEA fails to apply any threshold to the Project’s GHG emissions* (DEA, pp. 4-11 and 4-13) which are admitted to increase (id. [Tbl. 4.2-2]). Entirely missing is any discussion of state/local requirements, such as GHG reduction goals under California Air Resources Board’s (“CARB”) 2017 Scoping Plan or Southern California Association of Governments’ (“SCAG”) 2020 Regional Transportation Plan/Sustainable Communities Strategies (“RTP/SCS”). By failing to consider these relevant standards plans, the DEA fails to take a hard look at the Project’s GHG emissions and impact on Climate Change under relevant state/local standards, which is inconsistent with NEPA. This must be cured in a revised GHG analysis that considers CARB’s 2017 Scoping Plan and SCAG’s RTP/SCS plans, including performance-based standards under related to VMTs and mobile emissions—also noted by experts (see Attachment 1 [Exhibit B]).

In sum, as highlighted by the expert comment letters, the DEA/GCD air quality and GHG analysis relies on missing scientific and hard data, lacks post-2033 impacts, and fails to take a hard look at relevant CAAQS standards.

F. THE FAA MUST TAKE A HARD LOOK AT TRAFFIC-RELATED IMPACTS

NEPA requires federal agencies to take a “hard look” at the environmental consequences of their proposed action, including all foreseeable direct and indirect effects and the likely cumulative impact of the agency action. *Idaho Sporting Congress, Inc. v. Rittenhouse*, 305 F.3d 957, 973 (9th Cir. 2002); 40 C.F.R. §§ 1502.16, 1508.7, 1508.8. Under FAA guidelines, a project’s traffic generation is a factor directly/indirectly related to several covered resources, including air quality (1050.1F Desk Reference, p. 1-4 [“such as exhaust from project-generated vehicle traffic on the surrounding road network”]); traffic (*id.* at p. 8-13 [“operational effects including ... increased traffic”]); socioeconomic (*id.* at 12-6 [“Disrupt local traffic patterns and substantially reduce the levels of service of roads serving an airport and its surrounding communities”]); environmental justice (*id.* at 12-10 [“increased traffic congestion”]); and noise (*id.* at C-11 [“on-road mobile ground sources (such as ground access vehicles)” may be modeled separately from aircraft noise]). See 5 U.S.C. § 4332(2)(C); 40 C.F.R. §§ 1502.21, 1506.6(f), 1610.2; Order 5050.4B ¶ 1007.m; *California v. Block*, 690 F.2d 753, 765 (9th Cir. 1982); *Idaho Sporting Congress v. Thomas*, 137 F.3d 1146 (9th Cir. 1998).

Here, the DEA examined only Level of Service (“LOS”) traffic impacts (DEA, p. 4-52). Completely missing was any analysis of VMTs and, thus, the DEA fails to take a hard look at traffic impacts caused by the Project, including those admitted in LAWA’s CEQA DEIR (discussed supra Section II.B). This is substantial evidence that the ATMP may have a significant impact under NEPA, which should be analyzed in a revised traffic study included in a NEPA-compliant EIS. So too, this analysis should avoid methodological errors that were presented in the Project’s DEIR and noted by our experts (see Attachment 1 [Exhibit A]), including but not limited to:

- Failure to analyze long-term VMTs as well as LOS impacts beyond 2028 (or 2033 here);
- Failure to account for all VMTs, specifically non-passenger trips (e.g., employees and other trips) for this regional serving use, which underestimates the full impact of the project; and
- Failure to consider all feasible mitigation measures to reduce the ATMP’s VMT and LOS impacts.

G. THE FAA MUST TAKE A HARD LOOK AT ALL DIRECT/INDIRECT NOISE IMPACTS

Federal agencies also must take a “hard look” at direct, indirect, and cumulative effects on noise. Under FAA guidelines, while “current noise conditions is usually confined to aircraft noise[,] ... the inclusion of other noise data, such as background or ambient noise or notable levels of noise in the study area from other sources (e.g., highways, industrial uses) is appropriate where such noise data is pertinent to understanding the affected environment and to considering the environmental impacts of the proposed action and alternative(s).” 1050.1F Desk Reference, p. 11-8. Additionally, FAA guidelines require disclosure of “noise increases of [Day-Night Average Sound Level (“DNL”)] 1.5 dB or more over noise sensitive areas that are exposed to noise at or above the DNL 65 dB noise exposure level, or that would be exposed at or above the DNL 65 dB level due to a 1.5 dB or greater increase, when compared to the no action alternative for the same timeframe.” *Id.*

Here, the DEA claims no significant noise impacts (DEA, p. 4-47), despite LAWA already identifying significant noise impacts under its CEQA DEIR (discussed supra Section II.B). This is substantial evidence that the ATMP may have a significant impact under NEPA, which should be analyzed in a revised noise study included in a NEPA-compliant EIS. This is extremely confusing to the public and our members. So too, this analysis should avoid methodological errors that were presented in the Project's DEIR and noted by our experts (see Attachment 1 [Exhibit B]), including but not limited to:

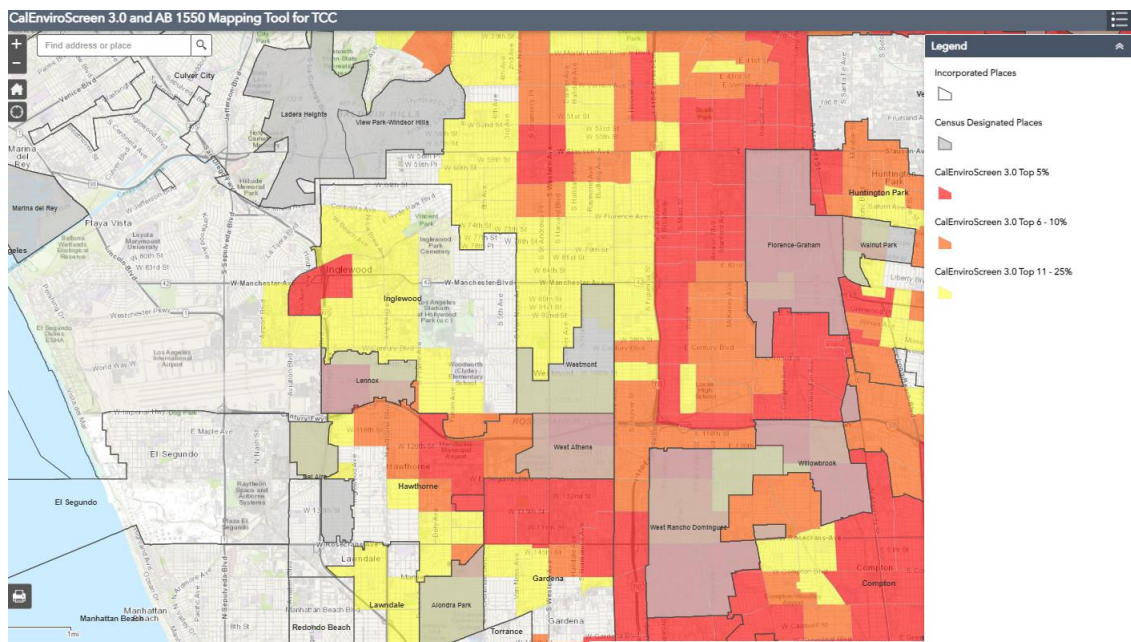
- Making contradictory statements that dismiss the widely recognized fact that environmental noise affects human health, including potential physiological and psychological damage;
- Relying on unsubstantiated assumptions, such as the 29 decibels (“**dBA**”) attenuation for classrooms, which is nine more than the widely accepted 20 dBA attenuation standard;
- Failing to provide maximum exterior noise levels (“**Lmax**”) at exposed schools, which is critical in establishing the environmental setting of the school;
- Failing to consider long-term noise impacts beyond 2028 or 2033, even though LAX is planned to generate an additional 165,316 annual aircraft operations by 2045—a level that exceeds Burbank Airport operations from last year;
- Failing to provide supporting documentation underlying its noise modeling makes verification impossible; and
- Failing to use actual field measurements to determine construction noise impacts—particularly as it relates to nighttime noise impacts.
- Failing to consider all reasonable feasible mitigation measures, such as a requirement for active construction noise monitoring at adjacent noise-sensitive receptors anytime construction activities take place during nighttime hours, active nighttime noise monitoring, or imposing nighttime noise standards (e.g., exceed existing ambient nighttime noise levels by more 5 dBA).

H. THE FAA MUST TAKE A HARD LOOK AT ADEQUATE MITIGATION MEASURES AND PROJECT ALTERNATIVES

FAA guidelines encourage FAA officials to incorporate mitigation into project design to avoid and minimize environmental impacts “[t]hroughout the environmental analysis process.” Order 1050.1F ¶ 2-3.6. An agency’s decision to forego issuing an EIS may be justified in some circumstances by the adoption of mitigation measures, but the proposed mitigation measures must be developed to a reasonable degree—“a ‘perfunctory description, or mere listing of mitigation measures, without supporting analytical data, is insufficient to support a finding of no significant impact.” *National Parks & Conservation Ass’n v. Babbitt* (9th Cir. 2001) 241 F.3d 722, 734 (internal citations and quotations omitted); see also Order 1050.1F ¶ 4-4(a) & (c) (where an EA uses mitigation in order to avoid a finding of significance and preparation of an EIS, “the discussion must be in sufficient detail to describe the impacts of the mitigation ... [and] is clearly specified in terms of expected outcomes, which may include measurable performance standards.”).

A reviewing court must “consider whether they constitute an adequate buffer against the negative impacts that may result from the authorized activity ... [such that] mitigation measures will render such impacts so minor as to not warrant an EIS.” *Id.* However, said mitigation measures must be more than mere vague statements of good intentions. *See City and County of San Francisco v. United States*, 615 F.2d 498, 501 (9th Cir. 1980). This can be achieved when measures are project-related, within the agency’s control, and made real by “firm commitments” by the relevant public agencies and/or project developer. *Preservation Coalition, Inc. v. Pierce*, 667 F.2d 851, 860 (9th Cir. 1982); *see also City and County of San Francisco v. United States*, 615 F.2d 498 (9th Cir. 1980) (noise, air, and water pollution mitigated through abatement and control; traffic congestion mitigated through close cooperation with city); *see also* Order 1050.1F ¶ 6-2.3 (relied upon mitigation measures “must be implemented and/or monitored by the FAA or other entity responsible for implementing and/or monitoring mitigation.”).

Here, the abovementioned issues, indicate a truncated analysis relying on misleading project description, abbreviated analysis, and ignoring substantial evidence of potentially significant impacts. This only subverts the ability of FAA and other decision-makers to consider feasible mitigation measures and/or a reasonable range of alternatives that reduce the Project’s impacts on air quality, GHG, traffic, noise impacts, and cumulative impact thereof. These effects will have an acute impact on disadvantaged communities within and near the Project’s general study area (see DEA, p. 3-5; *see also* CalEnviroScreen figure below).⁹



To this end, we request FAA consider mitigation measures that would reduce Project impacts suffered by EJ communities, which is documented in SEIU’s white paper, which contextualizes the Project impacts—whether admitted or masked by the DEIR’s and DEA’s narrow review—will have real, long-term impacts on workers, families, and communities (particularly communities of color) well beyond 2028 or 2033 (see Attachment 3). As explained in further detail

⁹ See also CalEnviroScreen,

<https://www.arcgis.com/apps/webappviewer/index.html?id=ba698dc09c824da1b1ab3d0dd7f5bd54>.

in SEIU's white paper, airport development as historically come at the expense of airline essential workers, which must not be repeated here for the LAWA's ATMP—a historic expansion of LAX.

Hence, FAA, LAWA, and the City of Los Angeles should establish a stakeholders table that includes workers (and/or their representatives), EJ groups, and other impacted communities to develop a set of firm commitments related to community benefit standards. These mitigation measures must include improved labor standards for airport workers to ensure economic benefits reach impacted communities, public transit commitment, and revisiting the Airport's noise contour. Furthermore, the FAA/LAWA should consider the following that ultimately serve to reduce the Project's significant VMT, GHG, and mobile-emissions impacts:

- Expanded public transit service from neighborhoods where service/hospitality workers live to LAX/AHEZ at times needed for all shifts of work;
- Free or reduced transit passes for LAX/AHEZ workers;
- Free or reduced parking at LAX/AHEZ for workers who carpool;
- Quality job creation that expands housing opportunities near LAX/AHEZ for employees via:
 - a. Operational jobs that provide real living wages able to afford an apartment in Los Angeles, which housing experts estimate must be \$33/hour in 2015¹⁰—LAX's current living wage of \$16.50/hour is not enough even when healthcare costs are not considered. This is necessary for workers to be able to afford to live near LAX/AHEZ and not commute longer distances that increase VMT and mobile-emissions;

and/or
 - b. Airlines contribute to an affordable housing fund directly for service workers living in neighborhoods surrounding the airport that will promote employees living closer to LAX/AHEZ;

and/or
 - c. Operational jobs that provide real healthcare, which must be increased from the current LAX living wage law requiring merely \$5.55/hour for healthcare.¹¹

¹⁰ Southern California Public Radio (89.3KPPC) (1/15/15) LA Residents Need To Make \$33 An Hour To Afford The Average Apartment ("You need to earn at least \$33 an hour — \$68,640 a year — to be able to afford the average apartment in Los Angeles County, according to Matt Schwartz, president and chief executive of the California Housing Partnership, which advocates for affordable housing."), <https://www.scpr.org/blogs/economy/2015/01/15/17806/la-residents-need-to-make-34-an-hour-to-afford-ave/>.

¹¹ California USSW service employee's health and welfare trust fund has been quoted healthcare costs for a family Kaiser plan for LAX employees that cost up to \$9.40/hour for family coverage.

III. CONCLUSION

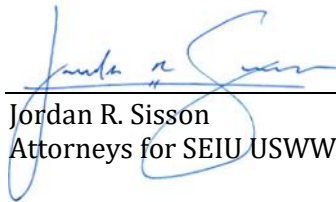
In closing, Commenters urge the FAA/LAWA to stay all action on the Project until the issues discussed herein are resolved in a recirculated analysis contained in a NEPA-compliant EIS. This Project can and must do better. Rising inequality threatens Los Angeles' prosperity. There are serious challenges in the region concerning affordable housing and living wage jobs — and COVID has made things even more difficult for our members. USWW and Local 11 work to stem this rising tide of inequality and fight to make our region a place of opportunity for all—a place where their members can work and afford to live. LAWA must better consider to what extent this Project will ensure better permanent service jobs for airline service workers who will feel the significant air quality, GHG, and other impacts caused by the Project. True community and worker benefits are needed if this Project is to be approved. So too, it is inherently inconsistent for LAWA to admit significant impacts under CEQA, but not here in this NEPA review. How is the public supposed to reconcile this blatant inconsistency?

On behalf of Commenters, this Office requests, to the extent not already on the notice list, all notices of NEPA actions and any approvals, determinations, or public hearings to be held on the Project under federal, state, and/or local law requiring such notices to any person who has filed a written request for them. Please send notice by electronic and regular mail to: Jordan R. Sisson, Esq., 801 S. Grand Avenue, 11th Fl., Los Angeles, CA 90017, jordan@gideonlaw.net.

Thank you for your consideration of these comments. Commenters reserve the right to supplement these comments at future hearings and proceedings for this Project. We ask that this letter and attachments are placed in the administrative record for the Project.

Sincerely,

LAW OFFICE OF GIDEON KRACOV



Jordan R. Sisson
Attorneys for SEIU USWW and UNITE HERE Local 11

Attachments:

Attachment 1: Commenters' (3/15/21) CEQA Comments, inclusive of expert comments attached thereto:

Exhibit A: RK Engineering Group (3/15/21) Traffic Comments

Exhibit B: RK Engineering Group (3/15/21) Noise Comments

Exhibit C: SWAPE (3/15/21) AQ/GHG Comments

Attachment 2: SWAPE (7/21/21) DEA/GCD Comments

Attachment 3: SEIU (June 2021) Turbulence Ahead: What LAX's Expansion Means for the City of Los Angeles' Legacy on Racial Equity & Environmental Justice

EXHIBIT B



Technical Consultation, Data Analysis and
Litigation Support for the Environment

2656 29th Street, Suite 201
Santa Monica, CA 90405

Matt Hagemann, P.G, C.Hg.
(949) 887-9013
mhagemann@swape.com

Paul E. Rosenfeld, PhD
(310) 795-2335
prosenfeld@swape.com

July 27, 2021

Jordan Sisson
Law Office of Gideon Kracov
801 S. Grand Ave., 11th Floor
Los Angeles, CA 90017

Subject: Comments on the Airfield & Terminal Modernization Project (SCH No. 2019049020)

Dear Mr. Sisson,

We have reviewed the May 2021 Draft Environmental Assessment ("Draft EA") and Draft General Conformity Determination ("Draft GCD") and the October 2020 Draft Environmental Impact Report ("DEIR") for the Los Angeles International Airport Airfield & Terminal Modernization Project ("Project") located in the City of Los Angeles ("City"). The Project proposes to construct development of Taxiway D Extension West, Runway 6L-24R Exits, Concourse 0, Terminal 9, as well as the removal and replacement of 15 of the 18 West Remote Gates and roadway system improvements, on the 3,800-acre airport property.

Our review concludes that the Draft EA and Draft GCD fail to adequately evaluate the Project's air quality and greenhouse gas impacts. As a result, emissions and health risk impacts associated with construction and operation of the proposed Project are underestimated and inadequately addressed. An updated Draft EA and Draft GCD should be prepared to adequately assess and mitigate the potential air quality and greenhouse gas impacts that the project may have on the surrounding environment.

Air Quality & Greenhouse Gases

Failure to Evaluate Emissions from Concurrent Construction and Operational Phases

The Draft EA and Draft GCD fail to evaluate the potential emissions from concurrent construction and operational phases. Specifically, regarding the buildout of the Project, the Draft EA states:

"The development phasing for the Proposed Project, if approved would be broken down into four major elements:

- Airfield Improvements – Development of the airfield improvements (Runway 6L-24R exit taxiways, Taxiway D extension and Taxiway C extension), including construction of enabling projects and parallel, exit, and crossover taxiway relocations and improvements, would begin approximately early-2022 and would be completed around mid-2027.
- Concourse 0 – Development of Concourse 0, including construction of enabling projects, Concourse 0, and the associated apron, would begin around mid-2022 and would be completed around early-2027.
- Terminal 9 – Development of Terminal 9, including construction of enabling projects, Terminal 9, the associated apron, the Terminal 9 APM station, Terminal 9 access roads and the Terminal 9 parking facility, would begin around mid-2022 and would be completed early-2028.
- Roadways (Landside) Improvements – Development of the roadway improvements, including those involving S. Sepulveda Boulevard, 96th Street, W. Century Boulevard, the above roadway system, new ramps, and elevated roads, would begin around early-2022 and would be completed in mid-2028” (emphasis added) (p. 1-28).

As demonstrated above, the end dates of the different development phases vary from early-2027 to mid-2028. As such, the operation of some phases may overlap with the construction of other phases. Thus, the Draft EA and Draft GCD fail to account for the overlapping emissions that may be generated during this time period or consider the full extent of the Project’s air quality impacts.

Failure to Consider Long-Term Air Quality Impacts

The Draft EA fails to consider the full extent of the Project’s operational air quality impacts by failing to analyze long-term conditions. The buildout years analyzed in the Draft EA’s air quality analysis is 2028 and 2033 (see excerpts below) (p. 4-8, Table 4.1-5, Table 4.1-6).

Scenario	CO (tpy)	VOC (tpy)	NO_x (tpy)	SO_x (tpy)	PM₁₀ (tpy)	PM_{2.5} (tpy)
Aircraft & APU	5,594	607	5,513	488	52	52
GSE	730	8	69	<1	1	1
Traffic & Parking	2,385	67	283	9	490	149
Stationary	1	1	1	<1	<1	<1
Construction in 2028 ¹	8	1	3	<1	<1	<1
Total²	8,718	684	5,869	497	543	202
2028 No Action Alternative Emissions	8,670	678	5,868	498	535	200
2028 Net Emissions ³	48	6	2	(1)	8	2
General Conformity <i>de minimis</i> Threshold	100	10	10	70	100	70
Exceeds <i>de minimis</i> Threshold?	No	No	No	No	No	No

Table 4.1-6 2033 Proposed Project Operational Emissions Inventory						
Scenario	CO (tpy)	VOC (tpy)	NO _x (tpy)	SO _x (tpy)	PM ₁₀ (tpy)	PM _{2.5} (tpy)
Aircraft & APU	5,795	622	6,189	533	58	58
GSE	355	4	30	<1	1	<1
Traffic & Parking	2,268	64	259	9	522	158
Stationary	1	1	1	<1	<1	<1
Total¹	8,419	691	6,479	542	581	216
2033 No Action Alternative Emissions	8,396	682	6,493	545	576	217
2033 Net Emissions ²	23	9	(13)	(3)	5	(1)
General Conformity <i>de minimis</i> Threshold	100	10	10	70	100	70
Exceeds <i>de minimis</i> Threshold?	No	No	No	No	No	No
Source: Appendix E of this EA.						
Notes:						
¹ Totals may not add exactly because of rounding.						
² Net emissions shown in parentheses are negative values.						
Key:						
APU – auxiliary power unit		GSE – ground support equipment		tpy – tons per year		
CO – carbon monoxide		NO _x – nitrogen oxides		PM ₁₀ – respirable particulate matter		
PM _{2.5} – fine particulate matter		SO _x – sulfur oxides				

However, as demonstrated in the Activity Forecasts and Operational Analyses, provided as Appendix B to the DEIR, the Project is expected to generate an additional 165,316 annual aircraft operations in 2045, when compared to 2028 (see excerpt below) (p. 3-12, Table 3-7).

TABLE 3-7 HISTORICAL AND UNCONSTRAINED FORECAST TOTAL UNSCHEDULED OPERATIONS

FISCAL YEAR ¹	AIRCRAFT OPERATIONS		SHARE
	UNSCHEDULED ²	TOTAL ³	UNSCHEDULED ⁴
Unconstrained Forecast ⁵			
2018	71,454	714,543	10.0%
2023	75,190	751,901	10.0%
2028	79,984	799,843	10.0%
2033	85,347	853,471	10.0%
2038	90,240	902,401	10.0%
2043	94,735	947,345	10.0%
2045	96,516	965,159	10.0%

Furthermore, the Draft EA states:

“Over the long-term (such as the 2018-2045 forecast period analyzed in the LAX Airfield and Terminal Modernization Project Forecast Activity Report), demand for air travel and airline activity is expected to grow” (p. 1-4).

Thus, the Draft EA and the DEIR’s Activity Forecasts and Operational Analyses indicate a significant amount of planned growth, which was not accounted for in the Draft EA’s air quality analysis. By failing to analyze the Project’s long-term operational air quality impacts, the Draft EA fails to consider the full extent of the Project’s operational air quality impacts and should not be relied upon.

Unsubstantiated Conformity with the SCAQMD’s 2016 AQMP/SIP

Review of the Draft EA demonstrates that the Project’s construction-related VOC and NO_x emissions would exceed the General Conformity *de minimis* thresholds established by the SCAQMD (p. 4-5, Table 4.1-2). However, the Draft EA concludes that the Project would have a less-than-significant impact because the Project would conform with the 2016 Air Quality Management Plan (“AQMP”) as emissions are within the State Implementation Plan (“SIP”) emissions budget. Specifically, the Draft EA states:

“Based on coordination with the SCAQMD, who prepared the 2016 Air Quality Management Plan (AQMP) that is the current applicable SIP, SCAQMD has reviewed the construction emissions submitted for the Proposed Project and determined that the NO_x and VOC emissions from the Proposed Project construction activities can be accommodated within the General Conformity Budget established in the Final 2016 AQMP (see **Appendix E.4** of this EA). Therefore, because construction emissions for the Proposed Project are included in the SIP budget, the Proposed Project would conform to the SIP that allows for attainment of the NAAQS and impacts would not be significant when compared to the No Action Alternative” (p. 4-7).

Furthermore, the Draft GCD states:

“The conformity determination for NO_x and VOC will be based on the availability of conformity set-aside budgets in the currently approved SIP and coordination with SCAQMD to allow LAWA to apply a portion of those budgets to the Proposed Project emissions. As previously mentioned, a written determination from the State/local air quality agency stating that the project emissions, together with all other emissions in the non-attainment or maintenance area, would not exceed the emissions budget in the SIP would demonstrate conformity” (emphasis added) (Appendix I, pp. 132).

As demonstrated above, there is written determination from the SCAQMD stating that the Project, together with all other emissions in the non-attainment or maintenance area, would not exceed the emissions budget. However, review of the letter from the SCAQMD dated April 21, 2021, confirming that the anticipated emissions from the Project are within the AQMP/SIP emissions budget for general conformity purposes, demonstrates that the SCAQMD fails to mention or discuss the emissions from other projects in the non-attainment or maintenance area (Appendix E, pp. 277-279). As such, while the Project’s emissions *individually* can be accommodated within the general conformity budgets established in the 2016 AQMP, we cannot verify that the total emissions within the South Coast Air Basin can be accommodated by the emissions budget. As such, until LAWA and the SCAQMD provide

further documentation demonstrating that total emissions from all projects in the South Coast Air Basin do not exceed the general conformity budgets, the Project's significance determination should not be relied upon.

Failure to Adequately Disclose Construction and Operational Assumptions

Review of the Draft EA and Draft GCD demonstrates the Project fails to disclose several modeling inputs used to quantify construction and operational emissions. Specifically, regarding the Project's construction-related modeling inputs, we reiterate the following comment by the SCAQMD:

"The analysis should provide detailed modeling inputs that will be used to quantify the Proposed Project's construction emissions, including, but not limited to, anticipated construction schedule for demolition, grading, building construction, paving, and architectural coating; assumptions for construction equipment in terms of types, numbers, and hours of operation; estimated number of construction workers on-site during each phase of construction activities; locations of construction staging areas, if any; and construction truck haul routes" (CEQA AQ Protocol, pp. 4).

Furthermore, regarding the Project's operational modeling inputs, we reiterate the following comment by the SCAQMD:

"Provide detailed modeling inputs that will be used to quantify the Proposed Project's operational emissions, including, but not limited to, CalEEMod modeling input (e.g., project size, square feet of buildings, employees information, number of parking spaces, water demand, ADT of passenger vehicles and trucks, if any)" (CEQA AQ Protocol, pp. 5).

Without detailed information regarding the Project's input parameters, we cannot verify that the Project's emissions estimates are accurate. As such, the Project should not be approved until an updated analysis is prepared that discloses and quantifies the above-mentioned construction-related and operational input parameters.

Failure to Evaluate Emissions from Lead Remediation

Review of the Draft EA demonstrates that the Project may require lead remediation. Specifically, the Draft EA states:

"Hazardous building materials including, but not limited to, asbestos-containing materials (ACM) and lead-based paint (LBP), could be present in existing structures to be demolished. Compliance with federal, state, and local regulations and programs (see **Appendix D**), and abatement of these materials prior to demolition would prevent their release into the environment and protect worker health and safety" (p. 4-17).

As such, the Project should have evaluated the potential emissions from remedial activities that would result from compliance with federal, state, and local regulations and programs. For example, there may be an increase in hauling, worker, and vendor trips and construction equipment. As such, the Project

should not be approved until an updated analysis is prepared to evaluate the emissions associated with remedial activities.

Disclaimer

SWAPE has received limited discovery regarding this project. Additional information may become available in the future; thus, we retain the right to revise or amend this report when additional information becomes available. Our professional services have been performed using that degree of care and skill ordinarily exercised, under similar circumstances, by reputable environmental consultants practicing in this or similar localities at the time of service. No other warranty, expressed or implied, is made as to the scope of work, work methodologies and protocols, site conditions, analytical testing results, and findings presented. This report reflects efforts which were limited to information that was reasonably accessible at the time of the work, and may contain informational gaps, inconsistencies, or otherwise be incomplete due to the unavailability or uncertainty of information obtained or provided by third parties.

Sincerely,

A handwritten signature in blue ink, appearing to read "Matt Hagemann".

Matt Hagemann, P.G., C.Hg.

A handwritten signature in blue ink, appearing to read "Paul E. Rosenfeld".

Paul E. Rosenfeld, Ph.D.

Attachment A: Matt Hagemann CV

Attachment B: Paul E. Rosenfeld CV



Technical Consultation, Data Analysis and
Litigation Support for the Environment

2656 29th Street,
Suite 201
Santa Monica, CA
90405

(949) 887-9013
mhagemann@swape.com

Matthew F. Hagemann, P.G.,* C.Hg**

**Geologic and Hydrogeologic
Characterization, Investigation
and Remediation Strategies
Expert Testimony
Industrial Stormwater Compliance
CEQA Review**

Professional Certifications:

*Professional Geologist

**Certified Hydrogeologist

Education:

M.S. Degree, Geology, California State University Los Angeles, Los Angeles, CA, 1984.

B.A. Degree, Geology, Humboldt State University, Arcata, CA, 1982.

Professional Certifications:

California Professional Geologist

California Certified Hydrogeologist

Professional Experience:

30 years of experience in environmental policy, contaminant assessment and remediation, stormwater compliance, and CEQA review. Spent nine years with the U.S. EPA in the Resource Conservation Recovery Act (RCRA) and

Superfund programs and served as EPA's Senior Science Policy Advisor in the Western Regional Office where he identified emerging threats to groundwater. While with EPA, served as a Senior Hydrogeologist in the oversight of the assessment of seven major military facilities undergoing base closure. Led numerous enforcement actions under provisions of the Resource Conservation and Recovery Act (RCRA) and directed efforts to improve hydrogeologic characterization and water quality monitoring. For the past 15 years, as a founding partner with SWAPE, developed extensive client relationships and has managed complex projects that include consultations as an expert witness and a regulatory specialist, and managing projects ranging from industrial stormwater compliance to CEQA review of impacts from hazardous waste, air quality and greenhouse gas emissions.

Positions held include:

Government:

- Senior Science Policy Advisor and Hydrogeologist, U.S. Environmental Protection Agency (1989–1998);
- Hydrogeologist, National Park Service, Water Resources Division (1998 – 2000);
- Geologist, U.S. Forest Service (1986 – 1998)

Educational:

- Geology Instructor, Golden West College, 2010 – 2014, 2017;
- Adjunct Faculty Member, San Francisco State University, Department of Geosciences (1993 – 1998);
- Instructor, College of Marin, Department of Science (1990 – 1995);

Private Sector:

- Founding Partner, Soil/Water/Air Protection Enterprise (SWAPE) (2003 – present);
- Senior Environmental Analyst, Komex H2O Science, Inc. (2000 -- 2003);
- Executive Director, Orange Coast Watch (2001 – 2004);
- Geologist, Dames & Moore (1984 – 1986).

Senior Regulatory and Litigation Support Analyst:

With SWAPE, responsibilities have included:

- Lead analyst and testifying expert, for both plaintiffs and defendants, in the review of over 300 environmental impact reports and negative declarations since 2003 under CEQA that identify significant issues with regard to

hazardous waste, water resources, water quality, air quality, greenhouse gas emissions, and geologic hazards.

- Recommending additional mitigation measures to lead agencies at the local and county level to include additional characterization of health risks and implementation of protective measures to reduce exposure to hazards from toxins.
- Stormwater analysis, sampling and best management practice evaluation, for both government agencies and corporate clients, at more than 150 industrial facilities.
- Serving as expert witness for both plaintiffs and defendants in cases including contamination of groundwater, CERCLA compliance in assessment and remediation, and industrial stormwater contamination.
- Technical assistance and litigation support for vapor intrusion concerns, for both government agencies and corporate clients.
- Lead analyst and testifying expert in the review of environmental issues in license applications for large solar power plants before the California Energy Commission.
- Manager of a project to evaluate numerous formerly used military sites in the western U.S.
- Manager of a comprehensive evaluation of potential sources of perchlorate contamination in Southern California drinking water wells.
- Manager and designated expert for litigation support under provisions of Proposition 65 in the review of releases of gasoline to sources drinking water at major refineries and hundreds of gas stations throughout California.

With Komex H2O Science Inc., duties included the following:

- Senior author of a report on the extent of perchlorate contamination that was used in testimony by the former U.S. EPA Administrator and General Counsel.
- Senior researcher in the development of a comprehensive, electronically interactive chronology of MTBE use, research, and regulation.
- Senior researcher in the development of a comprehensive, electronically interactive chronology of perchlorate use, research, and regulation.
- Senior researcher in a study that estimates nationwide costs for MTBE remediation and drinking water treatment, results of which were published in newspapers nationwide and in testimony against provisions of an energy bill that would limit liability for oil companies.
- Research to support litigation to restore drinking water supplies that have been contaminated by MTBE in California and New York.
- Lead author for a multi-volume remedial investigation report for an

operating school in Los Angeles that met strict regulatory requirements and rigorous deadlines.

- Development of strategic approaches for cleanup of contaminated sites in consultation with clients and regulators.

Executive Director:

As Executive Director with Orange Coast Watch, an Orange County-based not-for-profit water-quality organization, led efforts to restore water quality at Orange County beaches from multiple sources of contamination including urban runoff and the discharge of wastewater. In reporting to a Board of Directors that included representatives from leading Orange County universities and businesses, prepared issue papers in the areas of treatment and disinfection of wastewater and control of the discharge of grease to sewer systems. Actively participated in the development of countywide water quality permits for the control of urban runoff and permits for the discharge of wastewater. Worked with other nonprofits to protect and restore water quality, including Surfrider, Natural Resources Defense Council and Orange County CoastKeeper as well as with business institutions including the Orange County Business Council.

Hydrogeology:

As a Senior Hydrogeologist with the U.S. Environmental Protection Agency, led investigations to characterize and cleanup closing military bases, including Mare Island Naval Shipyard, Hunters Point Naval Shipyard, Treasure Island Naval Station, Alameda Naval Station, Moffett Field, Mather Army Airfield, and Sacramento Army Depot. Specific activities included:

- Leading efforts to model groundwater flow and contaminant transport, ensured adequacy of monitoring networks, and assessed cleanup alternatives for contaminated sediment, soil, and groundwater.
- Initiating a regional program for evaluation of groundwater sampling practices and laboratory analysis at military bases.
- Identifying emerging issues, wrote technical guidance, and assisted in policy and regulation development through work on four national U.S. EPA workgroups, including the Superfund Groundwater Technical Forum and the Federal Facilities Forum.

At the request of the State of Hawaii, developed a methodology to determine the vulnerability of groundwater to contamination on the islands of Maui and Oahu. Used

analytical models and a GIS to show zones of vulnerability, and the results were adopted and published by the State of Hawaii and County of Maui.

As a hydrogeologist with the EPA Groundwater Protection Section, worked with provisions of the Safe Drinking Water Act and NEPA to prevent drinking water contamination. Specific activities included the following:

- Received an EPA Bronze Medal for contribution to the development of national guidance for the protection of drinking water.
- Managed the Sole Source Aquifer Program and protected the drinking water of two communities through designation under the Safe Drinking Water Act. Prepared geologic reports, conducted hearings, and responded to public comments from residents who were very concerned about the impact of designation.
- Reviewed a number of Environmental Impact Statements for planned major developments, including large hazardous and solid waste disposal facilities, mine reclamation, and water transfer.

Served as a hydrogeologist with the RCRA Hazardous Waste program. Duties included:

- Supervised the hydrogeologic investigation of hazardous waste sites to determine compliance with Subtitle C requirements.
 - Reviewed and wrote "part B" permits for the disposal of hazardous waste.
- Conducted RCRA Corrective Action investigations of waste sites and led inspections that formed the basis for significant enforcement actions that were developed in close coordination with U.S. EPA legal counsel.
- Wrote contract specifications and supervised contractor's investigations of waste sites.

With the National Park Service, directed service-wide investigations of contaminant sources to prevent degradation of water quality, including the following:

- Applied pertinent laws and regulations including CERCLA, RCRA, NEPA, NRDA, and the Clean Water Act to control military, mining, and landfill contaminants.
- Conducted watershed-scale investigations of contaminants at parks, including Yellowstone and Olympic National Park.
- Identified high-levels of perchlorate in soil adjacent to a national park in New Mexico and advised park superintendent on appropriate response actions under CERCLA.
- Served as a Park Service representative on the Interagency Perchlorate Steering Committee, a national workgroup.

- Developed a program to conduct environmental compliance audits of all National Parks while serving on a national workgroup.
- Co-authored two papers on the potential for water contamination from the operation of personal watercraft and snowmobiles, these papers serving as the basis for the development of nation-wide policy on the use of these vehicles in National Parks.
- Contributed to the Federal Multi-Agency Source Water Agreement under the Clean Water Action Plan.

Policy:

Served as senior management as the Senior Science Policy Advisor with the U.S. Environmental Protection Agency, Region 9. Activities included the following:

- Advising the Regional Administrator and senior management on emerging issues such as the potential for the gasoline additive MTBE and ammonium perchlorate to contaminate drinking water supplies.
- Shaping EPA's national response to these threats by serving on workgroups and by contributing to guidance, including the Office of Research and Development publication, Oxygenates in Water: Critical Information and Research Needs.
- Improving the technical training of EPA's scientific and engineering staff.
- Earning an EPA Bronze Medal for representing the region's 300 scientists and engineers in negotiations with the Administrator and senior management to better integrate scientific principles into the policy-making process.
- Establishing national protocol for the peer review of scientific documents.

Geology:

With the U.S. Forest Service, led investigations to determine hillslope stability of areas proposed for timber harvest in the central Oregon Coast Range. Specific activities included:

- Mapping geology in the field, and used aerial photographic interpretation and mathematical models to determine slope stability.
- Coordinating research with community stakeholders who were concerned with natural resource protection.
- Characterizing the geology of an aquifer that serves as the sole source of drinking water for the city of Medford, Oregon.

As a consultant with Dames and Moore, led geologic investigations of two contaminated sites (later listed on the Superfund NPL) in the Portland, Oregon, area and a large

hazardous waste site in eastern Oregon. Duties included the following:

- Supervising year-long effort for soil and groundwater sampling.
- Conducting aquifer tests.
 - Investigating active faults beneath sites proposed for hazardous waste disposal.

Teaching:

From 1990 to 1998, taught at least one course per semester at the community college and university levels:

- At San Francisco State University, held an adjunct faculty position and taught courses in environmental geology, oceanography (lab and lecture), hydrogeology, and groundwater contamination.
- Served as a committee member for graduate and undergraduate students.
- Taught courses in environmental geology and oceanography at the College of Marin.
- Part time geology instructor at Golden West College in Huntington Beach, California from 2010 to 2014 and in 2017.

Invited Testimony, Reports, Papers and Presentations:

Hagemann, M.F., 2008. Disclosure of Hazardous Waste Issues under CEQA. Presentation to the Public Environmental Law Conference, Eugene, Oregon.

Hagemann, M.F., 2008. Disclosure of Hazardous Waste Issues under CEQA. Invited presentation to U.S.EPA Region 9, San Francisco, California.

Hagemann, M.F., 2005. Use of Electronic Databases in Environmental Regulation, Policy Making and Public Participation. Brownfields 2005, Denver, Colorado.

Hagemann, M.F., 2004. Perchlorate Contamination of the Colorado River and Impacts to Drinking Water in Nevada and the Southwestern U.S. Presentation to a meeting of the American Groundwater Trust, Las Vegas, NV (served on conference organizing committee).

Hagemann, M.F., 2004. Invited testimony to a California Senate committee hearing on air toxins at schools in Southern California, Los Angeles.

Brown, A., Farrow, J., Gray, A. and **Hagemann, M.**, 2004. An Estimate of Costs to Address MTBE Releases from Underground Storage Tanks and the Resulting Impact to Drinking Water Wells.

Presentation to the Ground Water and Environmental Law Conference, National

Groundwater Association.

Hagemann, M.F., 2004. Perchlorate Contamination of the Colorado River and Impacts to Drinking Water in Arizona and the Southwestern U.S. Presentation to a meeting of the American Groundwater Trust, Phoenix, AZ (served on conference organizing committee).

Hagemann, M.F., 2003. Perchlorate Contamination of the Colorado River and Impacts to Drinking Water in the Southwestern U.S. Invited presentation to a special committee meeting of the National Academy of Sciences, Irvine, CA.

Hagemann, M.F., 2003. Perchlorate Contamination of the Colorado River. Invited presentation to a tribal EPA meeting, Pechanga, CA.

Hagemann, M.F., 2003. Perchlorate Contamination of the Colorado River. Invited presentation to a meeting of tribal representatives, Parker, AZ.

Hagemann, M.F., 2003. Impact of Perchlorate on the Colorado River and Associated Drinking Water Supplies. Invited presentation to the Inter-Tribal Meeting, Torres Martinez Tribe.

Hagemann, M.F., 2003. The Emergence of Perchlorate as a Widespread Drinking Water Contaminant. Invited presentation to the U.S. EPA Region 9.

Hagemann, M.F., 2003. A Deductive Approach to the Assessment of Perchlorate Contamination. Invited presentation to the California Assembly Natural Resources Committee.

Hagemann, M.F., 2003. Perchlorate: A Cold War Legacy in Drinking Water. Presentation to a meeting of the National Groundwater Association.

Hagemann, M.F., 2002. From Tank to Tap: A Chronology of MTBE in Groundwater. Presentation to a meeting of the National Groundwater Association.

Hagemann, M.F., 2002. A Chronology of MTBE in Groundwater and an Estimate of Costs to Address Impacts to Groundwater. Presentation to the annual meeting of the Society of Environmental Journalists.

Hagemann, M.F., 2002. An Estimate of the Cost to Address MTBE Contamination in

Groundwater(and Who Will Pay). Presentation to a meeting of the National Groundwater Association.

Hagemann, M.F., 2002. An Estimate of Costs to Address MTBE Releases from Underground Storage Tanks and the Resulting Impact to Drinking Water Wells. Presentation to a meeting of the U.S. EPA and State Underground Storage Tank Program managers.

Hagemann, M.F., 2001. From Tank to Tap: A Chronology of MTBE in Groundwater. Unpublished report.

Hagemann, M.F., 2001. Estimated Cleanup Cost for MTBE in Groundwater Used as Drinking Water. Unpublished report.

Hagemann, M.F., 2001. Estimated Costs to Address MTBE Releases from Leaking Underground Storage Tanks. Unpublished report.

Hagemann, M.F., and VanMouwerik, M., 1999. Potential Water Concerns Related to Snowmobile Usage. Water Resources Division, National Park Service, Technical Report.

VanMouwerik, M. and **Hagemann, M.F.** 1999, Water Quality Concerns Related to Personal Watercraft Usage. Water Resources Division, National Park Service, Technical Report.

Hagemann, M.F., 1999, Is Dilution the Solution to Pollution in National Parks? The George Wright Society Biannual Meeting, Asheville, North Carolina.

Hagemann, M.F., 1997, The Potential for MTBE to Contaminate Groundwater. U.S. EPA Superfund Groundwater Technical Forum Annual Meeting, Las Vegas, Nevada.

Hagemann, M.F., and Gill, M., 1996, Impediments to Intrinsic Remediation, Moffett Field Naval Air Station, Conference on Intrinsic Remediation of Chlorinated Hydrocarbons, Salt Lake City.

Hagemann, M.F., Fukunaga, G.L., 1996, The Vulnerability of Groundwater to Anthropogenic Contaminants on the Island of Maui, Hawaii. Hawaii Water Works Association Annual Meeting, Maui, October 1996.

Hagemann, M. F., Fukunaga, G. L., 1996, Ranking Groundwater Vulnerability in Central Oahu, Hawaii. Proceedings, Geographic Information Systems in Environmental Resources Management, Air and Waste Management Association Publication VIP-61.

Hagemann, M.F., 1994. Groundwater Characterization and Cleanup at Closing Military Bases in California. Proceedings, California Groundwater Resources Association Meeting.

Hagemann, M.F. and Sabol, M.A., 1993. Role of the U.S. EPA in the High Plains States Groundwater Recharge Demonstration Program. Proceedings, Sixth Biennial Symposium on the Artificial Recharge of Groundwater.

Hagemann, M.F., 1993. U.S. EPA Policy on the Technical Impracticability of the Cleanup of DNAPL-contaminated Groundwater. California Groundwater Resources Association Meeting.

Hagemann, M.F., 1992. Dense Nonaqueous Phase Liquid Contamination of Groundwater: An Ounce of Prevention... Proceedings, Association of Engineering Geologists Annual Meeting, v. 35.

Other Experience:

Selected as subject matter expert for the California Professional Geologist licensing examinations, 2009-2011.



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SOIL WATER AIR PROTECTION ENTERPRISE

525 Broadway Avenue, Suite 203

Santa Monica, California 90401

Attn: Paul Rosenfeld, Ph.D.

Tel: (310) 795-2335

Fax: (310) 434-0011

Email: prosenfeld@swape.com

Paul Rosenfeld, Ph.D.**Chemical Fate and Transport & Air Dispersion Modeling***Principal Environmental Chemist***Risk Assessment And Remediation Specialist****Education**

Ph.D. Soil Chemistry, University of Washington, 1999. Dissertation on VOC filtration.

M.S. Environmental Science, U.C. Berkeley, 1995. Thesis on organic waste economics.

B.A. Environmental Studies, U.C. Santa Barbara, 1991. Thesis on wastewater treatment.

Professional Experience

Dr. Rosenfeld is the environmental chemist at Soil Water Air Protection Enterprise (SWAPE). His focus is the fate and transport of environmental contaminants, risk assessment, and ecological restoration. His project experience ranges from monitoring and modeling of pollution sources as they relate to human and ecological health. Dr. Rosenfeld has investigated and designed remediation programs and risk assessments for contaminated sites containing, petroleum, MtBE and fuel oxygenates, chlorinated solvents, pesticides, radioactive waste, PCBs, PAHs, dioxins, furans, volatile organics, semi-volatile organics, perchlorate, heavy metals, asbestos, PFOA, unusual polymers, and odor. Significant projects performed by Dr. Rosenfeld include the following:

Litigation Support**Client: Nexsen Pruet, LLC (Charleston, South Carolina)**

Serving as expert in chlorine exposure in railroad tank car accident where approximately 120,000 pounds of chlorine were released.

Client: Buzbee Law Firm (Houston, Texas)

Serving as expert in catalyst release and refinery emissions cases against BP Texas City. One case settled regarding worker exposure, but ongoing litigation remains involving ~21,500 plaintiffs who have health claims and are seeking remediation from chemicals released from BP facility.

Client: Girardi Keese (Los Angeles, California)

Serving as expert investigating hydrocarbon exposure and property damage for ~600 individuals and ~280 properties in Carson, California, where homes were constructed above a large tank farm formerly owned by Shell.

Client: Brent Coon Law Firm (Cleveland, Ohio)

Served as expert calculating an environmental exposure to benzene, PAHs, and VOCs from a Chevron Refinery in Hooven Ohio. Ran AERMOD to calculate cumulative dose.

Client: Girardi Keese (Los Angeles, California)

Served as expert testifying on hydrocarbon exposure to a woman who worked on a fuel barge operated by Chevron. Demonstrated that the plaintiff was exposed to excessive amounts of benzene.

Client: Lundy Davis (Lake Charles, Louisiana)

Served as consulting expert on an oil field case representing the lease holder of a contaminated oil field. Conducted field work evaluating oil field contamination in Sulfur, Louisiana. Property is owned by Conoco Phillips, but leased by Yellow Rock, a small oil firm.

Client: Cox Cox Filo (Lake Charles, Louisiana)

Serving as testifying expert on multimillion gallon oil spill in Lake Charles which occurred on June 19, 2006, resulting in hydrocarbon vapor exposure to hundreds of workers and residents. Prepared air model and calculated dose. Demonstrated that petroleum odor alone can result in significant health harms.

Client: Cotchett Pitre & McCarthy (San Francisco, California)

Served as testifying expert representing homeowners who unknowingly purchased homes built on an old oil field in Santa Maria, California. Properties have high concentrations of petroleum hydrocarbons in subsurface soils resulting in diminished property value.

Client: Baron & Budd (Dallas, Texas) & Weitz & Luxenberg (New York, NY)

Serving as consulting expert in MTBE Federal Multi District Litigation (MDL) in New York. Consolidated ground water data, created maps for test cases, constructed damage model, evaluated taste and odor threshold levels.

Client: Law Offices Of Anthony Liberatore P.C. (Los Angeles, California)

Served as testifying expert representing individuals who rented homes on the Inglewood Oil Field in California. Plaintiffs were exposed to hydrocarbon contaminated water and air, and experienced health harms associated with the petroleum exposure.

Client: Baron & Budd P.C. Dallas Texas and Korein Tillery (Madison, County)

Illinois, Private Wells Analysis: Coordinated data acquisition and GIS analysis evaluating private well proximity to leaking underground storage tanks to support litigation noting that private well owners should be compensated for MTBE testing.

Client: Orange County District Attorney (Orange County, California)

Coordinated a review of 143 ARCO gas stations in Orange County to assist the District Attorney's prosecution of CCR Title 23 and California Health and Safety Code violators.

Client: Environmental Litigation Group (Birmingham, Alabama)

Serving as testifying expert in a health effects case against ABC Coke/Drummond Co for polluting a community with PAHs, benzene, particulate matter, heavy metals, and coke oven emissions. Created air dispersions models and conducted attic dust sampling, exposure modeling, and risk assessment for plaintiffs.

Client: Masry Vitatoe (Westlake Village, CA), Engstrom Lipscomb Lack (Los Angeles, CA) & Baron & Budd (Dallas Texas).

Served as consulting expert in Proposition 65 lawsuit filed against the major oil companies for benzene and toluene releases from gas stations and refineries which contaminated groundwater. Settlement included over \$110 million dollars in injunctive relief.

Client: Tommy Franks Law Firm (Austin, Texas)

Served as expert evaluating groundwater contamination which resulted from the hazardous waste injection program and negligent actions of Morton Thiokol and Rohm Hass. Interpreted drinking water contamination and community exposure.

Client: Baron & Budd (Dallas Texas) and Sher Leff (San Francisco, California)

Serving as consulting expert for several California cities which have filed defective product cases against Dow Chemical and Shell for 1,2,3-trichloropropane groundwater contamination. Generated maps showing capture zones of impacted wells for various municipalities.

Client: Baron & Budd (Dallas Texas) and Korein Tillery (Madison County, Illinois)

Serving as consulting expert for a Class Action defective product Atrazine claim filed in Madison County, Illinois against Syngenta and five other manufactures. The plaintiff class representative is Holiday Shores Water System which is evaluating health issues associated with atrazine, costing out treatment for filtration of public drinking water supplies.

Client: Weitz & Luxenberg (New York, NY)

Serving as expert on Property Damage and Nuisance claims resulting from emissions from the Countywide Landfill in Ohio. The landfill had an exothermic reaction or fire resulting from aluminum dross dumping, and the EPA fined the landfill \$10,000,000 dollars.

Client: Baron & Budd (Dallas Texas)

Serving as consulting expert for a groundwater contamination case in Pensacola Florida where fluorinated compounds contaminated wells operated by Escambia County.

Client: Environmental Litigation Group (Birmingham, Alabama)

Serving as an expert on property damage, medical monitoring and toxic tort claims that have been filed on behalf of over 12,000 plaintiffs who were exposed to PCBs and dioxins/furans resulting from emissions from Monsanto and Cerro Copper's operations in East Sauget, Illinois.

Client: Environmental Litigation Group (Birmingham, Alabama)

Served as an expert on groundwater case when Exxon Mobil and Helena Chemical released ethylene dichloride into groundwater resulting in a large plume. Prepared report on the appropriate treatment technology and cost, and flaws with the proposed on site remedy.

Client: Environmental Litigation Group (Birmingham, Alabama)

Serving as an expert on air emissions released when a Bartlo Packaging Incorporated facility in West Helena Arkansas exploded resulting in community exposure to pesticides and smoke from combustion of pesticides.

Client: Omara & Padilla (San Diego, California)

Served as testifying expert on nuisance case against Nutro Dogfood Company that constructed a large dog food processing facility in the middle of a residential community in Victorville California with no odor control devices. The facility has undergone significant modifications including installation of a regenerative thermal oxidizer.

Client: Environmental Litigation Group (Birmingham, Alabama)

Serving as an expert on property damage and medical monitoring claims that have been filed against International Paper resulting from chemical emissions from facilities located in Bastrop Louisiana, Prattville, Alabama, and Georgetown South Carolina.

Client: Estep and Shafer (West Virginia)

Served as expert running various air models to calculate acid emissions dose to residents resulting from emissions from a coal fired power plant in West Virginia.

Client: Watts Law Firm (Austin, Texas), Woodfill Pressler (Houston, Texas), Woska & Ass. (Oklahoma)

Served as testifying expert on community and worker exposure to CCA, creosote, PAHs, and dioxins/furans from a BNSF and Kopper's Facility in Somerville, Texas. Conducted field sampling, risk assessment, dose assessment and air modelling to quantify exposure to workers and community members.

Client: Environmental Litigation Group (Birmingham, Alabama)

Served as expert regarding community exposure to CCA, creosote, PAHs, and dioxins/furans from a Louisiana Pacific wood treatment facility in Florala, Alabama. Conducted blood sampling and environmental sampling to determine environmental exposure to dioxins/furans and PAHs.

Client: Sanders Law (Colorado Springs, Co) and Vamvoras & Schwartzberg (Lake Charles, Louisiana)

Serving as expert calculating chemical exposure to over 500 workers from large ethylene dichloride spill in Lake Charles, Louisiana, at the Conoco Phillips Refinery.

Client: Baron & Budd P.C. (Dallas, Texas)

Served as consulting expert in a defective product lawsuit against Dow Agrosience focusing on Clopyralid, a recalcitrant herbicide that damaged numerous compost facilities across the United States.

Client: Sullivan Papain Block McGrath & Cannavo (NY, NY) and The Cochran Firm (Dothan, MS)

Served as expert regarding community exposure to metals, PAHs PCBs, and dioxins/furans from the burning of Ford Paint Sludge and municipal solid waste in Ringwood, New Jersey.

Client: Rose, Klein Marias (Los Angeles, CA)

Serving as expert in Proposition 65 cases, each one citing an individual facility in the Port of Oakland. Prepared air dispersion and risk models to demonstrate that each facility emits diesel particulate matter that results in risks exceeding 1/100,000, hence violating the Proposition 65 Statute.

Client: Rose, Klein Marias (Los Angeles, CA)

Serving as expert in 55 Proposition 65 cases, each one citing an individual facility in the Port of Los Angeles and Port of Long Beach as the defendant. Prepared air dispersion and risk models to demonstrate that each facility emits diesel particulate matter that results in risks exceeding 1/100,000, hence violating the Proposition 65 Statute.

Client: Graham & Associates (Calabasas, CA)

Served as expert in a case in which General Motors is the plaintiff and BP Arco is the defendant. Conducted air models to demonstrate that sulfur emissions from the BP Arco facility formed sulfuric acid, destroying paint on over 350 automobiles.

Client: Rose, Klien Marias (Los Angeles, CA) and Environmental Law Foundation (San Francisco, CA)

Served as expert in a Proposition 65 case against potato chip manufacturers. Conducted an analysis of several brands of potato chips for acrylamide concentration and found that all samples exceeded Proposition 65 No Significant Risk Levels.

Client: Gonzales & Robinson (Westlake Village, CA)

Served as testifying expert in a toxic tort case against Chevron (Ortho) for allowing a community to be contaminated with lead arsenate pesticide. Created air dispersion models, soil vadose zone transport models, and evaluated bioaccumulation of lead arsenate in food.

Client: Environment Now (Santa Monica, CA)

Served as expert for Environment Now to convince the State of California to file a nuisance claim against the automobile manufactures to recover MediCal damages from expenditures on asthma-related health care costs.

Client: Trutanich Michell (Long Beach, California)

Served as expert representing San Pedro Boat Works in the Port of Los Angeles. Prepared air dispersion, particulate air dispersion, and storm water discharge models to demonstrate that Kaiser Bulk Loading is responsible for copper concentrate accumulating in the bay sediment.

Client: Azurix of North America (Fort Myers, Florida)

Provided expert opinions, reports and research pertaining to a proposed County Ordinance requiring biosolids applicators to measure VOC and odor concentrations at application sites' boundaries.

Client: MCP Polyurethane (Pittsburg, Kansas)

Provided expert opinions and reports regarding metal-laden landfill runoff that damaged a running track by causing the reversion of the polyurethane due to its catalytic properties.

Risk Assessment And Modeling

Client: ABT-Haskell (San Bernardino, California)

Prepared air dispersion model for a proposed state-of-the-art enclosed compost facility. Developed odor detection limits to predict 1, 8, and 24-hour off-site concentrations of sulfur, ammonia, and amine as well as prepared a traffic analysis.

Client: Jefferson PRP Group (Los Angeles, California)

Evaluated exposure pathways for chlorinated solvents and hexavalent chromium for human health risk assessment of Los Angeles Academy (formerly Jefferson New Middle School) operated by Los Angeles Unified School District.

Client: Covanta (Susanville California)

Prepared human health risk assessment for Covanta Energy focusing on agricultural worker exposure to caustic fertilizer.

Client: CIWMB (Sacramento California)

Used dispersion models to estimate traveling distance and VOC concentrations downwind from a composting facility for the California Integrated Waste Management Board.

Client: Carboquimeca (Bogotá, Columbia)

Evaluated exposure pathways for human health risk assessment for a confidential client focusing on significant concentrations of arsenic and chlorinated solvents contaminating groundwater used for drinking water.

Client: Navy Base Realignment and Closure Team (Treasure Island, California)

Used Johnson-Ettinger model to estimate indoor air PCB concentrations and compared estimated values with empirical data collected in homes. Negotiated action levels with DTSC.

Client: San Diego State University (San Diego California)

Measured CO₂ flux from soils amended with different quantities of biosolids compost at Camp Pendleton to determine CO₂ credit values for coastal sage under fertilized and non-fertilized conditions.

Client: Navy Base Realignment and Closure Team (MCAS Tustin, California)

Evaluated cumulative risk of a multiple pathway scenario with a child resident and a construction worker's exposure to air and soil via particulate and vapor inhalation, incidental soil ingestion, and dermal contact with soil.

Client: MCAS Miramar (San Diego, California)

Evaluated exposure pathways of metals in soil, comparing site data to background data. Risk assessment incorporated multiple pathway scenarios assuming child resident and construction worker exposure to particulate and vapor inhalation, soil ingestion, and dermal soil contact.

Client: Naval Weapons Station (Seal Beach, California)

Used a multiple pathway model to generate dust emission factors from automobiles driving on dirt roads. Calculated bioaccumulation of metals, PCBs, dioxin congeners and pesticides to estimate human and ecological risk.

Client: King County, Douglas County (Washington State)

Measured PM₁₀ and PM_{2.5} emissions from windblown soil treated with biosolids and a polyacrylamide polymer in Douglas County Washington. Used Pilat Mark V impactor for measurement and compared data to EPA particulate regulations.

Client: King County, Seattle, Washington.

Conducted emission inventory for several compost and wastewater facilities comparing VOC, particulate, and fungi concentrations to NIOSH values estimating risk to workers and individuals at neighboring facilities.

Air Pollution Investigation and Remediation

Client: Republic Landfill (Santa Clarita, CA)

Managed a field investigation of odor around a landfill during 30+ events. Using hedonic tone, butanol scale, dilution-to-threshold values, and odor character to evaluate odor sources and character and intensity.

Client: California Biomass (Victorville, CA)

Managed a field investigation of odor around landfill during 9+ events. Using hedonic tone, butanol scale, dilution-to-threshold values, and odor character to evaluate odor sources, character and intensity.

Client: ABT-Haskell (Redlands, California)

Assisted in permitting a compost facility that will be completely enclosed with a complex scrubbing system using acid scrubbers, base scrubbers, biofilters, heat exchangers and chlorine to reduce VOC emissions by 99 percent.

Client: Synagro (Corona, California)

Designed and monitored 30-foot by 20-foot by 6-foot biofilter for VOC control from an industrial composting facility in Corona, California, reducing VOC emissions by 99 percent.

Client: Jeff Gage, (Tacoma, Washington)

Conducted emission inventory at industrial compost facility using GC/MS analyses for VOCs. Evaluated effectiveness of VOC and odor control systems and estimated human health risk.

Client: Daishowa America (Port Angeles Mill, Washington)

Analyzed industrial paper sludge and ash for VOCs, heavy metals and nutrients to develop a land application program. Metals were compared to federal guidelines to determine maximum allowable land application rates.

Client: Jeff Gage (Puyallup Washington)

Measured effectiveness of biofilters at composting facility and ran EPA dispersion models to estimate traveling distance of odor and human health risk from exposure to volatile organics.

Surface Water, Groundwater, and Wastewater Investigation/Remediation

Client: Confidential (Downey, California)

Managed groundwater investigation to determine horizontal extent of 1,000 foot TCE plume associated with a metal finishing shop.

Client: Confidential (West Hollywood, California)

Designed soil vapor extraction system that is currently being installed for confidential client. Managed groundwater investigation to determine horizontal extent of TCE plume associated with dry cleaning.

Client: Synagro Technologies (Sacramento, California)

Managed groundwater investigation to determine if biosolids application impacted salinity and nutrient concentrations in groundwater.

Client: Navy Base Realignment and Closure Team (Treasure Island, California)

Assisted in the design and remediation of PCB, chlorinated solvent, hydrocarbon and lead contaminated groundwater and soil on Treasure Island. Negotiated screening levels with DTSC and Water Board. Assisted in the preparation of FSP/QAPP, RI/FS, and RAP documents and assisted in CEQA document preparation.

Client: Navy Base Realignment and Closure Team (MCAS Tustin, California)

Assisted in the design of groundwater monitoring systems for chlorinated solvents at Tustin MCAS. Contributed to the preparation of FS for groundwater treatment.

Client: MCP (Walnut, California)

Conducted forensic surface water and sediment sampling. Designed and conducted bench scale laboratory experiments. Demonstrated that metal and organic contaminants in storm water and sediment from landfill flooded and chemically compromised a polyurethane track.

Client: Mission Cleaning Facility (Salinas California)

Prepared a RAP and cost estimate for using an oxygen releasing compound (ORC) and molasses to oxidize diesel fuel in soil and groundwater at Mission Cleaning in Salinas.

Client: King County, Washington

Established and monitored experimental plots at a US EPA Superfund Site in wetland and upland mine tailings contaminated with zinc and lead in Smelterville, Idaho. Used organic matter and pH adjustment for wetland remediation and erosion control.

Client: City of Redmond (Richmond, Washington)

Collected storm water from compost-amended and fertilized turf to measure nutrients in urban runoff. Evaluated effectiveness of organic matter-lined detention ponds on reduction of peak flow during storm events. Drafted compost amended landscape installation guidelines to promote storm water detention and nutrient runoff reduction.

Client: City of Seattle (Seattle, Washington)

Measured VOC emissions from Renton wastewater treatment plant in Washington. Ran GC/MS, dispersion models, and sensory panels to characterize, quantify, control and estimate risk from VOCs.

Client: Plumas County (Quincy, California)

Installed wetland to treat contaminated water containing 1% copper in an EPA Superfund site. Revegetated 10 acres of acidic and metal laden sand dunes resulting from hydraulic mining. Installed and monitored piezometers in wetland estimating metal loading.

Client: Adams Egg Farm (St. Kitts, West Indies)

Designed, constructed, and maintained 3 anaerobic digesters at Springfield Egg Farm, St. Kitts. Digesters treated chicken excrement before effluent discharged into sea. Chicken waste was converted into methane cooking gas.

Client: BLM (Kremmling Colorado)

Collected water samples for monitoring program along upper stretch of the Colorado River. Rafted along river, protecting water quality by digging and repairing latrines.

Soil Science and Restoration Projects

Client: Kinder Morgan (San Diego County California)

Designed and monitored the restoration of a 110-acre project on Camp Pendleton along a 26-mile pipeline. Managed crew of 20, planting coastal sage, riparian, wetland, native grassland, and marsh ecosystems. Negotiated with the CDFW concerning species planting list and success standards.

Client: NAVY BRAC (Orote Landfill, Guam)

Designed and monitored pilot landfill cap mimicking limestone forest. Measured different species' root-penetration into landfill cap. Plants were used to evapotranspire water, reducing water leaching through soil profile.

Client: LA Sanitation District Puente Hills Landfill (Whittier, California)

Monitored success of upland and wetland mitigation at Puente Hills Landfill operated by Sanitation Districts of Los Angeles. Negotiated with the Army Corps of Engineers and CDFG to obtain an early sign-off.

Client: City of Escondido (Escondido California)

Designed, managed, installed, and monitored a 20-acre coastal sage scrub restoration project at Kit Carson Park, Escondido, California.

Client: Home Depot (Encinitas, California)

Designed, managed, installed and monitored a 15-acre coastal sage scrub and wetland restoration project at Home Depot in Encinitas, California.

Client: Alvarado Water Filtration Plant (San Diego, California)

Planned, installed and monitored 2-acre riparian and coastal sage scrub mitigation in San Diego California.

Client: Monsanto and James River Corporation (Clatskanie Oregon)

Served as a soil scientist on a 50,000-acre hybrid poplar farm. Worked on genetically engineering study of Poplar trees to see if glyphosate resistant poplar clones were economically viable.

Client: World Wildlife Fund (St. Kitts, West Indies)

Managed 2-year biodiversity study, quantifying and qualifying the various flora and fauna in St. Kitts' expanding volcanic rainforest. Collaborated with skilled botanists, ornithologists and herpetologists.

Publications

Rosenfeld, P.E. & Feng, L. (2011). *The Risks of Hazardous Waste*, Amsterdam: Elsevier Publishing.

Cheremisinoff, N.P., & **Rosenfeld, P.E.** (2011). *Handbook of Pollution Prevention and Cleaner Production: Best Practices in the Agrochemical Industry*, Amsterdam: Elsevier Publishing.

Gonzalez, J., Feng, L., Sutherland, A., Waller, C., Sok, H., Hesse, R., **Rosenfeld, P.** (2011). PCBs and Dioxins/Furans in Attic Dust Collected Near Former PCB Production and Secondary Copper Facilities in Sauget, IL. *Procedia Environmental Sciences* 4(2011):113-125.

Feng, L., Wu, C., Tam, L., Sutherland, A.J., Clark, J.J., **Rosenfeld, P.E.**, (2010). Dioxin and Furan Blood Lipid and Attic Dust Concentrations in Populations Living Near Four Wood Treatment Facilities in the United States. *Journal of Environmental Health* 73(6):34-46.

Cheremisinoff, N.P., & **Rosenfeld, P.E.** (2010). *Handbook of Pollution Prevention and Cleaner Production: Best Practices in the Wood and Paper Industries*, Amsterdam: Elsevier Publishing.

Cheremisinoff, N.P., & **Rosenfeld, P.E.** (2009). *Handbook of Pollution Prevention and Cleaner Production: Best Practices in the Petroleum Industry*, Amsterdam: Elsevier Publishing.

Wu, C., Tam, L., Clark, J., **Rosenfeld, P.** (2009). 'Dioxin and furan blood lipid concentrations in populations living near four wood treatment facilities in the United States', in Brebbia, C.A. and Popov, V., eds., *Air Pollution XVII*:

Proceedings of the Seventeenth International Conference on Modelling, Monitoring and Management of Air Pollution, Tallinn, Estonia. 20-22 July, 2009, Southampton, Boston. WIT Press.

Tam L. K., Wu C. D., Clark J. J. and **Rosenfeld, P.E.** (2008) A Statistical Analysis Of Attic Dust And Blood Lipid Concentrations Of Tetrachloro-p-Dibenzodioxin (TCDD) Toxicity Equivalency Quotients (TEQ) In Two Populations Near Wood Treatment Facilities. *Organohalogen Compounds*, Volume 70 (2008) page 002254.

Tam L. K., Wu C. D., Clark J. J. and **Rosenfeld, P.E.** (2008) Methods For Collect Samples For Assessing Dioxins And Other Environmental Contaminants In Attic Dust: A Review. *Organohalogen Compounds*, Volume 70 (2008) page 000527.

Hensley, A.R. A. Scott, J. J. J. Clark, **P. E. Rosenfeld** (2007) "Attic Dust and Human Blood Samples Collected near a Former Wood Treatment Facility" *Environmental Research*. 105, pp 194-197.

Rosenfeld, P.E., J. J. J. Clark, A. R. Hensley, M. Suffet. (2007) "The Use of an Odor Wheel Classification for Evaluation of Human Health Risk Criteria for Compost Facilities" –*Water Science & Technology* 55(5): 345-357.

Rosenfeld, P. E., M. Suffet. (2007) "The Anatomy Of Odour Wheels For Odours Of Drinking Water, Wastewater, Compost And The Urban Environment " *Water Science & Technology* 55(5): 335-344.

Sullivan, P. J. Clark, J.J.J., Agardy, F. J., **Rosenfeld, P.E.**, (2007) "Toxic Legacy, Synthetic Toxins in the Food, Water, and Air in American Cities," Elsevier Publishing, Boston Massachusetts.

Rosenfeld P.E., and Suffet, I.H. (Mel) (2007) "Anatomy Of An Odor Wheel" *Water Science and Technology*, In Press.

Rosenfeld, P.E., Clark, J.J.J., Hensley A.R., Suffet, I.H. (Mel) (2007) "The use of an odor wheel classification for evaluation of human health risk criteria for compost facilities." *Water Science And Technology*, In Press.

Hensley A.R., Scott, A., **Rosenfeld P.E.**, Clark, J.J.J. (2006) "Dioxin Containing Attic Dust And Human Blood Samples Collected Near A Former Wood Treatment Facility." *The 26th International Symposium on Halogenated Persistent Organic Pollutants – DIOXIN2006*, August 21 – 25, 2006. Radisson SAS Scandinavia Hotel in Oslo Norway.

Rosenfeld, P.E., and Suffet I.H. (2004) "Control of Compost Odor Using High Carbon Wood Ash", *Water Science and Technology*, Vol. 49, No. 9. pp. 171-178.

Rosenfeld, P.E., Clark J. J. and Suffet, I.H. (2004) "Value of and Urban Odor Wheel." (2004). *WEFTEC 2004*. New Orleans, October 2 - 6, 2004.

Rosenfeld, P.E., and Suffet, I.H. (2004) "Understanding Odorants Associated With Compost, Biomass Facilities, and the Land Application of Biosolids" *Water Science and Technology*. Vol. 49, No. 9. pp 193-199.

Rosenfeld, P.E., and Suffet I.H. (2004) "Control of Compost Odor Using High Carbon Wood Ash", Water Science and Technology, Vol. 49, No. 9. pp. 171-178.

Rosenfeld, P. E., Grey, M. A., Sellew, P. (2004) Measurement of Biosolids Odor and Odorant Emissions from Windrows, Static Pile and Biofilter. Water Environment Research. 76 (4): 310-315 JUL-AUG 2004.

Rosenfeld, P. E., Grey, M., (2003) Two stage biofilter for biosolids composting odor control. Seventh International In Situ And On Site Bioremediation Symposium. Batelle Conference Orlando Florida. June 2 and June 6, 2003.

Rosenfeld, P.E., Grey, M and Suffet, M. 2002. "Controlling Odors Using High Carbon Wood Ash." Biocycle, March 2002, Page 42.

Rosenfeld, P.E., Grey, M and Suffet, M. (2002). "Compost Demonstration Project, Sacramento, California Using High-Carbon Wood Ash to Control Odor at a Green Materials Composting Facility Integrated Waste Management Board Public Affairs Office, Publications Clearinghouse (MS-6), Sacramento, CA Publication #442-02-008. April 2002.

Rosenfeld, P.E., and C.L. Henry. 2001. Characterization of odor emissions from three different biosolids. Water Soil and Air pollution. Vol. 127 Nos. 1-4, pp. 173-191

Rosenfeld, P.E., and Henry C. L., 2000. Wood ash control of odor emissions from biosolids application. Journal of Environmental Quality. 29:1662-1668.

Rosenfeld, P.E., C.L. Henry and D. Bennett. 2001. Wastewater dewatering polymer affect on biosolids odor emissions and microbial activity. Water Environment Research. 73: 363-367.

Rosenfeld, P.E., and C.L. Henry. 2001. Activated Carbon and Wood Ash Sorption of Wastewater, Compost, and Biosolids Odorants Water Environment Research, 73: 388-392.

Rosenfeld, P.E., and Henry C. L., 2001. High carbon wood ash effect on biosolids microbial activity and odor. Water Environment Research. Volume 131 No. 1-4, pp. 247-262

Rosenfeld, P.E., C.L. Henry, R. Harrison. 1998. Oat and Grass Seed Germination and Nitrogen and Sulfur Emissions Following Biosolids Incorporation With High-Carbon Wood-Ash. Water Environment Federation 12th Annual Residuals and Biosolids Management Conference Proceedings. Bellevue Washington.

Chollack, T. and **P. Rosenfeld.** 1998. Compost Amendment Handbook For Landscaping. Prepared for and distributed by the City of Redmond, Washington State.

P. Rosenfeld. 1992. The Mount Liamuiga Crater Trail. Heritage Magazine of St. Kitts, Vol. 3 No. 2.

P. Rosenfeld. 1993. High School Biogas Project to Prevent Deforestation On St. Kitts. Biomass Users Network, Vol. 7, No. 1, 1993.

P. Rosenfeld. 1992. British West Indies, St. Kitts. Surf Report, April issue.

P. Rosenfeld. 1998. Characterization, Quantification, and Control of Odor Emissions From Biosolids Application To Forest Soil. Doctoral Thesis. University of Washington College of Forest Resources.

P. Rosenfeld. 1994. Potential Utilization of Small Diameter Trees On Sierra County Public Land. Masters thesis reprinted by the Sierra County Economic Council. Sierra County, California.

P. Rosenfeld. 1991. How to Build a Small Rural Anaerobic Digester & Uses Of Biogas In The First And Third World. Bachelors Thesis. University of California.

England Environmental Agency, 2002. Landfill Gas Control Technologies. Publishing Organization Environment Agency, Rio House, Waterside Drive, Aztec West, Almondsbury BRISTOL, BS32 4UD

Presentations

Sok, H.L.; Waller, C.C.; Feng, L.; Gonzalez, J.; Sutherland, A.J.; Wisdom-Stack, T.; Sahai, R.K.; Hesse, R.C.; **Rosenfeld, P.E.** "Atrazine: A Persistent Pesticide in Urban Drinking Water." Urban Environmental Pollution, Boston, MA, June 20-23, 2010.

Feng, L.; Gonzalez, J.; Sok, H.L.; Sutherland, A.J.; Waller, C.C.; Wisdom-Stack, T.; Sahai, R.K.; La, M.; Hesse, R.C.; **Rosenfeld, P.E.** "Bringing Environmental Justice to East St. Louis, Illinois." Urban Environmental Pollution, Boston, MA, June 20-23, 2010.

Rosenfeld, P.E. (2009) "Perfluorooctanoic Acid (PFOA) and Perfluorooctane Sulfonate (PFOS) Contamination in Drinking Water From the Use of Aqueous Film Forming Foams (AFFF) at Airports in the United States" Presentation at the 2009 Ground Water Summit and 2009 Ground Water Protection Council Spring Meeting, April 19-23, 2009. Tuscon, AZ.

Rosenfeld, P.E. (2009) "Cost to Filter Atrazine Contamination from Drinking Water in the United States" Contamination in Drinking Water From the Use of Aqueous Film Forming Foams (AFFF) at Airports in the United States" Presentation at the 2009 Ground Water Summit and 2009 Ground Water Protection Council Spring Meeting, April 19-23, 2009. Tuscon, AZ.

Rosenfeld, P. E. (2007) "Moss Point Community Exposure To Contaminants From A Releasing Facility" Platform Presentation at the 23rd Annual International Conferences on Soils Sediment and Water, October 15-18, 2007. University of Massachusetts, Amherst MA.

Rosenfeld, P. E. (2007) "The Repeated Trespass of Tritium-Contaminated Water Into A Surrounding Community Form Repeated Waste Spills From A Nuclear Power Plant" Platform Presentation at the 23rd Annual International Conferences on Soils Sediment and Water, October 15-18, 2007. University of Massachusetts, Amherst MA.

Rosenfeld, P. E. (2007) “Somerville Community Exposure To Contaminants From Wood Treatment Facility Emissions” Poster Presentation at the 23rd Annual International Conferences on Soils Sediment and Water, October 15-18, 2007. University of Massachusetts, Amherst MA.

Rosenfeld P. E. “Production, Chemical Properties, Toxicology, & Treatment Case Studies of 1,2,3-Trichloropropane (TCP)” – Platform Presentation at the Association for Environmental Health and Sciences (AEHS) Annual Meeting, San Diego, CA, 3/2007

Rosenfeld P. E. “Blood and Attic Sampling for Dioxin/Furan, PAH, and Metal Exposure in Florala, Alabama” – Platform Presentation at the AEHS Annual Meeting, San Diego, CA, 3/2007

Hensley A.R., Scott, A., **Rosenfeld P.E.**, Clark, J.J.J. (2006) “Dioxin Containing Attic Dust And Human Blood Samples Collected Near A Former Wood Treatment Facility.” APHA 134 Annual Meeting & Exposition, Boston Massachusetts. November 4 to 8th, 2006.

Paul Rosenfeld Ph.D. “Fate, Transport and Persistence of PFOA and Related Chemicals.” Mealey’s C8/PFOA Science, Risk & Litigation Conference” October 24, 25. The Rittenhouse Hotel, Philadelphia.

Paul Rosenfeld Ph.D. “Brominated Flame Retardants in Groundwater: Pathways to Human Ingestion, Toxicology and Remediation PEMA Emerging Contaminant Conference. September 19. Hilton Hotel, Irvine California.

Paul Rosenfeld Ph.D. “Fate, Transport, Toxicity, And Persistence of 1,2,3-TCP.” PEMA Emerging Contaminant Conference. September 19. Hilton Hotel in Irvine, California.

Paul Rosenfeld Ph.D. “Fate, Transport and Persistence of PDBEs.” Mealey’s Groundwater Conference. September 26, 27. Ritz Carlton Hotel, Marina Del Ray, California.

Paul Rosenfeld Ph.D. “Fate, Transport and Persistence of PFOA and Related Chemicals.” International Society of Environmental Forensics: Focus On Emerging Contaminants. June 7,8. Sheraton Oceanfront Hotel, Virginia Beach, Virginia.

Paul Rosenfeld Ph.D. “Rate Transport, Persistence and Toxicology of PFOA and Related Perfluorochemicals”. 2005 National Groundwater Association Ground Water And Environmental Law Conference. July 21-22, 2005. Wyndham Baltimore Inner Harbor, Baltimore Maryland.

Paul Rosenfeld Ph.D. “Brominated Flame Retardants in Groundwater: Pathways to Human Ingestion, Toxicology and Remediation.” 2005 National Groundwater Association Ground Water And Environmental Law Conference. July 21-22, 2005. Wyndham Baltimore Inner Harbor, Baltimore Maryland.

Paul Rosenfeld, Ph.D. and James Clark Ph.D. and Rob Hesse R.G. Tert-butyl Alcohol Liability and Toxicology, A National Problem and Unquantified Liability. National Groundwater Association. Environmental Law Conference. May 5-6, 2004. Congress Plaza Hotel, Chicago Illinois.

Paul Rosenfeld, Ph.D., 2004. Perchlorate Toxicology. Presentation to a meeting of the American Groundwater Trust. March 7th, 2004. Pheonix Arizona.

Hagemann, M.F., **Paul Rosenfeld, Ph.D.** and Rob Hesse, 2004. Perchlorate Contamination of the Colorado River. Invited presentation to a meeting of tribal representatives, Parker, AZ.

Paul Rosenfeld, Ph.D. A National Damage Assessment Model For PCE and Dry Cleaners. Drycleaner Symposium. California Ground Water Association. Radison Hotel, Sacramento, California. April 7, 2004.

Paul Rosenfeld, Ph.D. and James Clark Ph.D. Understanding Historical Use, Chemical Properties, Toxicity and Regulatory Guidance of 1,4 Dioxane. National Groundwater Association. Southwest Focus Conference. Water Supply and Emerging Contaminants. February 20-21, 2003. Hyatt Regency Phoenix Arizona.

Paul Rosenfeld, Ph.D. Underground Storage Tank Litigation and Remediation. California CUPA Forum. Marriott Hotel. Anaheim California. February 6-7, 2003.

Paul Rosenfeld, Ph.D. Underground Storage Tank Litigation and Remediation. EPA Underground Storage Tank Roundtable. Sacramento California. October 23, 2002

Rosenfeld, P.E. and Suffet, M. 2002. Understanding Odor from Compost, Wastewater and Industrial Processes. Sixth Annual Symposium On Off Flavors in the Aquatic Environment. International Water Association. Barcelona Spain. October 7- 10.

Rosenfeld, P.E. and Suffet, M. 2002. Using High Carbon Wood Ash to Control Compost Odor. Sixth Annual Symposium On Off Flavors in the Aquatic Environment. International Water Association. Barcelona Spain. October 7- 10.

Rosenfeld, P.E. and Grey, M. A. 2002. Biocycle Composting For Coastal Sage Restoration. Northwest Biosolids Management Association. Vancouver Washington. September 22-24.

Rosenfeld, P.E. and Grey, M. A. 2002. Soil Science Society Annual Conference. Indianapolis, Maryland. November 11-14.

Rosenfeld, P.E. 2000. Two stage biofilter for biosolids composting odor control. Water Environment Federation. Anaheim California. September 16, 2000.

Rosenfeld, P. E. 2000. Wood ash and biofilter control of compost odor. Biofest. October 16, 2000. Ocean Shores, California

Rosenfeld, P. E. 2000. Bioremediation Using Organic Soil Amendments. California Resource Recovery Association. Sacramento California.

Rosenfeld, P.E., C.L. Henry, R. Harrison. 1998. Oat and Grass Seed Germination and Nitrogen and Sulfur Emissions Following Biosolids Incorporation With High-Carbon Wood-Ash. Water Environment Federation 12th Annual Residuals and Biosolids Management Conference Proceedings. Bellevue Washington.

Rosenfeld, P.E., and C.L. Henry. 1999. An evaluation of ash incorporation with biosolids for odor reduction. Soil Science Society of America. Salt Lake City Utah.

Rosenfeld, P.E., C.L. Henry, R. Harrison. 1998. Comparison of Microbial Activity and Odor Emissions from Three Different Biosolids Applied to Forest Soil. Brown and Caldwell, Seattle Washington.

Rosenfeld, P.E., C.L. Henry. 1998. Characterization, Quantification, and Control of Odor Emissions from Biosolids Application To Forest Soil. Biofest Lake Chelan, Washington.

Rosenfeld, P.E., C.L. Henry, R. B. Harrison, and R. Dills. 1997. Comparison of Odor Emissions From Three Different Biosolids Applied to Forest Soil. Soil Science Society of America, Anaheim California.

Professional History

Soil Water Air Protection Enterprise (SWAPE); 2003 to present; Founding And Managing Partner

UCLA School of Public Health; 2007 to present; Lecturer (Asst Res)

UCLA School of Public Health; 2003 to 2006; Adjunct Professor

UCLA Environmental Science and Engineering Program; 2002-2004; Doctoral Intern Coordinator

UCLA Institute of the Environment, 2001-2002; Research Associate

Komex H₂O Science, 2001 to 2003; Senior Remediation Scientist

National Groundwater Association, 2002-2004; Lecturer

San Diego State University, 1999-2001; Adjunct Professor

Anteon Corp., San Diego, 2000-2001; Remediation Project Manager

Ogden (now Amec), San Diego, 2000-2000; Remediation Project Manager

Bechtel, San Diego, California, 1999 – 2000; Risk Assessor

King County, Seattle, 1996 – 1999; Scientist

James River Corp., Washington, 1995-96; Scientist

Big Creek Lumber, Davenport, California, 1995; Scientist

Plumas Corp., California and USFS, Tahoe 1993-1995; Scientist

Peace Corps and World Wildlife Fund, St. Kitts, West Indies, 1991-1993; Scientist

Bureau of Land Management, Kremmling Colorado 1990; Scientist

Teaching Experience

UCLA Department of Environmental Health (Summer 2003 through 2010) Teach Environmental Health Science 100 to students, including undergrad, medical doctors, public health professionals and nurses. Course focuses on the health effects of environmental contaminants.

National Ground Water Association, Successful Remediation Technologies. Custom Course In Sante Fe, New Mexico. May 21, 2002. Focused on fate and transport of fuel contaminants associated with underground storage tanks.

National Ground Water Association; Successful Remediation Technologies Course in Chicago Illinois. April 1, 2002. Focused on fate and transport of contaminants associated with Superfund and RCRA sites.

California Integrated Waste Management Board, April and May, 2001. Alternative Landfill Caps Seminar in San Diego, Ventura, and San Francisco. Focused on both prescriptive and innovative landfill cover design.

UCLA Department of Environmental Engineering, February 5 2002 Seminar on Successful Remediation Technologies focusing on Groundwater Remediation.

University Of Washington, Soil Science Program, Teaching Assistant for several courses including: Soil Chemistry, Organic Soil Amendments, and Soil Stability.

U.C. Berkeley, Environmental Science Program Teaching Assistant for Environmental Science 10.

Academic Grants Awarded

California Integrated Waste Management Board. \$41,000 grant awarded to UCLA Institute of the Environment. Goal: To investigate effect of high carbon wood ash on volatile organic emissions from compost. 2001.

Synagro Technologies, Corona California: \$10,000 grant awarded to San Diego State University. Goal: investigate effect of biosolids for restoration and remediation of degraded coastal sage soils. 2000.

King County, Department of Research and Technology, Washington State. \$100,000 grant awarded to University of Washington: Goal: To investigate odor emissions from biosolids application and the effect of polymers and ash on VOC emissions. 1998.

Northwest Biosolids Management Association, Washington State. \$20,000 grant awarded to investigate effect of polymers and ash on VOC emissions from biosolids. 1997.

James River Corporation, Oregon: \$10,000 grant was awarded to investigate the success of genetically engineered Poplar trees with resistance to round-up. 1996.

United State Forest Service, Tahoe National Forest: \$15,000 grant was awarded to investigating fire ecology of the Tahoe National Forest. 1995.

Kellogg Foundation, Washington D.C. \$500 grant was awarded to construct a large anaerobic digester on St. Kitts in West Indies. 1993.

Cases that Dr. Rosenfeld Provided Deposition or Trial Testimony

In the Court of Common Pleas for the Second Judicial Circuit, State of South Carolina, County of Aiken
David Anderson, et al., *Plaintiffs*, vs. Norfolk Southern Corporation, et al., *Defendants*.
Case Number: 2007-CP-02-1584

In the Circuit Court of Jefferson County Alabama
Jaeannette Moss Anthony, et al., *Plaintiffs*, vs. Drummond Company Inc., et al., *Defendants*
Civil action No. CV 2008-2076

In the Ninth Judicial District Court, Parish of Rapides, State of Louisiana
Roger Price, et al., *Plaintiffs*, vs. Roy O. Martin, L.P., et al., *Defendants*.
Civil Suit Number 224,041 Division G

In the United States District Court, Western District Lafayette Division
Ackle et al., *Plaintiffs*, vs. Citgo Petroleum Corporation, et al., *Defendants*.
Case Number 2:07CV1052

In the United States District Court for the Southern District of Ohio
Carolyn Baker, et al., *Plaintiffs*, vs. Chevron Oil Company, et al., *Defendants*.
Case Number 1:05 CV 227

In the Fourth Judicial District Court, Parish of Calcasieu, State of Louisiana
Craig Steven Arabie, et al., *Plaintiffs*, vs. Citgo Petroleum Corporation, et al., *Defendants*.
Case Number 07-2738 G

In the Fourteenth Judicial District Court, Parish of Calcasieu, State of Louisiana
Leon B. Brydels, *Plaintiffs*, vs. Conoco, Inc., et al., *Defendants*.
Case Number 2004-6941 Division A

In the District Court of Tarrant County, Texas, 153rd Judicial District
Linda Faust, *Plaintiff*, vs. Burlington Northern Santa Fe Rail Way Company, Witco Chemical Corporation
A/K/A Witco Corporation, Solvents and Chemicals, Inc. and Koppers Industries, Inc., *Defendants*.
Case Number 153-212928-05

In the Superior Court of the State of California in and for the County of San Bernardino
Leroy Allen, et al., *Plaintiffs*, vs. Nutro Products, Inc., a California Corporation and DOES 1 to 100,
inclusive, *Defendants*.
John Loney, Plaintiff, vs. James H. Didion, Sr.; Nutro Products, Inc.; DOES 1 through 20, inclusive,
Defendants.
Case Number VCVVS044671

In the United States District Court for the Middle District of Alabama, Northern Division
James K. Benefield, et al., *Plaintiffs*, vs. International Paper Company, *Defendant*.
Civil Action Number 2:09-cv-232-WHA-TFM

In the Superior Court of the State of California in and for the County of Los Angeles
Leslie Hensley and Rick Hensley, *Plaintiffs*, vs. Peter T. Hoss, as trustee on behalf of the Cone Fee Trust;
Plains Exploration & Production Company, a Delaware corporation; Rayne Water Conditioning, Inc., a

California corporation; and DOES 1 through 100, *Defendants*.
Case Number SC094173

In the Superior Court of the State of California in and for the County of Santa Barbara, Santa Maria Branch
Clifford and Shirley Adelhelm, et al., all individually, *Plaintiffs*, vs. Unocal Corporation, a Delaware
Corporation; Union Oil Company of California, a California corporation; Chevron Corporation, a
California corporation; ConocoPhillips, a Texas corporation; Kerr-McGee Corporation, an Oklahoma
corporation; and DOES 1 through 100, *Defendants*.
Case Number 1229251 (Consolidated with case number 1231299)

In the United States District Court for Eastern District of Arkansas, Eastern District of Arkansas
Harry Stephens Farms, Inc. and Harry Stephens, individual and as managing partner of Stephens
Partnership, *Plaintiffs*, vs. Helena Chemical Company, and Exxon Mobil Corp., successor to Mobil
Chemical Co., *Defendants*.
Case Number 2:06-CV-00166 JMM (Consolidated with case number 4:07CV00278 JMM)

In the United States District Court for the Western District of Arkansas, Texarkana Division
Rhonda Brasel, et al., *Plaintiffs*, vs. Weyerhaeuser Company and DOES 1 through 100, *Defendants*.
Civil Action Number 07-4037

In The Superior Court of the State of California County of Santa Cruz
Constance Acevedo, et al. *Plaintiffs* Vs. California Spray Company, et al. *Defendants*
Case No CV 146344

In the District Court of Texas 21st Judicial District of Burleson County
Dennis Davis, *Plaintiff*, vs. Burlington Northern Santa Fe Rail Way Company, *Defendant*.
Case Number 25,151

EXHIBIT C

From: Pehrson, John
Sent: Fri, 13 Nov 2020 21:09:23 +0000
To: Sang-Mi Lee; Zorik Pirveysian
Cc: Skidmore, Anthony; Ijams, Robin; Evelyn Quintanilla
Subject: RE: LAX ATMP General Conformity Set-Aside Request
Attachments: NOx & VOC General Conformity Set Aside Requests v4 2020-11-13.pdf

Sang-Mi and Zorik,

My apologies for not responding yesterday to your last question. [REDACTED]

During the construction period, total aircraft operations would be the same with or without the proposed Project. However, taxi/idle times under the With Project scenario would be longer during periods when one of the runways was closed to allow safe tie-in of the new extended Taxiway D on the north airfield. The runway closures are expected to occur for approximately four-and-a-half months in 2023 and again in 2024 (to tie-in each of the two north airfield runways). The effect of the runway closures is the major contributor to the NOx and VOC annual emissions in 2023 and 2024. Without the runway shutdowns, annual emissions of VOC would be less than the General Conformity *de minimis* thresholds, and NOx emissions would be much lower (about 14 tons per year in 2023 and 2024 due to direct project construction activity).

I've included a revised summary of the set-aside request which corrects the VOC emissions, and would like to set a time to go over the detailed results with you. I'm expecting that the call should take approximately 30 minutes. We would submit a formal request under LAWA letterhead after that call.

Regards,
John

John R. Pehrson, PE
Associate, Chemical Engineer
CDM Smith
46 Discovery, Suite 250, Irvine, California 92618
(949) 930-7251 (Direct) | (949) 933-1117 (Cell) | (949) 752-5452 (Office) | (949) 585-9160 (Fax)
cdmsmith.com



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From: Sang-Mi Lee <slee@aqmd.gov>
Sent: Thursday, November 12, 2020 3:03 PM

To: Pehrson, John <PehrsonJR@cdmsmith.com>
Subject: Re: LAX ATMP General Conformity Set-Aside Request

What's the changes for those years of construction?

From: Pehrson, John <PehrsonJR@cdmsmith.com>
Sent: Thursday, November 12, 2020 1:48 PM
To: Sang-Mi Lee <slee@aqmd.gov>; Zorik Pirveysian <ZPirveysian@aqmd.gov>
Cc: Skidmore, Anthony <SkidmoreAJ@cdmsmith.com>; Evelyn Quintanilla <equintanilla@lawa.org>
Subject: Re: LAX ATMP General Conformity Set-Aside Request

Not above the general conformity thresholds.

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From: Sang-Mi Lee <slee@aqmd.gov>
Sent: Thursday, November 12, 2020 1:40:00 PM
To: Pehrson, John <PehrsonJR@cdmsmith.com>; Zorik Pirveysian <ZPirveysian@aqmd.gov>
Cc: Skidmore, Anthony <SkidmoreAJ@cdmsmith.com>; Evelyn Quintanilla <equintanilla@lawa.org>
Subject: RE: LAX ATMP General Conformity Set-Aside Request

Hi John,

Thanks for the heads up. Is there any expected changes in operational emissions due to the project?

Thanks,
Sang-Mi

From: Pehrson, John <PehrsonJR@cdmsmith.com>
Sent: Thursday, November 12, 2020 12:56 PM
To: Sang-Mi Lee <slee@aqmd.gov>; Zorik Pirveysian <ZPirveysian@aqmd.gov>
Cc: Skidmore, Anthony <SkidmoreAJ@cdmsmith.com>; Evelyn Quintanilla <equintanilla@lawa.org>
Subject: LAX ATMP General Conformity Set-Aside Request

Zorik and Sang Mi,

Attached is the summary of project construction emissions and our set-aside request for NOx and VOC. If you have any time before the Thanksgiving break, we would like to discuss this request and provide more detailed calculations during and after the discussion.

Thank you,
John

John R. Pehrson, PE
Associate, Chemical Engineer
CDM Smith
46 Discovery, Suite 250, Irvine, California 92618
(949) 930-7251 (Direct) | (949) 933-1117 (Cell) | (949) 752-5452 (Office) | (949) 585-9160 (Fax)
cdmsmith.com



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Attachment Name:
NOX & VOC GENERAL CONFORMITY SET ASIDE REQUESTS V4 2020-11-13.PDF

LAX Airfield & Terminal Modernization Project
Request for NOx and VOC Budget from Conformity Set-Aside Accounts

NOx	Calendar Year											
	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	
Emissions in tons per year.												
General Conformity Set Aside for LAX LAMP	164.00	194.00	198.00	122.00	63.00	53.00						
LAX LAMP Construction Emissions (Final EA)	18.00	36.00	35.00	20.00	11.00	7.00	2.00	0.00				
LAX ATMP Aggressive Constr Emissions (EIR)			0.00	3.21	7.66	56.87	57.80	8.20	2.74	1.47	0.00	
Total LAX Projects with NOx > 10 tpy	18.00	36.00	35.00	23.21	18.66	63.87	59.80	(a)	(a)	(a)	(a)	
Remaining from LAMP Set Aside	146.00	158.00	163.00	98.79	44.34	-10.87	-59.80	(a)	(a)	(a)	(a)	
2016 AQMP Conformity Set-Aside	730.00	730.00	730.00	730.00	730.00	730.00	730.00	730.00	730.00	730.00	730.00	
2012 AQMP Conformity Set-Aside	365.00	365.00	365.00	365.00	365.00	365.00	365.00	365.00	365.00	365.00	365.00	
REQUESTED ADDITIONAL SET ASIDE BUDGETS FOR ATMP						10.9	59.8					
VOC	Calendar Year											
Emissions in tons per year.	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	
General Conformity Set Aside for LAX LAMP	32.00	41.00	42.00	37.00	23.00	21.00						
LAX LAMP Construction Emissions (Final EA)	5.00	4.00	4.00	2.00	1.00	0.50	0.50	0.00				
LAX ATMP Aggressive Constr Emissions (EIR)			0.00	0.90	2.01	25.78	28.40	6.21	2.01	0.42	0.00	
Total LAX Projects	5.00	4.00	4.00	2.90	3.01	26.28	28.90	(a)	(a)	(a)	(a)	
Remaining from LAMP Set Aside	27.00	37.00	38.00	34.10	19.99	-5.28	-28.90	(a)	(a)	(a)	(a)	
2016 AQMP Conformity Set-Aside	182.50	182.50	182.50	182.50	182.50	182.50	182.50	182.50	182.50	182.50	182.50	
2012 AQMP Conformity Set-Aside	73.00	73.00	73.00	73.00	73.00	73.00	73.00	73.00	73.00	73.00	73.00	
REQUESTED ADDITIONAL SET ASIDE BUDGETS FOR ATMP						5.3	28.9					

(a) Emissions from each airport project is less than the general conformity de minimis thresholds for NOx (10 tpy) and VOC (10 tpy) in the South Coast Air Basin

April 12, 2021

Samantha Bricker
Chief Sustainability & Revenue Management Officer
Los Angeles World Airports
1 World Way
Los Angeles, CA 90045

Dear Ms. Bricker,

This letter is in response to your letter dated February 26, 2021 requesting for confirmation that the anticipated emissions from the Los Angeles International Airport Airfield and Terminal Modernization Project (ATMP) are within the Air Quality Management Plan (AQMP)/State Implementation Plan (SIP) emissions budget for general conformity purposes.

The general conformity determination process is intended to demonstrate that a proposed Federal action will not: (1) cause or contribute to new violations of a national ambient air quality standard (NAAQS); (2) interfere with provisions in the applicable SIP for maintenance of any NAAQS; (3) increase the frequency or severity of existing violations of any standard; or (4) delay the timely attainment of any standard. As such, for general conformity determination, the proposed federal action needs to conform to the latest approved SIP/AQMP.

The South Coast Air Basin (Basin) is designated as an extreme non-attainment area for ozone, serious non-attainment for PM_{2.5} and maintenance area for Carbon Monoxide. In order to accommodate projects subject to general conformity requirements and to streamline the review process, general conformity budgets for NO_x and VOC emissions are established in the AQMP. The 2016 AQMP (<https://www.aqmd.gov/home/air-quality/clean-air-plans/air-quality-mgt-plan/final-2016-aqmp>), which is the latest plan approved by U.E. EPA, established set aside accounts to accommodate emissions subject to general conformity requirements. The set-aside accounts include 2 tons per day (tpd) or 730 tons per year (tpy) of NO_x and 0.5 tpd or 182.5 tpy of VOC each year starting in 2017 through 2030, and 0.5 tpd (182.5 tpy) of NO_x and 0.2 tpd (73 tpy) of VOC each year in 2031 and thereafter.

The anticipated emissions from the proposed project exceed the General Conformity de minimis thresholds of NO_x, VOC and CO in years 2023 and 2024 as indicated in Table 3-6, Proposed Project Direct and Indirect Emissions Through 2033, of your letter. These emissions are from construction equipment and increased aircraft taxi time associated with delay due to construction

activities. Los Angeles World Airports (LAWA) has indicated that detailed information on emissions calculations (source inputs, assumptions and emission results) included in the general conformity analysis are available on LAWA's ATMP project website (<https://www.lawa.org/atmp/documents>)¹.

South Coast AQMD staff has reviewed the proposed project emissions and determined that NOx and VOC emissions above de minimis thresholds can be accommodated within the general conformity budgets established in the 2016 AQMP. The emissions accommodated in the general conformity budgets for 2023 and 2024 are listed in Table 1 below. Table 2 shows the annual average operating day emissions converted from annual emissions using the number of days expected to occur for each construction segment and its impact on increased aircraft taxi time (Table 5-1 of your letter).

Table 1. Proposed Project Emissions Accommodated in 2016 AQMP General Conformity Budgets (tons per year)

Pollutants	Emission Phase	2023	2024
NOx	Construction	53.0	58.0
VOC	Construction	25.0	27.0

Table 2. Annual Average Operating Day Emissions from the Proposed Project Accommodated in 2016 AQMP General Conformity Budgets (tons per day)

Pollutants	Emission Phase	2023	2024
NOx	Construction	0.353	0.376
VOC	Construction	0.172	0.181

In addition to NOx and VOC emissions, CO emissions are also anticipated to exceed the de minimis threshold in 2023 and 2024. However, the results of the air dispersion modeling included in your request letter indicate that the increased emissions from the construction phase would result in ground level concentrations not exceeding the NAAQS, as shown in Attachment 5 of your request letter. Therefore, even though CO emissions are above the *de minimis* threshold, the project is not expected to interfere with the CO maintenance status of the Basin. LAWA has indicated that detailed information on CO emissions calculations, including the emission source

¹ Available under National Environmental Policy Act (NEPA) documents at <https://www.lawa.org/atmp/documents>. Refer to page 8 of LAWA's request letter for detailed instructions to access data.

inputs to the dispersion model during construction, and CO modeling results as well as the dispersion modeling protocol are available at LAWA's ATMP website².

In summary, based on our evaluation, the proposed project will conform to the latest EPA approved AQMP as the emissions from the project are accommodated within the AQMP's emissions budgets, and the proposed project is not expected to result in any new or additional violations of the NAAQS or impede the projected attainment of the NAAQS.

If you have any questions, please contact me at (909) 396-2856 or srees@aqmd.gov or Sang-Mi Lee, Program Supervisor at (909)-396-3169 or slee@aqmd.gov.

Sincerely,

Sarah Rees

Sarah L. Rees, Ph.D.
Deputy Executive Officer
Planning, Rule Development & Area Sources
South Coast Air Quality Management District

Attachment:

Letter from Los Angeles World Airports dated February 26, 2021

cc: Tom Kelly, US EPA Region IX
Rongsheng Luo, SCAG
Barbara Baird, South Coast AQMD
Zorik Pirveysian, South Coast AQMD
Sang-Mi Lee, South Coast AQMD
Jillian Wong, South Coast AQMD
Lijin Sun, South Coast AQMD

ZP:SL

² Available under CEQA Environmental documents at <https://www.lawa.org/atmp/documents>. Refer to page 16 of LAWA's request letter for detailed instructions to access data.



Los Angeles
World Airports

February 26, 2021

Dr. Sarah Rees
Acting Deputy Executive Director
Planning, Rule Development and Area Sources
South Coast Air Quality Management District
21865 Copley Drive
Diamond Bar, California 91765

LAX

Van Nuys

City of Los Angeles

Eric Garcetti
Mayor

Board of Airport
Commissioners

Sean O. Burton
President

Valeria C. Velasco
Vice President

Gabriel L. Eshaghian
Beatrice C. Hsu
Nicholas P. Roxborough
Dr. Cynthia A. Telles
Karim Webb

Justin Erbacci
Chief Executive Officer

Subject: Los Angeles International Airport Airfield and Terminal Modernization Project
Proposed Project Construction Emissions and General Conformity Budgets

Thank you for the ongoing discussions and for the information provided on the federal Clean Air Act (CAA) general conformity process under the 2016 Air Quality Management Plan (2016 AQMP) and how it applies to the Los Angeles International Airport (LAX) Airfield and Terminal Modernization Project (Proposed Project).¹ Los Angeles World Airports (LAWA) formally requests confirmation from the South Coast Air Quality Management District (SCAQMD) that emissions associated with the Proposed Project are within the State Implementation Plan (SIP) budgets established in the approved 2016 AQMP.

The following information regarding this request are included in the attachments to this letter:

- Attachment 1 – Proposed Project Overview
- Attachment 2 – General Conformity Rules and Criteria
- Attachment 3 – Summaries of Proposed Project Construction and Operational Emissions
- Attachment 4 – Summary of Carbon Monoxide (CO) Concentrations Under the Proposed Project
- Attachment 5 – Summary of Nitrogen Oxides (NO_x) and Volatile Organic Compound (VOC) Construction Emissions Subject to the Requested Confirmation

We respectfully request that the SCAQMD confirm that the emissions in Attachment 5 are within the General Conformity Budgets identified in the 2016 AQMP (Appendix III, Chapter 2). Please contact me at sbricker@lawa.org or (310) 259-5798 with any questions regarding this request.

Sincerely,

Samantha Bricker

Samantha Bricker
Chief Sustainability & Revenue Management Officer
Los Angeles World Airports

¹ Conference calls regarding CAA general conformity for projects in the South Coast Air Basin, including the Proposed Project, were held between SCAQMD and LAWA on December 4, 2020; January 12, 2021; January 22, 2021, February 5, 2021, and February 11, 2021.



ATTACHMENT 1

Proposed Project Overview

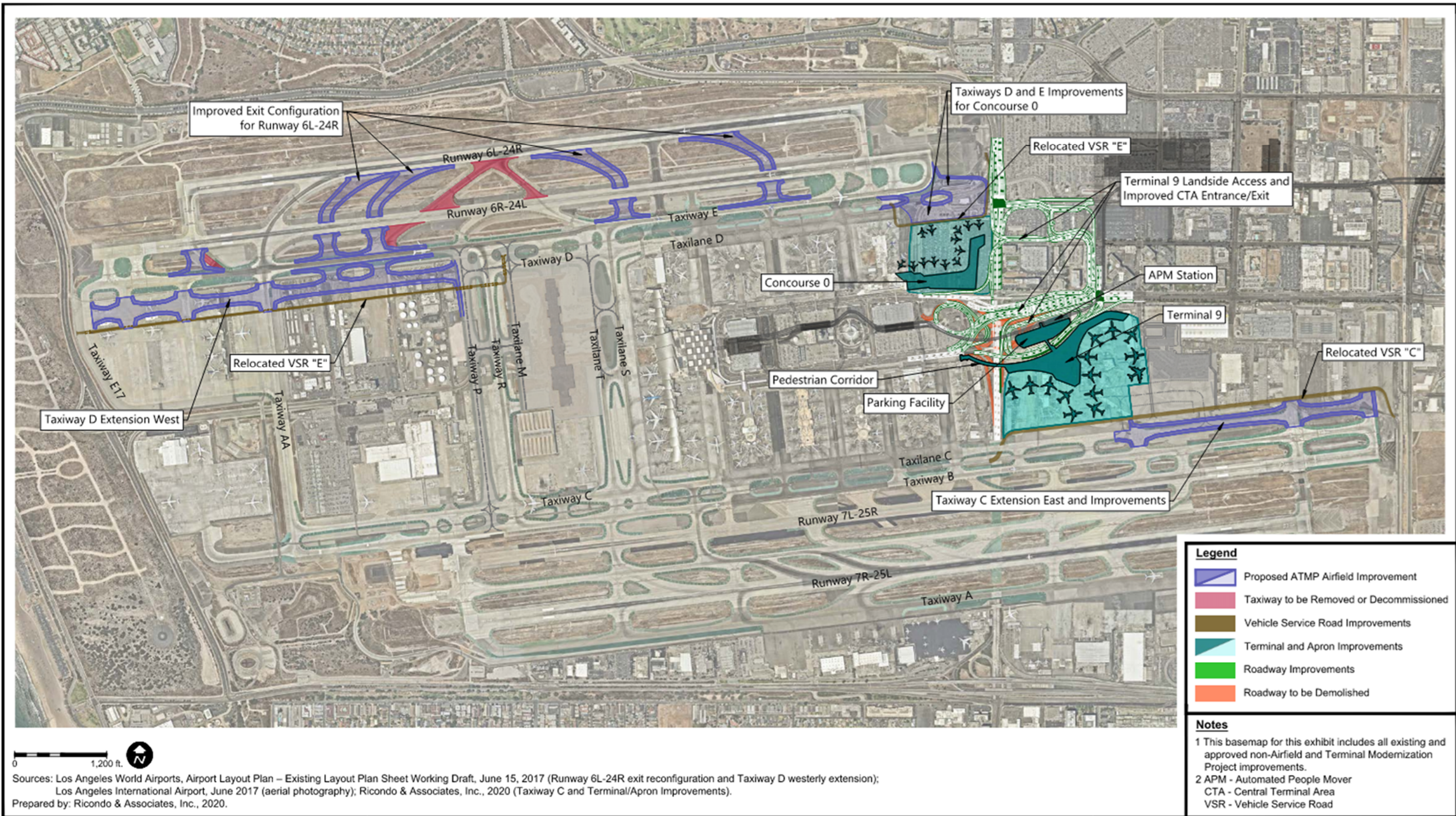
LAWA is pursuing the Proposed Project to implement airfield, terminal, and landside roadway improvements at LAX as part of LAWA's continuing commitment to maintain LAX as a world class airport. The Proposed Project consists of several primary elements, including airfield improvements that would enhance management of aircraft movements and safety within the airfield, new terminal facilities to upgrade passenger processing capabilities and enhance the passenger experience, and an improved system of roadways to provide better access to and egress from the Central Terminal Area (CTA) and all terminals and reduce congestion on nearby public roadways. Key components of these elements are summarized below:

- **Airfield Elements**
 - Remove and replace Runway 6L 24R acute-angled runway exit Taxiways Y and Z between Runway 6R 24L and parallel Taxiway E with four new acute-angled runway exit taxiways
 - Extend parallel Taxiway D from Taxiway C14 west to meet Taxiway E17 and relocate a vehicle service road (VSR) south according to Airplane Design Group (ADG) VI FAA separation design standards
 - Construct improvements and an easterly extension of Taxiway C from Taxiway C3 to Taxiway B1 and relocate VSR C to meet ADG VI FAA separation standards
- **Terminal/Concourse-Related Airfield Elements**
 - Extend Taxiway E east of Taxiway D7 for access to Concourse 0 and maintain unrestricted ADG V and restricted ADG VI capability
 - Extend Taxiway D east of Taxiway D7 and relocate the VSR between Taxiway E and Taxiway D south of the extended Taxiway D for access to Concourse 0 and provide simultaneous unrestricted ADG VI movement on Taxiway E and unrestricted ADG V movement on Taxiway D
 - Construct paved area located at the eastern ends of extended Taxiway D and Taxiway E that could be used for aircraft pushbacks for the northeastern gate at Concourse 0 and temporarily hold departing aircraft waiting to access Runway 6R 24L for takeoff
 - Construct aircraft parking apron and taxiways connecting Concourse 0 to the north airfield
 - Construct aircraft parking apron and a taxiway connecting Terminal 9 to the south airfield
- **Terminal Area Elements**
 - Remove 15 of the existing 18 West Remote Gates and construct Concourse 0 and Terminal 9
 - Decommission 15 passenger gates and associated holding areas located at the West Remote Gates in the western part of LAX
 - Construct Concourse 0 east of Terminal 1 with up to 11 narrowbody aircraft passenger gates servicing domestic and international passengers and remove two existing passenger gates at Terminal 1 resulting in a net gain of nine new narrowbody aircraft passenger gates at the northeast area of the CTA

- Construct Terminal 9 east of S. Sepulveda Boulevard and south of W. Century Boulevard with up to 12 widebody aircraft passenger gates servicing domestic and international passengers resulting in a net gain of 12 new widebody aircraft passenger gates at the southeast area of the CTA
- Net Change in Passenger Gates – Concourse 0 and Terminal 9 would provide up to 21 new passenger gates. Of the 21 passenger gates, 15 would serve as replacements to the decommissioned West Remote Gates, which is a net increase of 6 passenger gates. The net increase in six passenger gates would provide additional international and domestic connectivity between Terminal 8 and Terminal 9 and between Terminal 1 and Concourse 0. All of the new passenger gates would be connected to concourse and terminal facilities contiguous to the CTA.
- Construct a pedestrian corridor over S. Sepulveda Boulevard to connect Terminal 8 and Terminal 9
- Construct an APM station at Terminal 9
- Construct a parking facility at Terminal 9
- Roadway Elements
 - Construct connecting roadways for Terminal 9 to and from off airport roadways and the CTA
 - Construct roadway improvements in the vicinity of the W. Century Boulevard / S. Sepulveda Boulevard interchange to improve efficient movement into and out of the CTA

Before construction can begin on the key components of the Proposed Project, a number of facilities must be either relocated or new facilities constructed. These actions are enabling projects, which are part of the Proposed Project and emissions associated with them are included in the inventories provided in Attachment 5. Various enabling projects that allow for construction of the Proposed Project elements include, but are not limited to, removal of various airfield support facilities, removal of aircraft parking positions, removal of vehicle parking spaces, reconfiguration of vehicle service roads, and utility relocation.

Figure 1 provides an overview of the Proposed Project element locations at LAX.



LAX Airfield and Terminal Modernization Project

Proposed Project

Figure
1

ATTACHMENT 2

General Conformity Rules and Criteria

LAWA is asking the Federal Aviation Administration (FAA) for unconditional approval of the portion of the Airport Layout Plan (ALP) that would include the airside, terminal, and landside facilities of the Proposed Project. Section 176(c) of the CAA (42 U.S.C. 7506(c)) requires the FAA to demonstrate that the Proposed Project conforms to the applicable State Implementation Plan (SIP) required under Section 110(a) of the CAA (42 U.S.C. 7410(a)) before the action is otherwise approved. In this context, conformity means that such Proposed Project must be consistent with a SIP's purpose of eliminating or reducing the severity and number of violations of National Ambient Air Quality Standards (NAAQS) and achieving expeditious attainment of those standards. The FAA must determine if the Proposed Project is subject to the general conformity regulations and, if so, if the action "conforms" to the applicable SIP by ensuring that the action does not:

- cause or contribute to any new violation of any NAAQS;
- increase the frequency or severity of any existing violations of any NAAQS; or
- delay the timely attainment of any NAAQS or any required interim emission reductions or other milestones.

The process of evaluating projects under the General Conformity Regulations generally involves the following steps:

- determining if the project is exempt from conformity regulations;
- determining if the project is presumed to conform;
- preparation of an applicability analysis, if the project is not exempt or presumed to conform, including an evaluation of whether project emissions would exceed *de minimis* thresholds under the regulations; and
- for projects with pollutant emissions that exceed *de minimis* levels, a General Conformity Determination is required.

The Proposed Project is neither exempt from nor presumed to conform with the General Conformity Regulations.

General conformity applies to any criteria pollutant for which an area is in nonattainment or maintenance status. An applicability analysis under general conformity consists of preparing an emissions inventory for all project-related direct and indirect emissions and comparing that result with the *de minimis* thresholds. The regulation defines the thresholds based on pollutant and attainment/non-attainment designation. The thresholds applicable at LAX under the General Conformity Rules are shown in **Table 2-1**.

Emissions for the Proposed Project will be compared to these *de minimis* thresholds. Regulation 40 CFR § 93.159(d) notes that when comparing emissions to *de minimis* thresholds, the following scenarios must be considered:

- emissions in the year of attainment or the farthest year for which emissions are projected in the maintenance plan;
- the year in which the total of direct and indirect project-related emissions are expected to be the greatest on an annual basis; and
- any year for which the SIP has an applicable emissions budget.

Table 2-1. General Conformity *de minimis* Thresholds in the South Coast Air Basin

Pollutant (Precursor)	Area Designation/Classification	<i>de minimis</i> Threshold (tons per year)
CO	Attainment/Maintenance	100
PM ₁₀	Attainment/Maintenance	100
PM _{2.5} (NO _x , VOC, SO _x , or Ammonia)	Nonattainment/Serious	70
Ozone (NO _x or VOC)	Nonattainment/Extreme	10
Lead (Pb)	Nonattainment	25
NO ₂ (NO _x)	(See Note 1)	Not applicable

Sources: U.S. Environmental Protection Agency, *Green Book Nonattainment Areas*. Available: <https://www.epa.gov/green-book>, accessed October 2019; California Air Resources Board, *Area Designations Maps/State and National*. Available: <https://www.arb.ca.gov/desig/adm/adm.htm>, accessed October 2019.

Note 1: The South Coast Air Basin was designated a maintenance area for the annual NO₂ NAAQS in September 1998. As of September 2018, more than two consecutive maintenance periods had lapsed without an exceedance; therefore, the region is no longer subject to General Conformity for NO₂.

Key:

CO – carbon monoxide

NO_x – nitrogen oxides

PM₁₀ – respirable particulate matter

PM_{2.5} – fine particulate matter

SO_x – sulfur oxides

VOC – volatile organic compounds

If emissions in all of these scenarios are less than *de minimis*, no further analysis is needed. If emissions are above *de minimis* levels, a General Conformity Determination is required. In a General Conformity Determination, the regulations allow for the following avenues to show conformity:

- A written determination from the State/local air quality agency stating that the project emissions, together with all other emissions in the non-attainment or maintenance area, would not exceed the emissions budget in the SIP;
- A written commitment from the Governor, or the Governor's designee for SIP actions, to include the emissions in a revised SIP (this automatically results in a call for a SIP revision);
- Offsetting or mitigating project emissions so that there is no net increase within the non-attainment or maintenance area; or
- The applicable Metropolitan Planning Organization (MPO) determines that the emissions from the project, or portion thereof, are included in a conforming transportation plan and transportation improvement program.

The currently approved SIP for ozone in the South Coast Air Basin is referred to as the 2016 South Coast Ozone SIP and includes the SCAQMD Final 2016 Air Quality Management Plan, the Revised Proposed 2016 State Strategy for the State Implementation Plan, the 2018 Updates to the California State Implementation Plan, the Updated Federal 1979 1-Hour Ozone Standard Attainment Demonstration, and a local emissions statement rule.² Therefore, the 2016 South Coast Ozone SIP is the applicable SIP for this General Conformity Determination.

The SCAQMD has adopted by reference the federal General Conformity Regulations as SCAQMD Rule 1901. In addition, to streamline the review process and facilitate General Conformity Determinations, SCAQMD established separate NO_x and VOC General Conformity Budget set-aside accounts in the 2016 AQMP (Appendix III, Chapter 2), which provides the currently approved SIP budgets for the South Coast Air Basin. The initial budgets in the set-aside accounts were 2.0 tons per day (TPD) of

² U.S. Environmental Protection Agency. "Approval of Air Quality Implementation Plans; California; South Coast Air Basin; 1-Hour and 8-Hour Ozone Nonattainment Area Requirements – Final Rule." 84 FR 52005. October 1, 2019.

NO_x and 0.5 TPD of VOC each year from 2017 through 2030 and changed to 0.5 TPD of NO_x and 0.2 TPD of VOC in 2031.³ Projects that are confirmed by the SCAQMD to be accommodated within these General Conformity Budget set-aside accounts conform with the SIP per the first bullet above.⁴

³ South Coast Air Quality Management District. Final 2016 Air Quality Management Plan, Appendix III, Chapter 2, pp. III-2-87 (March 2017). Available at: <http://www.aqmd.gov/docs/default-source/clean-air-plans/air-quality-management-plans/2016-air-quality-management-plan/final-2016-aqmp/appendix-iii.pdf?sfvrsn=6>.

⁴ General Conformity Regulations at 40 CFR 93.158(a)(5)(i)(A).

ATTACHMENT 3

Proposed Project Construction and Operational Emissions

Proposed Project emissions during construction and operations are in the tables below. The emissions from construction equipment, construction haul and delivery trucks, and worker vehicle trips are considered “direct” emissions under the General Conformity definitions, while emissions from operations (aircraft, ground support equipment, passenger traffic, etc.) are considered “indirect” emissions under the definitions. As noted in the LAX Airfield and Terminal Modernization Project Final Air Quality Impact Analysis Protocol for NEPA and General Conformity, dated February 4, 2020,⁵ Proposed Project operational (i.e., indirect) emissions are the incremental emissions determined by subtracting each future year emissions under the No Action Alternative from the corresponding future year emissions under the Proposed Project. Since the airport passenger activity level and aircraft operations are estimated to be the same for each year under the Proposed Project and No Action Alternative, operational emissions are only nominally different between the two scenarios, with a caveat regarding aircraft operations during the construction period discussed below.

The Final Air Quality Impact Analysis Protocol for NEPA and General Conformity as well as detailed information on direct construction emission source inputs, assumptions and emission results (Draft Air Quality Data Files) are included on LAWA’s ATMP Project website under NEPA Environmental Documents at: <https://www.lawa.org/atmp/documents/>. [Note: Once on the www.lawa.org/atmp/documents site, scroll down to find the “NEPA Environmental Documents” heading. Below the heading will be a link for several items including the NEPA and General Conformity Air Quality Modeling Protocol, and an expansion button (+/-) for the Draft Air Quality Data Files. Click on the “+” symbol to the left of “Draft Air Quality Data Files” to expand the link and list the emission and dispersion modeling files.] Additional information and calculations will be included in the LAX ATMP Draft Environmental Assessment and Draft General Conformity Determination scheduled to be released in mid-2021.

Proposed Project Construction Impacts on Operational Activity

Construction of the airfield improvements would require the temporary closures of Runways 6L-24R and 6R-24L for approximately 4.5 months each, to safely tie-in the new runway exits to these runways. Only one of these runways would be closed in a given year. During these times, aircraft operations at LAX would occur on three runways (i.e., one runway in the north airfield and two runways in the south airfield). The temporary closure of each runway would increase the distances that aircraft would taxi, as some aircraft activity that would normally occur on the closed runway would be shifted to either the other north airfield runway, or to one of the south airfield runways (Runways 7L-25R or 7R-25L). Moreover, three-runway operations would be less efficient, resulting in a temporary increase in aircraft taxi-idle times and corresponding air pollutant emissions.

⁵ Federal Aviation Administration, LAX Airfield and Terminal Modernization Project Final Air Quality Impact Analysis Protocol for NEPA and General Conformity, February 4, 2020. The final protocol was reviewed and accepted by SCAQMD, California Air Resources Board, and U.S. Environmental Protection Agency in early 2020. The final protocol was submitted to SCAQMD via email from FAA on January 13, 2020, re - Los Angeles International Airport - Airfield and Terminal Modernization Project - Updated Air Quality Modeling Protocol; and from CDM Smith on December 7, 2020, Re – LAX ATMP Conformity Discussion with SCAQMD.

Two SIMMOD analyses of the airport, based on Design Day Flight Schedules, were conducted to develop an estimate of the increased taxi idle times due to the closure of Runway 6R-24L (i.e., the inboard runway). (These analyses were conducted assuming that Runway 6R-24L would be closed in 2023. It was later determined that Runway 6R-24L would be closed in 2024. The implications of this change are discussed below.) The closure of Runway 6R-24L was selected for the analysis since its closure would require any aircraft using the north airfield to taxi in or out from Runway 6L-24R (i.e., the outboard runway), and for all heavy aircraft (e.g., Boeing 747, Airbus A380, etc.) departing from LAX north airfield terminals to taxi down to the south airfield because Runway 6L-24R is not long enough to accommodate the heavy aircraft departures during the closure of Runway 6R-24L. One SIMMOD run was used to calculate taxi and delay times with Runway 6R-24L closed in 2023, and the other run was used to calculate taxi and delay times with all runways opened (i.e., normal operations) in 2023. The incremental taxi-idle times between the two runs represented the additional delay during proposed Project construction that would occur if Runway 6R-24L were closed in 2023.

Subsequent to completion of the SIMMOD analyses, the proposed construction schedule was modified, with the closure of Runway 6R-24L occurring in 2024 instead of 2023. This later year was forecasted to have approximately 1 percent more total aircraft operations than 2023, which would increase the incremental taxi-idle times relative to the closure in 2023. This increase is two-fold: (i) the taxi-idle times per aircraft operation would increase due to more operations occurring each day, which would increase the delay times per operation; and (ii) the total number of delayed operations would also increase. The increase in taxi-idle times per operation was estimated to be approximately 2.9 percent, which was combined with the increase in total operations (1 percent) to indicate a total increase in daily taxi-idle times of 3.9 percent due to the shutdown of Runway 6R-24L in 2024 compared to the shutdown in 2023. This 3.9 percent increase was added to the incremental results of the SIMMOD runs for 2023 to estimate incremental taxi-idle times for the shutdown of Runway 6R-24L in 2024.

The Proposed Project aircraft increased ground delay times per operation during these runway closures are noted in **Table 3-1**, and the associated incremental operational emissions in 2023 and 2024 are presented in **Table 3-2** and **Table 3-3**, respectively, as Proposed Project indirect emissions. The values in these tables are the same as those reported in the LAX Airfield and Terminal Modernization Project Draft Environmental Impact Report, dated October 2020; specifically, in Appendix C.1. [Note: Appendix C can be accessed from <https://www.lawa.org/atmp/documents/> by scrolling down to “CEQA Environmental Documents,” clicking the “+” symbol next to “Draft Environmental Impact Report (DEIR)” to expand the selection, then clicking the “+” symbol next to “Main Documents and Appendices (as individual sections):” to list the sections and appendices. Pages 176 and 177 of the Appendix C pdf file contains the calculation of increased ground delay emissions during the runway closures in 2023 and 2024].

Direct construction emissions for the Proposed Project are provided for each year of construction (2021 through 2028) in **Table 3-4**. Proposed Project indirect operational emissions in 2028 (year the project is expected to be completed and implemented) and 2033 (five-year outlook from the implementation year) is presented in **Table 3-5**. Total direct and indirect emissions for the Proposed Project from start of construction through 2033 are summarized in **Table 3-6**, which also compares the Proposed Project totals to the General Conformity *de minimis* thresholds. The operational emissions for years 2029 through 2032 were interpolated from the 2028 and 2033 results.

Table 3-1. Increased Aircraft Delay Times Due to Runway Closure During Construction

Activity	Proposed Project	No Action	Taxi Time Increment
<u>2023 Construction Impact on Operations - Closure of Runway 6L-24R</u>			
Average Taxi-Out Time per Departure (min)	22.76	19.82	2.95
Average Taxi-In Time per Arrival (min)	17.91	15.33	2.57
Average Taxi Time per LTO (min)	40.67	35.15	5.52
<u>2024 Construction Impact on Operations - Closure of Runway 6R-24L</u>			
Average Taxi-Out Time per Departure (min)	23.40	20.37	3.03
Average Taxi-In Time per Arrival (min)	18.41	15.76	2.65
Average Taxi Time per LTO (min)	41.81	36.14	5.67

Source: CDM Smith 2021.

LTO = Landing and Takeoff Operation

Table 3-2. Aircraft Emissions Due to Increased Taxi/Delay Times During Runway 6L-24R Closure

[ASSUMES ONE RUWAY (6L-24R) IS SHUTDOWN FOR 4.5 MONTHS]							
LAX 2023 Proposed Project - All Weather Conditions							
Emissions by Mode (short tons/year)							
		Emissions in 2023, tons					
Operation Group	Mode	CO	VOC	NOx	SOx	PM 2.5	PM 10
All Operation Groups	Startup	0.0	57.2	0.0	0.0	0.0	0.0
	Taxi Out	979.6	81.0	163.8	43.3	2.5	2.5
	Takeoff	11.7	1.0	917.6	36.4	2.6	2.6
	Climbout	6.2	0.4	371.8	15.7	1.1	1.1
	Approach	74.9	2.6	226.0	26.0	2.1	2.1
	Taxi In	910.7	77.1	148.3	39.5	2.4	2.4
Total LTO Cycle		1,983.1	219.4	1,827.5	160.9	10.7	10.7
All Operation Groups	APU	43.7	3.9	55.5	7.0	7.2	7.2
Grand Total		2,026.8	223.4	1,883.0	167.9	17.9	17.9
LAX 2023 No Action Alternative - All Weather Conditions							
Emissions by Mode (short tons/year)							
		Emissions in 2023, tons					
Operation Group	Mode	CO	VOC	NOx	SOx	PM 2.5	PM 10
All Operation Groups	Startup	0.0	57.2	0.0	0.0	0.0	0.0
	Taxi Out	852.9	70.6	142.6	37.7	2.2	2.2
	Takeoff	11.7	1.0	917.6	36.4	2.6	2.6
	Climbout	6.2	0.4	371.8	15.7	1.1	1.1
	Approach	74.9	2.6	226.0	26.0	2.1	2.1
	Taxi In	779.8	66.0	127.0	33.9	2.0	2.0
Total LTO Cycle		1,725.5	197.8	1,785.0	149.6	10.0	10.0
All Operation Groups	APU	43.7	3.9	55.5	7.0	7.2	7.2
Grand Total		1,769.2	201.8	1,840.5	156.6	17.3	17.3
LAX 2023 Project Project Increment - All Weather Conditions							
Emissions by Mode (short tons/year)							
		Emissions in 2023, tons					
Operation Group	Mode	CO	VOC	NOx	SOx	PM 2.5	PM 10
All Operation Groups	Startup	0.0	0.0	0.0	0.0	0.0	0.0
	Taxi Out	126.8	10.5	21.2	5.6	0.3	0.3
	Takeoff	0.0	0.0	0.0	0.0	0.0	0.0
	Climbout	0.0	0.0	0.0	0.0	0.0	0.0
	Approach	0.0	0.0	0.0	0.0	0.0	0.0
	Taxi In	130.9	11.1	21.3	5.7	0.3	0.3
Total LTO Cycle		257.6	21.6	42.5	11.3	0.7	0.7
All Operation Groups	APU	0.0	0.0	0.0	0.0	0.0	0.0
Grand Total		257.6	21.6	42.5	11.3	0.7	0.7

Source: CDM Smith 2021.

Notes:

Delay sequence modeling (DSQM) with default taxiway speeds.

Taxi in/out times based on average times per aircraft, operation type, gate, runway combination, and stage length.

Emissions represent weighted average from four weather conditions (VFRW, MVFRW, IFRW, and MVFRE).

Stage lengths based on SIMMOD results (AEDT requires approach to always be equal to 1).

Engine modifications made to reflect improved/cleaner engine technology.

AEDT 3b used for emissions inventory.

Table 3-3. Aircraft Emissions Due to Increased Taxi/Delay Times During Runway 6R-24L Closure

[ASSUMES ONE RUWAY (6R-24L) IS SHUTDOWN FOR 4.5 MONTHS]

LAX 2024 With Project - All Weather Conditions

Emissions by Mode (short tons/year)

		Emissions in 2024, tons					
Operation Group	Mode	CO	VOC	NOx	SOx	PM 2.5	PM 10
All Operation Groups	Startup	0.0	57.8	0.0	0.0	0.0	0.0
	Taxi Out	1,017.9	84.2	170.2	45.0	2.6	2.6
	Takeoff	11.9	1.0	927.4	36.8	2.7	2.7
	Climbout	6.3	0.4	375.7	15.9	1.1	1.1
	Approach	75.7	2.6	228.4	26.3	2.1	2.1
	Taxi In	946.2	80.1	154.1	41.1	2.4	2.4
Total LTO Cycle		2,057.9	226.2	1,855.8	165.0	10.9	10.9
All Operation Groups	APU	44.1	4.0	56.1	7.1	7.3	7.3
Grand Total		2,102.0	230.2	1,911.9	172.1	18.3	18.3

LAX 2024 Without Project - All Weather Conditions

Emissions by Mode (short tons/year)

		Emissions in 2024, tons					
Operation Group	Mode	CO	VOC	NOx	SOx	PM 2.5	PM 10
All Operation Groups	Startup	0.0	57.8	0.0	0.0	0.0	0.0
	Taxi Out	886.2	73.3	148.1	39.2	2.3	2.3
	Takeoff	11.9	1.0	927.4	36.8	2.7	2.7
	Climbout	6.3	0.4	375.7	15.9	1.1	1.1
	Approach	75.7	2.6	228.4	26.3	2.1	2.1
	Taxi In	810.2	68.6	131.9	35.2	2.1	2.1
Total LTO Cycle		1,790.2	203.8	1,811.6	153.3	10.3	10.3
All Operation Groups	APU	44.1	4.0	56.1	7.1	7.3	7.3
Grand Total		1,834.4	207.8	1,867.7	160.3	17.6	17.6

LAX 2024 Project Project Increment - All Weather Conditions

Emissions by Mode (short tons/year)

		Emissions in 2024, tons					
Operation Group	Mode	CO	VOC	NOx	SOx	PM 2.5	PM 10
All Operation Groups	Startup	0.0	0.0	0.0	0.0	0.0	0.0
	Taxi Out	131.7	10.9	22.0	5.8	0.3	0.3
	Takeoff	0.0	0.0	0.0	0.0	0.0	0.0
	Climbout	0.0	0.0	0.0	0.0	0.0	0.0
	Approach	0.0	0.0	0.0	0.0	0.0	0.0
	Taxi In	136.0	11.5	22.1	5.9	0.4	0.4
Total LTO Cycle		267.7	22.4	44.2	11.7	0.7	0.7
All Operation Groups	APU	0.0	0.0	0.0	0.0	0.0	0.0
Grand Total		267.7	22.4	44.2	11.7	0.7	0.7

Source: CDM Smith 2021

Table 3-6. Proposed Project Direct and Indirect Emissions Through 2033

Year	CO (tpy)	VOC (tpy)	NO _x (tpy)	SO _x (tpy)	PM ₁₀ (tpy)	PM _{2.5} (tpy)
2022 ¹	20	2	6	<1	1	1
2023 ²						
2023 Construction Equip	32	4	11	<1	2	1
2023 Aircraft Taxi Delays	258	22	43	11	1	1
2023 Total^{2,4}	289	25	53	11	3	1
2024 ²						
2024 Construction Equip	41	4	14	<1	2	1
2024 Aircraft Taxi Delays	268	22	44	12	1	1
2024 Total^{2,4}	308	27	58	12	3	2
2025 ¹	25	5	8	<1	1	1
2026 ¹	16	4	5	<1	1	<1
2027 ¹	17	3	6	<1	1	<1
2028 ²						
2028 Construction Equip	6	1	2	<1	<1	<1
2028 Operations	40	6	(2) ⁵	(1) ⁵	7	1
2028 Total^{2,4}	46	7	0	(1)⁵	7	1
2029 ³	42	7	(3) ⁵	(1) ⁵	7	1
2030 ³	37	8	(6) ⁵	(1) ⁵	6	0
2031 ³	33	8	(8) ⁵	(2) ⁵	6	0
2032 ³	28	9	(11) ⁵	(2) ⁵	5	(1) ⁵
2033 ³	24	9	(14) ⁵	(2) ⁵	5	(1) ⁵
Maximum	308	27	58	12	7	2
General Conformity <i>de minimis</i> Threshold	100	10	10	70	100	70
Exceeds Threshold? [Years that thresholds were exceeded]	Yes [2023, 2024]	Yes [2023, 2024]	Yes [2023, 2024]	No	No	No
Source: CDM Smith 2021						
Notes:						
1. Emissions include only direct emissions associated with project-related construction activity.						
2. Emissions include both direct emissions associated with project-related construction activity and indirect aircraft emissions from the temporary construction-related runway closures in 2023 and 2024.						
3. Emissions include only indirect operational emissions.						
4. Totals may not add exactly because of rounding.						
5. Net emissions shown in parentheses are negative values.						
Key:						
tpy – tons per year	CO – carbon monoxide		NO _x – nitrogen oxides			
PM ₁₀ – respirable particulate matter	PM _{2.5} – fine particulate matter		SO _x – sulfur oxides			
VOC – volatile organic compounds						

As can be seen in Table 3-6, emissions of CO, VOC, and NO_x would exceed the *de minimis* thresholds in 2023 and 2024 (the years when one or the other of the north airfield runways would be closed temporarily during construction). Therefore, a General Conformity Determination is required for CO, and ozone (due to emissions of the precursors VOC and NO_x).

The conformity determination for CO relies on the local air quality modeling option authorized in 40 CFR 93.158(a)(4)(i). For the ozone precursors VOC and NO_x, the conformity determination relies on the set-aside budgets in the currently approved SIP, as authorized in 40 CFR 93.158(a)(5)(i)(A). These two assessments are discussed in **Attachment 4** and **Attachment 5**, respectively.

ATTACHMENT 4

Summary of Carbon Monoxide (CO) Concentrations Under Proposed Project Construction

Air dispersion modeling of CO emissions during the peak year of construction (2024) was conducted for the LAX Airfield and Terminal Modernization Project. The modeling analysis included emissions from both the direct construction emissions and indirect aircraft operations during the runway closure in 2024. The methodology used to conduct the modeling is discussed in the LAX Airfield and Terminal Modernization Project Final Air Quality Impact Analysis Protocol for NEPA and General Conformity, dated February 4, 2020.⁶ The results of this modeling, shown in **Table 4-1**, indicate that CO concentrations would be substantially below (i.e., better than) the CO 1-hour and 8-hour NAAQS. The values in Table 4-1 are the same as those reported in the LAX Airfield and Terminal Modernization Project Draft Environmental Impact Report, dated October 2020; specifically, in Appendix C.3. [Note: Appendix C can be accessed from <https://www.lawa.org/atmp/documents/> by scrolling down to “CEQA Environmental Documents,” clicking the “+” symbol next to “Draft Environmental Impact Report (DEIR)” to expand the selection, then clicking the “+” symbol next to “Main Documents and Appendices (as individual sections):” to list the sections and appendices. Concentration summaries and details begin on page 529 of the Appendix C pdf file.] Additional information and calculations will be included in the LAX ATMP Draft Environmental Assessment and Draft General Conformity Determination scheduled to be released in mid-2021.

Table 4-1. Proposed Project Peak (2024) CO Concentrations During Construction

Pollutant	Averaging Period	Concentration Units	Construction (µg/m ³) ¹	Background (µg/m ³) ²	Total (µg/m ³) ³	NAAQS (µg/m ³)	Conforms with SIP?
CO	1-Hour	(µg/m ³)	817	2,406	3,223	40,000	Yes
		ppmv	0.7	2.1	2.8	35	
CO	8-Hour	(µg/m ³)	137	1,833	1,970	10,000	Yes
		ppmv	0.1	1.6	1.7	9	

Source: CDM Smith 2021.

Notes:

- Includes direct emissions associated with project-related construction activity and indirect aircraft emissions from the temporary construction-related runway closures in 2024. Values shown are for the highest 1st-high Proposed Project construction concentrations, which is more stringent than the form of the CO NAAQS (highest 2nd-high value, which allows one exceedance of the standard per year at each location).
- Background CO concentrations obtained from South Coast Air Quality Management District, *Historical Data by Year*. Available: <https://www.aqmd.gov/home/air-quality/historical-air-quality-data/historical-data-by-year>. Highest value in the period from 2016-2018 for Station No. 820 – Southwest Coastal LA County was used.
- Values may not add exactly due to rounding.

Key:
µg/m³ – micrograms per cubic meter ppmv – parts per million by volume CO – carbon monoxide

⁶ Federal Aviation Administration, LAX Airfield and Terminal Modernization Project Final Air Quality Impact Analysis Protocol for NEPA and General Conformity, February 4, 2020. The final protocol was reviewed and accepted by SCAQMD, California Air Resources Board, and U.S. Environmental Protection Agency in early 2020. The final protocol was submitted to SCAQMD via email from FAA on January 13, 2020, re - Los Angeles International Airport - Airfield and Terminal Modernization Project - Updated Air Quality Modeling Protocol; and from CDM Smith on December 7, 2020, Re – LAX ATMP Conformity Discussion with SCAQMD.

ATTACHMENT 5
Requested Allocation of Nitrogen Oxides (NO_x) and Volatile Organic Compound (VOC)
from 2016 AQMP Conformity Budget Set-Aside Accounts

The conformity determination for NO_x and VOC will be based on the availability of conformity set-aside budgets in the currently approved SIP and coordination with SCAQMD to allow LAWA to apply a portion of those budgets to the Proposed Project emissions. As previously mentioned, a written determination from the State/local air quality agency stating that the project emissions, together with all other emissions in the non-attainment or maintenance area, would **not exceed the emissions budget in the SIP would demonstrate conformity.**

The planning inventories are based on an “average annual operating day” described in Appendix III, Chapter 1 of the 2016 Air Quality Management Plan.⁷ The direct construction emissions are estimated to occur approximately 250 days per year (5 working days per week for 50 weeks per year). However, the incremental taxi/idle emissions from aircraft during the runway closures in 2023 and 2024 would occur continuously (24 hours per day, 7 days per week) during the period of time that each runway is closed. It was estimated that each runway would be closed for approximately 4.5 months or 137 days (4.5/12x365). Therefore, the direct annual construction emissions from Table 3-4 are divided by 250 working days per year, while the annual incremental taxiing emissions in Tables 3-2 (NO_x) and 3-3 (VOC) are divided by 137 days per year to obtain the average working day emissions. The total direct and indirect emissions in the average working day are summarized in **Table 5-1** for NO_x and VOC in 2023 and 2024.

Table 5-1. Proposed Project Requested Budgets form 2016 AQMP Conformity Set-Aside Accounts

Project Element	NO _x Emissions (tons per day)		VOC Emissions (tons per day)	
	2023	2024	2023	2024
Airfield (taxiway extensions) ¹	0.007	0.006	0.002	0.001
Roadways & Terminal 9 APM Station ¹	0.016	0.011	0.004	0.003
Concourse 0 and Terminal 9 ¹	0.020	0.037	0.008	0.013
Incremental taxiing due to runway closure ²	0.310	0.323	0.158	0.164
Proposed Project Total Budget Requests	0.353	0.376	0.172	0.181
Source: CDM Smith 2021. Note: 1. Daily direct construction emissions based on a 5-day work week (250 days/year). 2. Daily indirect taxiing emissions based on runway closure for 4.5 months (approximately 137 days/year). Key: tpy – tons per year CO – carbon monoxide NO _x – nitrogen oxides PM ₁₀ – respirable particulate matter PM _{2.5} – fine particulate matter SO _x – sulfur oxides VOC – volatile organic compounds				

⁷ South Coast Air Quality Management District. Final 2016 Air Quality Management Plan, Appendix III, Chapter 1, pp. III-1-28 and III-1-29 (March 2017). Available at: <http://www.aqmd.gov/docs/default-source/clean-air-plans/air-quality-management-plans/2016-air-quality-management-plan/final-2016-aqmp/appendix-iii.pdf?sfvrsn=6>.

The total values in Table 5-1 represent the final requested NO_x and VOC set-aside budgets for the Proposed Project in 2023 and 2024. It should be noted that the requested NO_x and VOC set-aside budgets are needed only for construction-related emissions, including those associated with aircraft operations during the temporary runway closures when the north airfield improvements are being constructed. No set-aside budgets are needed for the otherwise normal airport operations after construction is completed, as the nominal differences in emissions between No Action and the Proposed Project are below the applicable *de minimis* levels, as indicated above in Attachment 3, Table 3-6.

EXHIBIT D

Draft

SAN BERNARDINO INTERNATIONAL AIRPORT – EASTGATE AIR CARGO FACILITY

General Conformity Determination

Prepared for
U.S. Department of Transportation –
Federal Aviation Administration

July 2019





South Coast Air Quality Management District

21865 Copley Drive, Diamond Bar, CA 91765-4178
(909) 396-2000 • www.aqmd.gov

April 30, 2019

Michael Burrows
Executive Director
San Bernardino International Airport
1601 East Third Street, Suite 100
San Bernardino, CA 92408

Dear Mr. Burrows,

This letter is in response to your letter dated April 4, 2019 regarding the San Bernardino International Airport Eastgate Air Cargo Facility Project General Conformity Determination, which requests to accommodate the anticipated emissions from the proposed project in the Air Quality Management Plan (AQMP)/State Implementation Plan (SIP) set-aside general conformity budget.

The general conformity determination process is intended to demonstrate that a proposed Federal action will not: (1) cause or contribute to new violations of a national ambient air quality standard (NAAQS); (2) interfere with provisions in the applicable SIP for maintenance of any NAAQS; (3) increase the frequency or severity of existing violations of any standard; or (4) delay the timely attainment of any standard. As such, for general conformity determination, the proposed federal action needs to conform to the latest approved SIP/AQMP.

The South Coast Air Basin (Basin) is designated as an extreme non-attainment area for ozone, serious non-attainment for PM_{2.5} and maintenance area for Carbon Monoxide. In order to accommodate projects subject to general conformity requirements and to streamline the review process, general conformity budgets for NO_x and VOC emissions are established in the AQMP. While the 2016 AQMP (<https://www.aqmd.gov/home/air-quality/clean-air-plans/air-quality-mgt-plan/final-2016-aqmp>) is the latest AQMP submitted to U.S. EPA, it is still under U.S. EPA's review, and the latest approved AQMP is currently the Final 2012 AQMP ([https://www.aqmd.gov/docs/default-source/clean-air-plans/air-quality-management-plans/2012-air-quality-management-plan/final-2012-aqmp-\(february-2013\)/main-document-final-2012.pdf](https://www.aqmd.gov/docs/default-source/clean-air-plans/air-quality-management-plans/2012-air-quality-management-plan/final-2012-aqmp-(february-2013)/main-document-final-2012.pdf)), which established set aside accounts to accommodate emissions subject to general conformity requirements. The set-aside accounts include 1 ton per day (tpd) or 365 tons per year of NO_x and 0.2 tpd (73 tons per year) of VOC every year, starting in 2013 through 2030. South Coast AQMD has also set up a tracking system for projects subject to conformity determinations, whereby project emissions are debited from the applicable set aside accounts. In the 2016 AQMP, the set-aside accounts include 2 tpd (730 tons per year) of NO_x and 0.5 tpd (182.5 tons per year) of VOC every

year, starting in 2017 through 2030, and 0.5 tpd (182.5 tons per year) of NO_x and 0.2 tpd (73 tons per year) of VOC each year in 2031 and thereafter.

The anticipated emissions from the proposed project exceed the General Conformity *de minimis* thresholds of both NO_x and VOC in years 2019 and 2020 for construction and operations combined, and in years thereafter for operations. South Coast AQMD staff has reviewed the proposed project emissions and determined that they can be accommodated within the general conformity budgets established in the Final 2012 AQMP. The emissions allocated within the budget are listed in Attachment 2, supplemental submission of Updated Summary Tables of Annual Emissions from the Proposed Project, and summarized in the Table 1 below.

Table 1. Emissions from the Proposed Project accommodated in the Final 2012 AQMP General Conformity Budgets (tons per year)

Pollutants	Emission Phase	2019	2020	2021	2022	2023	2024
NO _x	Construction	8.8	0.1	0.0	0.0	0.0	0.0
VOC	Construction	1.0	0.5	0.0	0.0	0.0	0.0
NO _x	Operation	99.2	116.4	133.6	150.7	167.9	185.1
VOC	Operation	16.7	20.0	23.2	26.5	29.7	33.0

In addition to NO_x and VOC emissions, CO emissions are anticipated to exceed the *de minimis* threshold in during the operational phase in 2023 and afterwards. However, the results of the air dispersion modeling included in the April 4th letter indicate that the operation of the proposed project would result in ground level concentrations not exceeding the NAAQS, as shown in Table 11 of the reference letter. Therefore, even though CO emissions are above the *de minimis* threshold, the project is not expected to interfere with the CO maintenance status of the Basin. PM_{2.5} emissions from all the years covered in the proposed project are estimated to be below the *de minimis* threshold.

In summary, based on our evaluation, the proposed project will conform to the AQMP (i.e. project emissions are within AQMP budgets) and is not expected to result in any new or additional violations of the NAAQS or impede the projected attainment of the standards. However, in order to incorporate the projected aircraft operations in the next AQMP, South Coast AQMD staff recommends that detailed aircraft activity and emissions data for the San Bernardino International Airport be submitted to South Coast AQMD by the end of 2019. This way, these emissions can be appropriately included in the next AQMP emissions inventory and not rely on the general conformity budgets, which are in high demand and have a limited availability.

If you have any questions, please contact me at (909) 396-2239 or pfine@aqmd.gov.

Sincerely,



Philip M. Fine, Ph.D.
Deputy Executive Officer
Planning, Rule Development & Area Sources
South Coast Air Quality Management District

Attachments:

1. Letter from San Bernardino International Airport Authority dated April 4, 2019
2. Updated Summary Tables of Annual Emissions from the San Bernardino International Airport Eastgate Air Cargo Facility Project (2019-2024)

cc: Tom Kelly, US EPA Region IX
David Kessler, U.S. Department of Transportation, FAA
Rongsheng Luo, SCAG
Wayne Nastri, South Coast AQMD
Barbara Baird, South Coast AQMD
Sarah Rees, South Coast AQMD
Zorik Pirveysian, South Coast AQMD
Mike Krause, South Coast AQMD
Sang-Mi Lee, South Coast AQMD
Mark Gibbs, Director of Aviation, San Bernardino International Airport Authority

ZP:SL



San Bernardino International Airport Authority

April 4, 2019

Mr. Wayne Nastri
Executive Officer
South Coast Air Quality Management District
21865 Copley Drive
Diamond Bar, California 91765

Subject: San Bernardino International Airport
Eastgate Air Cargo Facility Project General Conformity Determination

Dear Mr. Nastri:

After extensive discussion with South Coast Air Quality Management District (SCAQMD) staff regarding the federal Clean Air Act general conformity process for federal actions, the San Bernardino International Airport Authority (Authority) is pleased to formally request confirmation from SCAQMD that relevant emissions associated with the proposed San Bernardino International Airport (Airport) Eastgate Air Cargo Facility (Proposed Project) are within the state implementation plan (SIP) conformity budgets established in the approved 2012 Air Quality Management Plan (AQMP), and the 2016 AQMP that is currently in review with the United States Environmental Protection Agency (EPA).

The Proposed Project would develop various facilities, supporting infrastructure and an air cargo hub on an approximately 101.5-acre site on the northern side of the Airport property. If the Proposed Project is approved, construction is anticipated to take one full year. Future analysis years include Opening Year (2019) and Opening Year + Five Years (2024). Opening day aircraft operations for the Proposed Project would include 12 daily take-offs and 12 daily landings for a total of 24 aircraft operations. Five years into the operation of the Proposed Project, the project sponsor anticipates that the number of project-related take-offs and landings would increase to 26 take-offs and 26 landings per day for a total of 52 aircraft operations, which would require a total of 14 aircraft parking positions. The Proposed Project would operate seven days per week with three daily employee shifts. On opening day, the Proposed Project would employ an estimated 1,700 people. At full operation, it is anticipated, the Proposed Project would employ an estimated 3,900 people.

Should the new cargo facility not be fully available by December 1, 2019, a phased move-in utilizing tenable portions of the proposed air cargo building and an existing eight-acre asphalt aircraft ramp located within the Proposed Project's future aircraft ramp footprint would support air cargo activities from December 1, 2019 through the remaining construction period ending in 2020. Therefore, construction and operation of the Proposed Project would potentially occur at the same time.

The Authority has asked the Federal Aviation Administration (FAA) for unconditional approval of the portion of the Airport Layout Plan (ALP) that would include the airside and landside

facilities related to the Proposed Project. Before the FAA can approve the ALP, it must determine that the approval conforms to the applicable SIP as required by Section 176(c) of the Clean Air Act (CAA) (42 U.S.C. 7401 *et seq.*) (Conformity Determination).

A Conformity Determination is required for each nonattainment and maintenance criteria air pollutant and its precursors where the total direct and indirect emissions resulting from the Proposed Project will exceed specified *de minimis* thresholds. The South Coast Air Basin (SCAB) is designated as an extreme nonattainment area for ozone, a nonattainment area for particulate matter less than or equal to 2.5 microns in diameter (PM_{2.5}), and a maintenance area for particulate matter less than 10 microns in diameter (PM₁₀) and carbon monoxide (CO). The applicable *de minimis* thresholds for a Conformity Determination are 10 tons per year (TPY) of volatile organic compounds (VOC), 10 TPY of nitrogen oxide (NO_x), 70 TPY for PM_{2.5}, and 100 TPY each for PM₁₀ and CO.

Construction of the Proposed Project will not result in an exceedance of *de minimis* thresholds (details provided below). However, as previously stated, should construction of the cargo facility not be completed by December 1, 2019, there is potential for construction and operation to occur simultaneously. A combination of construction and operational activities for the Proposed Project will exceed the *de minimis* thresholds for VOC and NO_x. However, CO, PM_{2.5}, PM₁₀, and SO₂ emissions would not exceed the *de minimis* thresholds. NO_x, VOC, and CO emissions associated with Proposed Project operations are expected to exceed the *de minimis* thresholds long-term. Emissions of PM_{2.5}, PM₁₀, and SO₂ are not expected to exceed the *de minimis* threshold during operation.

The SCAQMD has adopted by reference the federal General Conformity regulations set forth at Part 51, Subchapter C, Chapter I, Title 40, of the Code of Federal Regulations (CFR) as SCAQMD Rule 1901. In addition, to streamline the review process and to facilitate General Conformity Determinations, SCAQMD established two separate VOC and NO_x General Conformity Budgets in the 2012 AQMP, which is the current approved SIP for the SCAB. The budgets are 1 ton per day (TPD) of NO_x and 0.2 TPD of VOC for every year starting in 2013 until 2030. In the 2016 AQMP, which is currently under review by the U.S. EPA, the General Conformity Budgets were modified to 2.0 TPD of NO_x and 0.5 TPD of VOC for each year from 2017 to 2030, and 0.5 TPD of NO_x and 0.2 TPD of VOC each year in 2031 and thereafter.

The annual emission estimates generated from construction activities for the Proposed Project are provided in Table 1 and Table 4, for years 2019 and 2020 respectively. The construction calculations assume compliance with the Project commitment that contractors and building operators (by contract specifications) will utilize on-road heavy-duty diesel trucks with a gross vehicle weight rating greater than 14,000 pounds with a 2010 model year engine or newer. Included therein are comparisons with applicable *de minimis* thresholds. As shown in Tables 1 and 4, construction emissions are not expected to exceed *de minimis* levels in 2019 or 2020.

The 2019 and 2024 operational emissions inventories for the Proposed Project are presented in Table 2 and Table 6, respectively. The project's incremental increase (the difference calculated by subtracting the No Action emissions from the emissions with the Proposed Project) are then compared to the appropriate *de minimis* thresholds. During operation of the Proposed Project a commitment has been made for all on-site outdoor cargo-handling equipment (including yard

trucks, hostlers, yard goats, pallet jacks, forklifts, and other on-site equipment) and all on-site indoor forklifts to be powered by electricity. Furthermore, all ground support equipment (GSE) will operate on electric battery-power, with the exception of diesel lavatory and fuel trucks as battery-operated options are not available at this time. As shown in Table 2, operational emissions in 2019 would exceed the applicable *de minimis* thresholds for VOC and NO_x, while emissions of CO and PM_{2.5} would not exceed *de minimis* levels. Emissions of VOC, NO_x, and CO exceed the *de minimis* thresholds in 2024, as shown in Table 6. It should be noted that aircraft operations will peak in 2024 and remain constant through 2031. Therefore, the emissions generated in 2024 would be equivalent to emissions generated in the year 2031; the attainment year discussed in the 2016 AQMP.

Table 3 and Table 5 provide the estimated combined construction and operational emissions inventory (annual) for the analysis years of 2019 and 2020, respectively. As shown in Table 3, operational plus construction emissions in 2019 would exceed the *de minimis* threshold for VOC and NO_x. Additionally, 2020 emissions of VOC and NO_x from construction and operations combined exceed the *de minimis* thresholds, as provided in Table 5.

Daily emissions of VOC and NO_x are presented in Table 7 for 2019 operations only and Table 8 for 2019 operations and construction. Table 9 presents daily emissions for 2020 operations plus construction. Table 10 presents daily operational emissions for 2024 and beyond. Each of these tables include a comparison of project emissions to the VOC and NO_x emission budgets for calendar years 2017-2030 as presented in the 2012 AQMP, showing that the Proposed Project's emissions are within the SIP's General Conformity budgets.

The estimated annual CO emissions for 2024 operations was found to exceed the *de minimis* thresholds. However, the 2012 AQMP does not provide conformity budgets for CO emissions. Therefore, air dispersion modeling was conducted to determine if project impacts would result in an exceedance of the 1- and 8-hour CO National Ambient Air Quality Standards (NAAQS). The air dispersion modeling found that the operation of the Proposed Project would result in ground level concentrations (project + ambient) which do not exceed the relevant NAAQS, as shown in Table 11.

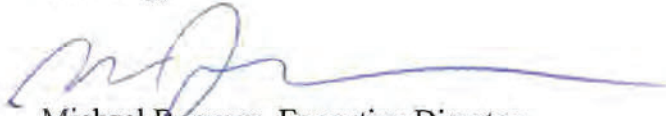
Although the 2016 AQMP has not yet been approved by the U.S. EPA, in response to a request by Mr. Michael Krause of the SCAQMD, the construction and operation emissions generated by the Proposed Project were compared to the General Conformity budgets provided in the 2016 AQMP. As shown in Table 12, the Proposed Project's emissions would also be within the SIP's General Conformity budgets as presented in the 2016 AQMP for calendar years 2017 – 2030 and 2031 and beyond.

The Authority respectfully requests that the SCAQMD confirm that these emissions are within the General Conformity Budgets identified in the 2012 AQMP (Appendix III, Chapter 2) and the 2016 AQMP (Appendix III, Chapter 2).

{{Signature Page Follows}}

Please contact me at (909) 382-4100 extension 102 should you have any questions.

Sincerely,

A handwritten signature in blue ink, appearing to read 'MB', followed by a long horizontal flourish.

Michael Burrows, Executive Director
San Bernardino International Airport

Attachments

Cc: Philip Fine, SCAQMD
Mike Krause, SCAQMD
Sang-Mi Lee, SCAQMD

TABLE 1

SUMMARY OF SAN BERNARDINO INTERNATIONAL AIRPORT EASTGATE AIR CARGO
 FACILITY – 2019 MAXIMUM CONSTRUCTION EMISSIONS

Analysis Year	Emissions (tons/year)			
	VOC	NO _x	CO	PM _{2.5}
2019	1.0	8.8	15.4	0.9
De Minimis Thresholds	10	10	100	70
Exceeds De Minimis?	NO	NO	NO	NO

NOTES:

CO = carbon monoxide

VOC = volatile organic compound

NO_x = oxides of nitrogen

PM_{2.5} = particulate matter less than or equal to 2.5 microns in diameter

SOURCE: ESA Airport, March 2019.

TABLE 2

SUMMARY OF SAN BERNARDINO INTERNATIONAL AIRPORT EASTGATE AIR CARGO
 FACILITY -- 2019 PROPOSED PROJECT OPERATIONAL EMISSIONS

Analysis Year	Emissions (tons/year)			
	VOC	NO _x	CO	PM2.5
2019 with Proposed Project	38.7	185.0	514.6	10.3
2019 No Action	22.0	85.8	458.5	8.2
2019 Net Emissions	16.7	99.2	56.2	2.1
De Minimis Thresholds	10	10	100	70
Exceeds De Minimis?	YES	YES	NO	NO

NOTES:

CO = carbon dioxide

VOC = volatile organic compound

NO_x = oxides of nitrogen

PM2.5 = particulate matter less than or equal to 2.5 microns in diameter

SOURCE: ESA, Airports, March 2019.

TABLE 3

SUMMARY OF SAN BERNARDINO INTERNATIONAL AIRPORT EASTGATE AIR CARGO
 FACILITY – 2019 PROPOSED COMBINED CONSTRUCTION AND PROJECT OPERATIONAL
 EMISSIONS

Analysis Year	Emissions (tons/year)			
	VOC	NO _x	CO	PM2.5
2019 Construction Plus Operation	39.8	193.8	530.1	11.2
2019 No Action	22.0	85.8	458.5	8.2
2019 Net Emissions	17.8	108.0	71.6	3.0
De Minimis Thresholds	10	10	100	70
Exceeds De Minimis?	YES	YES	NO	NO

NOTES:

CO = carbon monoxide

VOC = volatile organic compound

NO_x = oxides of nitrogen

PM2.5 = particulate matter less than or equal to 2.5 microns in diameter

SOURCE: ESA, Airports, March 2019.

TABLE 4

SUMMARY OF SAN BERNARDINO INTERNATIONAL AIRPORT EASTGATE AIR CARGO
 FACILITY – 2020 MAXIMUM CONSTRUCTION EMISSIONS

Analysis Year	Emissions (tons/year)			
	VOC	NO _x	CO	PM2.5
2020	0.5	0.1	0.8	0.0
De Minimis Thresholds	10	10	100	70
Exceeds De Minimis?	NO	NO	NO	NO

NOTES:

CO = carbon dioxide

VOC = volatile organic compound

NO_x = oxides of nitrogen

PM2.5 = particulate matter less than or equal to 2.5 microns in diameter

SOURCE: ESA, Airports, March 2019.

TABLE 5

SUMMARY OF SAN BERNARDINO INTERNATIONAL AIRPORT EASTGATE AIR CARGO FACILITY -- 2020 PROPOSED COMBINED CONSTRUCTION AND PROJECT OPERATIONAL EMISSIONS

Analysis Year	Emissions (tons/year)			
	VOC	NO _x	CO	PM2.5
2020 Construction Plus Operation	39.2	185.1	515.4	10.3
2020 No Action	22.0	85.8	458.5	8.2
2020 Net Emissions	17.2	99.3	56.9	2.1
De Minimis Thresholds	10	10	100	70
Exceeds De Minimis?	YES	YES	NO	NO

NOTES:

CO = carbon dioxide

VOC = volatile organic compound

NO_x = oxides of nitrogen

PM2.5 = particulate matter less than or equal to 2.5 microns in diameter

SOURCE: ESA, Airports, March 2019.

TABLE 6

SUMMARY OF SAN BERNARDINO INTERNATIONAL AIRPORT EASTGATE AIR CARGO
 FACILITY -- 2024 PROPOSED PROJECT OPERATIONAL EMISSIONS

Analysis Year	Emissions (tons/year)			
	VOC	NO _x	CO	PM2.5
2024 with Proposed Project	53.4	254.1	564.4	13.0
2024 No Action	20.5	69.0	451.0	9.2
2024 Net Emissions	33.0	185.1	113.4	3.8
De Minimis Thresholds	10	10	100	70
Exceeds De Minimis?	YES	YES	YES	NO

NOTES:

CO = carbon dioxide

VOC = volatile organic compound

NO_x = oxides of nitrogen

PM2.5 = particulate matter less than or equal to 2.5 microns in diameter

SOURCE: ESA, Airports, March 2019.

TABLE 7

SUMMARY OF SAN BERNARDINO INTERNATIONAL AIRPORT EASTGATE AIR CARGO
 FACILITY -- 2019 PROPOSED PROJECT OPERATIONAL EMISSIONS

Analysis Year	Emissions (tons/day)	
	VOC	NO _x
2019 with Proposed Project	0.1	0.5
2019 No Action	0.1	0.2
2019 Net Emissions	0.0	0.3
<i>2012 AQMP Budget for 2017 - 2030</i>	0.2	1.0
Exceeds Budget?	NO	NO
<i>2016 AQMP Budget for 2017 - 2030</i>	0.5	2.0
Exceeds Budget?	NO	NO

NOTES:

VOC = volatile organic compound
 NO_x = oxides of nitrogen

SOURCE: ESA, Airports, March 2019.

TABLE 8

SUMMARY OF SAN BERNARDINO INTERNATIONAL AIRPORT EASTGATE AIR CARGO
 FACILITY -- 2019 PROPOSED COMBINED CONSTRUCTION AND PROJECT OPERATIONAL
 EMISSIONS

Analysis Year	Emissions (tons/day)	
	VOC	NO _x
2019 Construction Plus Operation	0.1	0.5
2019 No Action	0.1	0.2
2019 Net Emissions	0.1	0.3
<i>2012 AQMP Budget for 2017 - 2030</i>	0.2	1.0
Exceeds Budget?	NO	NO

NOTES:

VOC = volatile organic compound
 NO_x = oxides of nitrogen

SOURCE: ESA, Airports, March 2019.

TABLE 9

SUMMARY OF SAN BERNARDINO INTERNATIONAL AIRPORT EASTGATE AIR CARGO
 FACILITY -- 2020 PROPOSED COMBINED CONSTRUCTION AND PROJECT OPERATIONAL
 EMISSIONS

Analysis Year	Emissions (tons/day)	
	VOC	NO _x
2020 Construction Plus Operation	0.1	0.5
2020 No Action	0.1	0.2
2020 Net Emissions	0.1	0.3
<i>2012 AQMP Budget for 2017 - 2030</i>	0.2	1.0
Exceeds Budget?	NO	NO

NOTES:

VOC = volatile organic compound
 NO_x = oxides of nitrogen

SOURCE: ESA, Airports, March 2019.

TABLE 10

SUMMARY OF SAN BERNARDINO INTERNATIONAL AIRPORT EASTGATE AIR CARGO
 FACILITY -- 2024 PROPOSED PROJECT OPERATIONAL EMISSIONS

Analysis Year	Emissions (tons/day)		
	VOC	NO _x	CO
2024 with Proposed Project	0.1	0.7	1.6
2024 No Action	0.1	0.2	1.3
2024 Net Emissions	0.1	0.5	0.3
<i>2012 AQMP Budget for 2017 - 2030</i>	0.2	1.0	NA
Exceeds Budget?	NO	NO	NA

NOTES:

VOC = volatile organic compound

NO_x = oxides of nitrogen

CO = carbon dioxide

N/A = Not Applicable, due to the maintenance status of CO there are no AQMP budgets are set for CO.

SOURCE: ESA, Airports, March 2019.

TABLE 10

SUMMARY OF SAN BERNARDINO INTERNATIONAL AIRPORT EASTGATE AIR CARGO
 FACILITY -- 2024 PROPOSED PROJECT OPERATIONAL EMISSIONS

Analysis Year	Emissions (tons/day)		
	VOC	NO _x	CO
2024 with Proposed Project	0.1	0.7	1.6
2024 No Action	0.1	0.2	1.3
2024 Net Emissions	0.1	0.5	0.3
<i>2012 AQMP Budget for 2017 - 2030</i>	0.2	1.0	NA
Exceeds Budget?	NO	NO	NA

NOTES:

VOC = volatile organic compound

NO_x = oxides of nitrogen

CO = carbon dioxide

N/A = Not Applicable, due to the maintenance status of CO there are no AQMP budgets are set for CO.

SOURCE: ESA, Airports, March 2019.

TABLE 11

SUMMARY OF SAN BERNARDINO INTERNATIONAL AIRPORT EASTGATE AIR CARGO
 FACILITY -- 2024 PROPOSED PROJECT OPERATIONAL EMISSIONS

Pollutant	Year of Impact	Averaging Period	Incremental Peak ($\mu\text{g}/\text{m}^3$)	Background ($\mu\text{g}/\text{m}^3$)	Total ($\mu\text{g}/\text{m}^3$)	Standard ($\mu\text{g}/\text{m}^3$)	Exceeds Standards?
CO	2024	1-hr NAAQS	143.6	2819	2963	40,000	No
		8-hr NAAQS	37.1	2476	2513	10,000	No

NOTES:

CO = carbon dioxide

Compliance with the 1-hr and 8-hr NAAQS is demonstrated by obtaining the 2nd highest ranked CO concentration for each modeled year.

The maximum concentration occurred in MET year 2015 and 2012 for the 1-hour standard for Study Year 2019 and 2024, respectively, and MET year 2016 for the 8-hour standard for both Study Years.

SOURCE: ESA, Airports, March 2019.

TABLE 12

SUMMARY OF SAN BERNARDINO INTERNATIONAL AIRPORT EASTGATE AIR CARGO FACILITY -- COMPARISON OF NET PROJECT EMISSIONS TO BUDGETS IN 2016 AQMP

Analysis Year	Emissions (tons/day)	
	VOC	NO _x
2019 Operations Only	0.0	0.3
2019 Construction Plus Operations	0.1	0.3
2020 Construction Plus Operations	0.1	0.3
2024 Operations Only	0.1	0.5
2016 AQMP Budget for 2017 - 2030	0.5	2.0
Exceeds Budget?	NO	NO
2016 AQMP Budget for 2031+	0.2	0.5
Exceeds Budget?	NO	NO

NOTES:

VOC = volatile organic compound
 NO_x = oxides of nitrogen

SOURCE: ESA, Airports, March 2019.

EXHIBIT E

September 13, 2021

Mr. Jordan Sisson
LAW OFFICE OF GIDEON KRACOV
801 South Grand Avenue, 11th Floor
Los Angeles, CA 90017

**Subject: LAX Airfield and Terminal Modernization Project Final EIR
Transportation Review, City of Los Angeles**

Dear Mr. Sisson:

Introduction

RK ENGINEERING GROUP, INC. (RK) is pleased to provide this review of transportation related impacts from the LAX Airfield and Terminal Modernization Project. RK has reviewed the Final Environmental Impact Report (FEIR), dated August 2021 (FEIR) and its appendices with respect to the proposed project and the impact to transportation systems in the vicinity of the site.

RK finds that several of the analysis deficiencies that were previously identified in the DEIR have not been addressed in the FEIR. The main issues that remain are in regards to the failure to analyze long-term conditions and disclose the full extant project impacts.

Comments

The following comments are offered with respect to the transportation impacts of the LAX Airfield and Terminal Modernization Project FEIR:

1. The FEIR's Topical Response TR-ATMP-G-3 is insufficient for addressing the issue of analyzing project impacts beyond year 2028. The primary issue at hand is that neither the DEIR nor the FEIR disclose the full amount of additional growth in aircraft and passenger operations that will occur beyond Year 2028 as a result of the project. The DEIR is very clear that the purpose of the project is to "help LAX to prepare early for the continued aviation growth that is projected by LAWA, SCAG

and the FAA to occur at LAX over the next several decades”.¹ The project is needed because “future growth in aircraft operations at LAX is anticipated to be constrained by the operational limitations of LAX’s four-runway airfield system; in turn, those operational constraints would also constrain future passenger growth.”² The constrained conditions at LAX are expected to result in 112,159 fewer aircraft operations 27.7 million fewer annual passengers in year 2045, compared to unconstrained conditions.³ Yet airfield congestion is not projected to be a constraint on growth until after year 2028.⁴ Therefore, the full extent of project impacts will not be realized until after year 2028. Thus, questions remain unanswered, such as how much additional aircraft and passenger operation will occur as a result of the project in year 2045 and what are the impacts from the additional growth?

2. Topical Response TR-ATMP-G-3, Page F2-16 states that, “it would be speculative to estimate environmental impacts of the proposed project some 25 years out (i.e. 17 years beyond when full operation of the project would occur [2028]). CEQA does not require this kind of speculation”. This statement is not accurate. The long-range projections in the SCAG RTP are regularly used as the basis for CEQA analysis and have been developed in manner that is supported by substantial evidence. As has the FAA’s Terminal Area Forecasts (TAF). The FEIR notes that CEQA does not require technical perfection in an EIR, but rather adequacy, completeness and a good-faith effort at full disclosure. Yet the FEIR continues to dismiss the prevalent issue of long-term impacts in Year 2045. Sufficient forecasting data is available to provide a reasonable assessment of future impacts and failure to do so does not constitute a good-faith effort.
3. Topical Response TR-ATMP-G-3, Page F2-27 states that, “in 2033 the number of (passenger) trips would be the same as Without Project scenario.” This statement contradicts the project description which indicates that the project will help accommodate future growth in aircraft operations over the next several decades. The FEIR has not provided any supplemental analysis to support the claim that number of trips would be the same in 2033. Hence, the VMT analysis for 2033 conditions is not supported by substantial evidence. As discussed in comment #2 above, the project trip generation would likely be substantially higher in year 2045

¹ LAX ATMP Draft EIR, October 2020. Page 2-18.

² LAX ATMP Draft EIR, October 2020. Page 2-16.

³ LAX ATMP Draft EIR, October 2020. Appendix B. Section 4.4.4.

⁴ LAX ATMP Draft EIR, October 2020. Page 2-16.

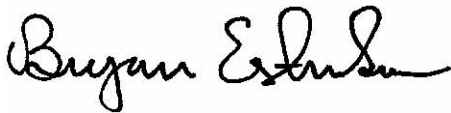
than year 2028 given the increased demand. Failing to disclose the full extent of project trip generation and project VMT results in under-reported impacts.

Conclusions

RK Engineering Group, Inc. has reviewed the LAX Airfield and Terminal Modernization Project FEIR with respect to transportation impacts. The FEIR fails to analyze the full extent of the project impact, which will occur after year 2028, when the modernization project would allow for significantly more growth in passenger travel.

RK appreciates the opportunity to work with the LAW OFFICE OF GIDEON KRACOV in reviewing the LAX Airfield and Terminal Modernization Project FEIR. If you have any questions please give call at (949) 474-0809

Sincerely,

A handwritten signature in black ink, reading "Bryan Estrada". The signature is fluid and cursive, with the first name "Bryan" and last name "Estrada" clearly legible.

Bryan Estrada, AICP, PTP
Principal

rk16876.doc
JN:2952-2020-01

September 13, 2021

Mr. Jordan Sisson
LAW OFFICE OF GIDEON KRACOV
801 South Grand Avenue, 11th Floor
Los Angeles, CA 90017

**Subject: LAX Airfield and Terminal Modernization Project Final EIR Noise Review,
City of Los Angeles**

Dear Mr. Sisson:

Introduction

RK ENGINEERING GROUP, INC. (RK) is pleased to provide this review of potential environmental noise impacts from the LAX Airfield and Terminal Modernization Project. This review is based on the information provided in the Los Angeles International Airport Airfield and Terminal Modernization Project Draft Environmental Impact Report, October 2020 (hereinafter referred to as FEIR) and the Final EIR, dated August 2021.

The purpose of this letter is to review the FEIR from a noise impact standpoint and provide comments to help ensure that all potential impacts from the project are adequately identified and the effects mitigated to the maximum extent feasible.

Comments

The following comments are offered with respect to the noise impacts of the LAX Airfield and Terminal Modernization Project FEIR:

1. ATMP-PC035-63. The FIER has not adequately addressed the issue of Classroom Disturbances. The issue remains that the FEIR inappropriately uses a blanket assumption of 29 dBA for reducing exterior-to-interior noise levels at all schools in the study area. The FEIR provides a reference to the LAWA Final EIR for LAX Specific Plan Amendment Study (SCH 1997061047), Section 4.10, Noise, January 2013. However, upon review of this study, no data was presented that showed the

measured exterior-to-interior noise levels at any school. All that was found in this document was another unsubstantiated and unverifiable reference to noise measurements done by LAWA. By using an unverifiable assumption of 29 dBA for exterior-to-interior environments, the FEIR has not substantiated the screening criteria of 84 and 94 dBA exterior exposure for schools to be below 55 dBA and 65 dBA in the classroom, respectively. Absent substantial evidence, the FEIR should have assumed a maximum exterior-to-interior building noise reduction of 20 dBA with windows closed. The result is that not all schools exposed to noise levels above 55 dBA are identified.

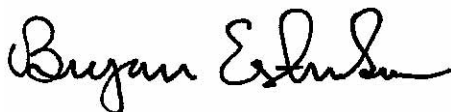
2. ATMP-PC-035-67. The FEIR does not consider the full extent of project noise impacts by not analyzing long-term conditions (i.e. year 2045). The FEIR's claim that it would be speculative to estimate environmental impacts in year 2045 goes against the intent of CEQA to provide a good-faith effort at full disclosure. The long-range projections in the SCAG RTP are regularly used as the basis for CEQA analysis and have been developed using substantial evidence. As has the FAA's Terminal Area Forecasts (TAF). Sufficient forecasting data is available to provide a reasonable assessment of future impacts. Furthermore, the FEIR continues to make the claim that the forecasted aircraft operations and passenger demand would not change as a result of the project. This claim is misleading because the FEIR is only basing this statement on the forecasted projections for year 2028, not year 2045, as described in Appendix B-2. Hence, it has not been demonstrated that the project will not change aircraft operations and passenger demand out to year 2045. If the project were to result in additional aircraft operations, then it would have a direct impact on noise to the surrounding community.
3. ATMP-PC035-71. The FEIR identifies potentially significant impacts from construction activities, which are expected to occur during the nighttime hours. Yet, the FEIR claims that active construction noise monitoring during nighttime hours is unwarranted and contrary to the noise metric that is the basis for determining significant impacts. This is inaccurate. The project's construction CNEL noise level can and should be calculated based on measured noise levels during all hours when construction activity is occurring, including nighttime hours. Active nighttime noise monitoring would help ensure actual construction noise levels (not based on computer models) do not exceed the nighttime noise standards in the City of Los Angeles or exceed existing ambient nighttime noise levels by more 5 dBA. The

monitoring program should monitor and establish the adequate baseline noise levels for each receptor prior to commencing any activity. The monitoring program should also notify construction management personnel when noise levels approach and/or exceed the applicable thresholds. Construction activity should cease or be modified in order to ensure violations do not occur. Repeated violations should result in fines or other penalties.

Conclusions

RK appreciates the opportunity to work with the LAW OFFICE OF GIDEON KRACOV in reviewing the LAX Airfield and Terminal Modernization Project FEIR. If you have any questions please give call at (949) 474-0809

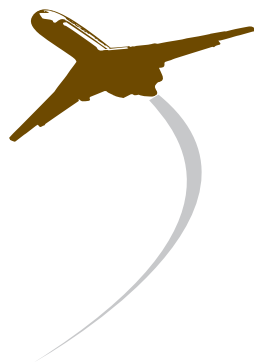
Sincerely,

A handwritten signature in black ink, appearing to read "Bryan Estrada".

Bryan Estrada, AICP, PTP
Principal

rk16877.doc
JN:2952-2020-02

EXHIBIT F



TURBULENCE AHEAD

**What LAX's Expansion Means for the
City of Los Angeles' Legacy on
Racial Equity & Environmental Justice**



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Executive Summary & Introduction

Right now, Los Angeles International Airport (LAX) is charging ahead on an expansion project of a scale not seen for decades. Los Angeles World Airports (LAWA), the organization that owns and operates LAX, quietly released a draft Environmental Impact Report late last year that reveals a project with a host of alarming implications for communities near the airport. If the City of Los Angeles and its elected officials are serious about leadership on environmental justice and equity, resolving the issues presented by this project will be critically important.

“...Black and Brown communities near LAX... grapple with a longstanding history of environmental racism...”

As it stands, the proposed development is poised to worsen traffic in an area already infamous for it, expose thousands of new residents to the noise of one of the busiest airports in the world, and intensify the air quality impact of a facility that is already a statewide leader in air pollution. Worse still, these outcomes are set to be concentrated within Black and Brown communities near LAX that already grapple with a longstanding history of environmental racism—communities that have suffered disproportionately from the health and economic fallout of the COVID pandemic.

LAWA’s current approach signals that the airport is not only failing to adequately protect the community from the consequences of LAX’s largest expansion in decades, but is, in effect, *concealing* the real, long-term effects of that expansion as it rushes toward approval as early as this year. The City of Los Angeles, LAWA, and the airlines that will occupy the new terminals have an obligation to do better and ensure that this project is carried out equitably, that it will not become another sad chapter in the story of environmental injustice in South Los Angeles and the continued exploitation of essential workers as the city emerges from the pandemic.

In this report, we take a deeper look at the proposed development and what the draft Environmental Impact Report does and doesn’t reveal about the consequences of LAWA’s plans for the airport. We will contextualize this project and what it means for workers, families and communities—particularly communities of color—as well as the direction of the City of Los Angeles as a whole. Finally, we will lay down a foundation for how the airport can approach this project as a real, positive opportunity for the region, and not a cautionary tale of corporate greed and bureaucratic complicity in the making.

In the coming years, the City of Los Angeles will prepare to host major events—the Super Bowl, the 2028 Summer Olympics, the World Cup—and enjoy global attention. It is critical that the city and its leaders take every opportunity to be a leading model for an equitable and just economy. With the whole world watching, showing how LAX’s development can be done without harm to communities of color will be an excellent place to start.



The Essential Workers & Diverse Stakeholders at LAX

Even though the airport plays a critical role in the region's economy and saw close to 90 million annual passengers at its peak in 2019, the plain truth is that the diverse group of people who work at or live near LAX are the ones who will be most directly impacted by its expansion.

Airport workers have always been essential, but during the pandemic that description became official. Cabin cleaners, baggage handlers, wheelchair agents, food service workers, security guards—these workers saw their lives and conditions change drastically in 2020, when they found themselves serving a vital public health function. These airport service workers also happen to largely be immigrants and people of color, groups that research has shown are more at risk of both getting COVID-19 and of dying from it.¹ One recent study found that throughout the United States, an increase of 1% in a county's Black population was associated with a nearly 2% increase in COVID infection and a 2.6% increase in related deaths. A similar increase in a county's Hispanic population was linked to a 2.4% rise in infections and 2% increase in deaths.² Compared to the rate for non-Hispanic whites, the death rate is nearly twice as high for Black individuals and 2.3 times as high for Hispanics or Latinos. Black and Brown workers have been on the frontlines of a pandemic that is significantly more dangerous in their communities and, as airport workers, they've been considerably

more exposed to the economic ramifications, seeing their jobs and hours disappear, sometimes for good.

The communities near LAX are as diverse as the airport's workforce. Adjacent to the airport to the north and south, Westchester and El Segundo are predominantly white and relatively affluent compared to the other areas near LAX. The picture changes dramatically east of the airport though, under the flightpath, where the emissions and noise footprint of LAX extend for miles. Inglewood is 40% Black and 50% Hispanic or Latino, Hawthorne is 25% and 55%, and Lennox is over 90% Hispanic or Latino.³ Smaller neighborhoods like Gramercy Park, Westmont, Vermont Vista and others all fall under the airport's noise contour maps to some degree, and all are majority non-white by significant margins. These neighborhoods and cities also happen to be cut through or surrounded by high traffic commercial corridors: the I-405, the I-110, the I-105 and the I-10.

This isn't a fluke or an accident. Redlining and restrictive covenants limited housing options for minority communities in Los Angeles dating back over a century, cutting people of color from access to nearly 95% of the city's housing.⁴ Black and Brown residents were concentrated where they were able to, primarily in what is now South Los Angeles, and the decades to follow saw the placement of industrial manufacturing facilities and transportation corridors within these same areas.

Development does not exist in a vacuum. It lands in a real place, it affects real people. These places and people have their own history and context, much of it run through with stories of injustice and stratification. There are two paths ahead for the elected officials and decision makers involved in this project: continue to be part of the problem and add to this unfortunate history, or break the cycle and confront this reality in a meaningful way. If the City of Los Angeles wishes to be known as a progressive city of the future—a leader on issues of justice and equity—it will need to correct its course on this project and do just that.

¹ CDC, "Covid-19 Racial and Ethnic Health Disparities," 12/10/20

² University of Minnesota Center for Infectious Disease Research and Policy, "Race, income inequality fuel COVID disparities in US Counties," 01/20/21

³ US Census Quickfacts, 07/01/19

⁴ SCOPE LA, "Between the 110 and the 405: Environmental Injustice in South Los Angeles," 11/27/17



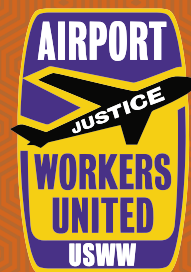


VALERIE KING

Screeners at LAX

I also live in Inglewood, about 5 minutes from the airport. We hear planes all the time. As the airport has expanded, it has bought up so much land. They offer cash for people's properties. It used to be people's homes. Now it's airport construction, the arena, the football stadium, the race track, the casino, and other tourist spots. The traffic is awful now. There's so much congestion, causing the air quality here to be bad.

The airport expansion has also caused the rent to go through the ceiling. My unit is \$2,195 for a two bedroom. A three bedroom costs over \$3,000. I live here with my son who also works at the airport. It's not easy living here anymore with the increase of the rents. This is a burden with low income being forced to move or be displaced because of the increase in the rents and the surrounding upcoming attraction expenses being forced on the community. A lot of people, including my coworkers, have had to relocate because they couldn't afford the rent. They've moved further away, like to Lancaster or Palmdale, and then their commute is worse and it takes them longer to get home. California is already known for smog. The LAX expansion will make all of this worse.

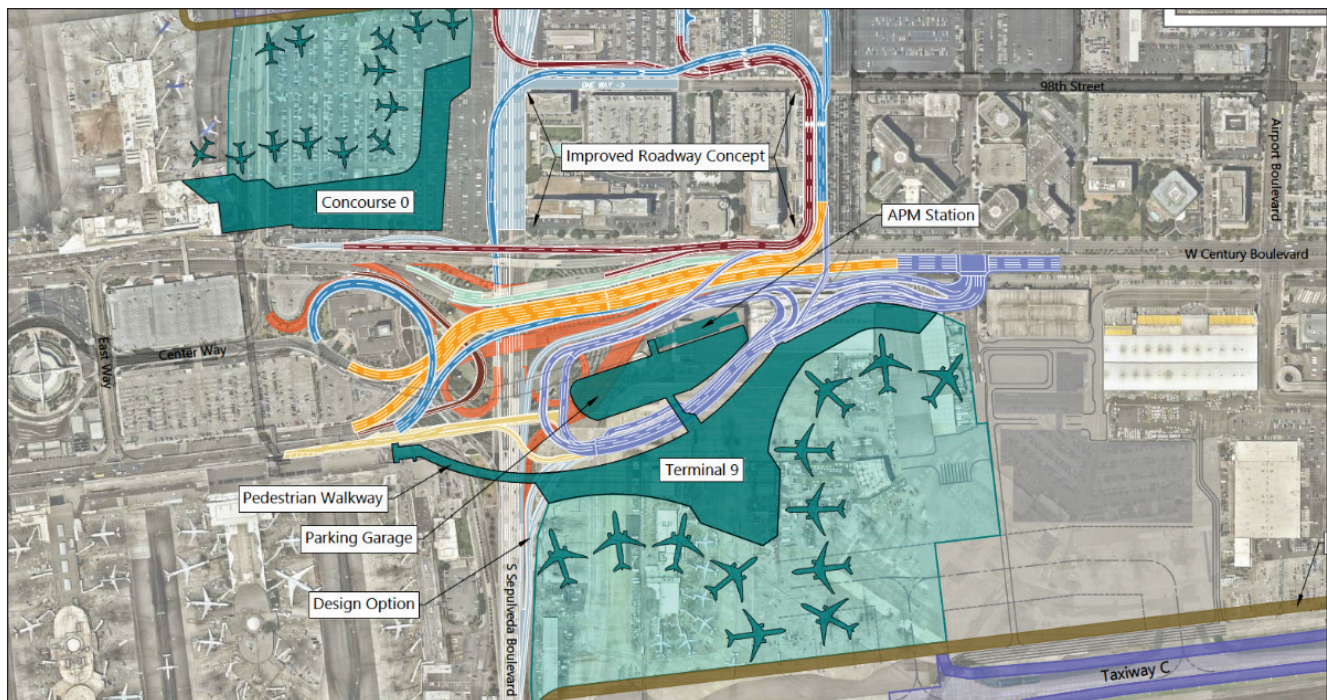


Airfield & Terminal Modernization Project — The Proposed Development

Before addressing the issues within LAX's proposed development project, let's take a look at what the airport has planned and why. LAX is the second busiest airport⁵ in the United States, seeing over 88 million annual passengers in 2019—ranking third in the world⁶ that year. In recent years, LAX has also been one of the fastest growing major airports in

the country⁷, despite the fact that the airport has long been constrained by infrastructure and a lack of space (LAWA's former chief executive, Deborah Flint, told the Wall Street Journal in 2019 that LAX was already "accommodating more people than the infrastructure allows for."⁸). The airport has been developing incrementally for decades, with the most recent major expansion happening in the early 1980s when Terminal 1 and the Tom Bradley International Terminal were added as the city prepared to host the 1984 Summer Olympics.

LAX's latest development—officially called the Airfield & Terminal Modernization Project (ATMP)—is moving for similar reasons, with Los Angeles set to host the Olympics in 2028. The new project has three main components: terminal improvements, landside improvements, and improvements to the airfield. Airfield improvements include an extension of one of the taxiways and a reconfiguration of taxiway and runway exits, aimed at reducing airfield wait times, which means the airport could accommodate additional flights in the same amount of time. Terminal improvements, the largest element



⁵ Rankings based on annual enplaned passenger figures from the US DoT

⁶ Port Authority of NY & NJ, 2019 Airport Traffic Report

⁷ FAA Airports Data, Commercial Service Airports Based on CY 2018

⁸ WSJ, "Can an Airport Get Too Big?" 11/13/2019

of the project, will include the additions of Terminal 9 and Concourse 0, each with over a million square feet of facilities, international processing, and a combined 21 new gates. The landside improvements include the addition of an automated people mover train station and increased access to a restructured Central Terminal Area. The planned Concourse 0 would extend LAX eastward from Terminal 1 all the way to Sepulveda, replacing a large parking lot and the primary northern entrance to the airport.

Terminal 9 would replace the airport's primary entrance from the south, extending the airport's southeastern point further down Century Blvd.

The assumed future tenants of Concourse 0 and Terminal 9 would benefit greatly from such a project. Southwest Airlines, who currently occupy Terminal 1, would likely become a primary tenant of the adjacent Concourse 0, allowing for a consolidation of their international operations at LAX.⁹ Despite the recent completion of a \$500 million renovation at Terminal 1, Southwest, third in market share at LAX, will certainly welcome the needed growth. Indeed, project mock-ups even show Southwest's

unique red, blue and yellow planes parked at Concourse 0.

Beyond speculation, Southwest has directly acknowledged that the expansion is necessary for them to grow in the region beyond 2021, the year they expect to be limited without additional gates. Southwest forecasts a regional growth rate of 3-5% annually over the next 10 to 15 years, and with Burbank constrained by facilities, Long Beach by slots, and Orange County by an enplanement cap, the airline is counting on much of this growth to come from LAX, where they have the airport's highest gate utilization rate, a figure they are trying to reduce.¹⁰ Concourse 0 isn't simply and solely a 'modernization' of the airport—it's a necessary endeavor for a growing and bottlenecked airline to concentrate this growth at LAX.

United Airlines finds itself in a similar position, fourth in market share at the competitive and growing LAX, an airport it considers a hub. Terminal 9 would be a boon for the airline, allowing it to consolidate its operations and that of its international Star Alliance partners.



⁹ *Cranky Flier*, "A Look at LAX's Plans for Terminal 9 and Concourse 0," 04/16/2019

¹⁰ Southwest Airlines, Terminal 1 East CDO & TDIP DED Briefing, 01/15/2020



Red Flags in the Draft Environmental Impact Report

The footprint of an airport of the scale of LAX goes far beyond just flights and passengers. It also means noise in surrounding neighborhoods and cities, traffic in connected roads and highways, and emissions that impact entire regions. Each of these factors carry with them their own implications. To name just a few: traffic can have significant economic impacts, noise can affect human health, and pollution can touch the lives of generations of families. An airport isn't only an airport—it's the center of a cascade of potential changes to the lives of countless people and their communities. As LAX grows to serve more passengers each year, these impacts grow too. There are serious, lasting consequences involved for the stakeholders at and around LAX, and any plan to develop or expand the airport warrants intense scrutiny. It is vital to see that development is approached responsibly and with the airport's many stakeholders in mind.

Based on the draft Environmental Impact Report produced for this project, LAX will fail to meet that standard.

The draft EIR for this project is rife with red flags. LAX appears committed to obfuscating the impact of the project in numerous areas—traffic, noise, air quality, greenhouse gas emissions. The result is a review that understates the development's impacts and effectively conceals its long-term effects. Further still, LAX's planned mitigation measures fall short.

According to LAX's own projections, LAX will grow from 88 million annual passengers in 2019 to over 110 million in 2028. By 2045, LAX could see well over 155 million annual passengers, an increase of 76%

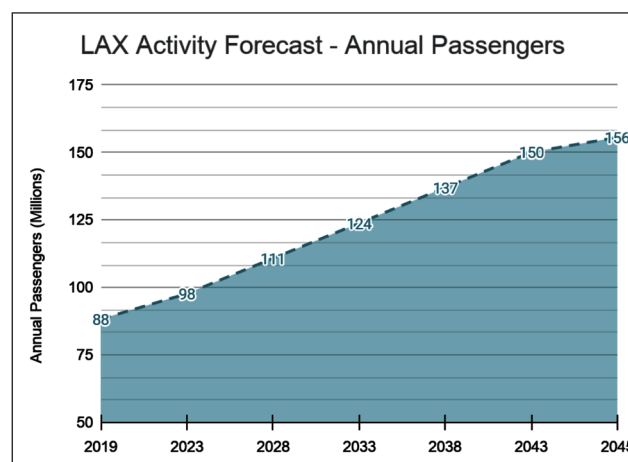
from 2019.¹¹ LAX forecasts over 250,000 additional flights at the airport between 2018 and 2045.

Despite this amount of growth based on LAX's own forecasts, their analysis of the project's noise, traffic, air quality and greenhouse gas emissions cuts off at 2028 in the DEIR, the year the project is supposed to be completed.

By overanalyzing the project's near-term conditions, LAX elects to ignore the years where the project—designed to increase the capacity of the airport—actually does just that.

With these kinds of fundamental flaws, can it actually be said that this project is proceeding responsibly? That the long-term interests of the people who will know the project's lasting effects firsthand are being considered? The current approach is a sign that LAX is caught up in short-term thinking, intent on pushing a major development through without due diligence and leaving vulnerable communities, families and workers to confront lasting impacts that haven't been adequately considered.

If that is the route LAX is preparing to go down, the airport runs the risk of doubling down on the racial and economic inequalities that essential workers and airport-adjacent communities have been facing for years, and which have only intensified during the COVID pandemic.



¹¹ ATMP DEIR, Appendix B, Table 3-5

Statewide Leader in Air Pollution Failing to Study Long-Term Air Quality Impact of Expansion

One of the most serious and complex elements of LAX's planned development is the change it will bring to air quality in the region. Before diving into what the draft EIR reveals about that though, some perspective on the airport first.

Put simply: it is difficult to understate the impact that LAX has on regional air quality. Much of Los Angeles County (in addition to all of Orange County and parts of Riverside and San Bernardino counties) falls within the South Coast Air Basin, which covers an area that represents nearly half the population of the entire state. Within the South Coast Air Basin, out of nearly 1,400 facilities, LAX is the largest emitter of NO_x, CO, and SO_x pollutants. It is the 2nd largest emitter of ROG, the 6th in TOG, 10th in PM₁₀ and 17th in PM.¹² Quite often, the other highest ranking facilities for these pollutants are oil refineries or major factories.

LAX's role in CO and NO_x emissions is particularly pronounced. LAX produced over 4,400 tons of Carbon Monoxide in 2018, with the second-place facility, John Wayne Airport, producing just 1,100 tons. LAX also

**LAX — Criteria Pollutant Emissions 2018
South Coast Air Basin & Statewide:**

Type of Pollutant	Tons/Year	2018 Rank SCAQMD	2018 Rank Statewide
TOG (Total Organic Gases)	645	#6	#48
TOG (Reactive Organic Gases)	636	#2	#6
CO (Carbon Monoxide)	4,433	#1	#2
NO_x (Nitrogen Oxides)	4,607	#1	#1
SO_x (Sulfur Oxides)	409	#1	#7
PM (Particulate matter)	48	#17	#139
PM10 (Particulate matter <10 micrometers)	47	#10	#77

produced over 4,600 tons of NO_x that year, with the second-place facility producing just 970 tons. In what is no small coincidence, that facility is the Torrance Refinery, which produces “a very significant amount” of the jet fuel used at LAX.¹³ Looking at this data, airports in general play a huge role in CO emissions, with all of the top 3 and 15 of the top 20 emitters in the South Coast Air Basin all being airports.¹⁴

Even statewide, out of about 20,000 facilities, LAX is an emissions leader: still 1st in NO_x, 2nd in CO, and in the top 10 in ROG and SO_x. Its lowest rank in any criteria pollutant statewide is 139th in particulate matter—still in the top .7% of all facilities in California.¹⁵

All of this is to say, LAX is a *huge* part of the emissions landscape within the Greater Los Angeles area and the state as a whole, and any proposed expansion of the airport carries with it significant implications for air quality and environmental equity.

So what does the draft EIR reveal about the air quality impact of the development project? That, even by just its planned build-out year, 2028, LAX with the ATMP would have a significant impact on air quality in both construction and operations. In order to qualify as significant, the EIR considered whether or not both

¹² CA Air Resources Board, Facility Search, 2018 Criteria Pollutants Data

¹³ About Us - Torrance Refinery, 2021

¹⁴ CA Air Resources Board, Facility Search, 2018 Criteria Pollutants Data

¹⁵ Ibid.



direct and indirect emissions of various pollutants would exceed certain daily peak thresholds. Analysis showed that in project construction, this was the case for CO, VOC, NO_x and SO_x.¹⁶ Not only was this the case, but daily peak emissions of CO and NO_x would exceed their respective thresholds by about 800%.

For operational emissions, this was the case for NO_x, SO_x, PM₁₀ and PM_{2.5}.¹⁷, exceeding the thresholds for NO_x by over 4,560%.

It helps to remember that this is LAWA's estimate of the project's impact merely by the year it is expected to be fully built. A longer view with respect to the air quality impact of this development doesn't exist because LAWA opted not to study it. By LAWA's own estimates, LAX could see compounded annual growth of 2.2% in passenger activity going all the way until 2045¹⁸, and all of this growth means a corresponding increase in emissions. For Southwest Airlines, the assumed tenant of Concourse 0, 2.2% growth would

be modest, as internal records from the airline show that they expect anywhere from 3 to 5% yearly growth in the Los Angeles area, mostly concentrated at LAX.¹⁹

All indications, including the airport's, are that LAX will continue to grow rapidly. LAWA's decision not to study the long-term impact of a project that can jumpstart this growth doesn't mean it isn't there, it just means it isn't being made known, least of all to the people who stand to be affected most. This is a troubling approach made all the more disturbing by the fact that many of the communities near LAX—Inglewood, Hawthorne, Lennox—are majority non-white. Communities that already have a history of environmental racism and disproportionately suffered the worst health and economic consequences of the pandemic are being set up to take on all of the inadequately studied impacts of a project they are not even the intended beneficiaries of.

Operational Emissions — 2018 Baseline vs. 2028 With Project:

	NO_x (lbs/day)	SO_x (lbs/day)	PM₁₀ (lbs/day)	PM_{2.5} (lbs/day)
2018 Baseline Totals:	30,690	2,314	2,834	1,090
2028 w/Project Totals:	33,199	2,808	3,492	1,268
Difference:	+2,509	+495	+658	+178
<i>Threshold:</i>	55	150	150	55

Direct & Indirect Construction — Related Emissions of Criteria Pollutants:

	CO (lbs/day)	VOC (lbs/day)	NO_x (lbs/day)	SO_x (lbs/day)
Peak Daily Direct Emissions:	483	67	160	2
Peak Daily Incremental Indirect Emissions:	3,911	327	645	171
Total Peak Daily Emissions:	4,394	385	805	173
<i>Threshold:</i>	550	75	100	150

¹⁶ ATMP DEIR, Section 4.1.1-40

¹⁷ ATMP DEIR, Section 4.1.1-45

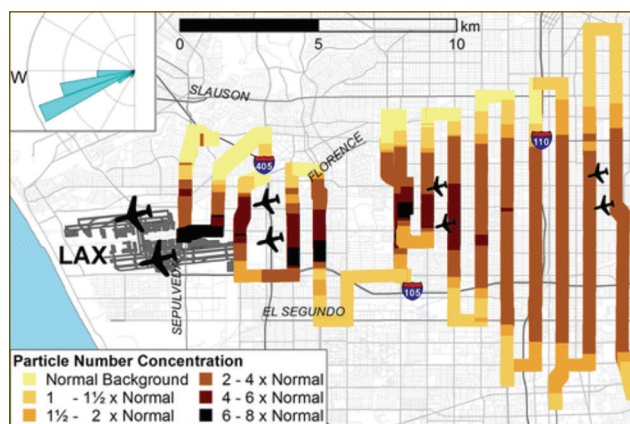
¹⁸ ATMP DEIR, Appendix B, Table 3-8

¹⁹ Southwest Airlines, Terminal 1 East CDO & TDIP DED Briefing, 01/15/2020



The Demographics Behind Pollution Near the Airport

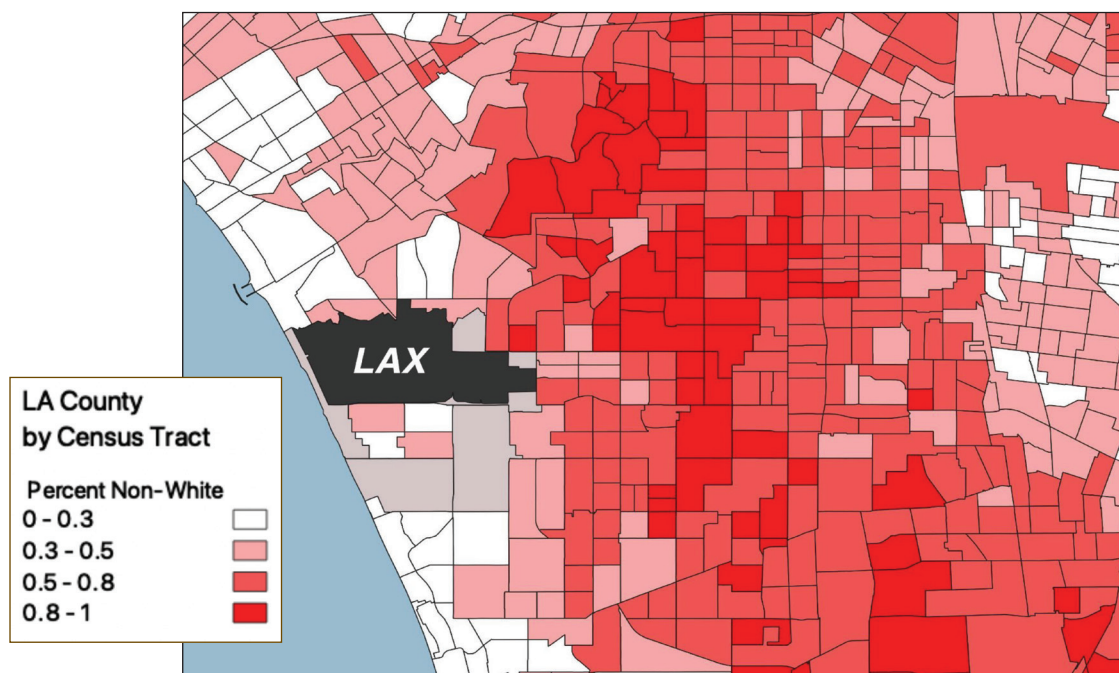
The implications of this development for communities of color around the airport are serious, but unfortunately they are not new. One groundbreaking 2016 study on airport-adjacent communities found that the populations within three miles of hub airports throughout the country tend to be not only majority non-white, but have nearly twice the proportion of people of color than the population at large.²⁰ This study also found that these disparities were



increasing, and that these areas also saw larger groups of people living in poverty, renters, and fewer college-educated individuals.²¹

This is dramatically true for LAX, where the neighborhoods and cities east of the airport are predominantly non-white. Five of the ten least-white census tracts in Los Angeles County are just east of the airport, under the flightpath.²²

Map below shows percent of non-white population around LAX.²³



²⁰ Woodburn, Amber Victoria "Pushback in the Jet Age: Investigating Neighborhood Change, Environmental Justice, and Planning Process in Airport-Adjacent Communities" (2016) Publicly Accessible Penn Dissertations. 2101.

²¹ Ibid.

²² American Community Survey 5-Year Estimates, US Census Bureau 2019

²³ Map Created from American Community Survey 5-Year Estimates, US Census Bureau 2019

The other unfortunate correlation for these communities is the presence of increased levels of pollution. An air quality study by a team at USC's School of Medicine in 2014 found that some types of pollution from jet airplanes reached neighborhoods as far as 10 miles downwind of LAX.²⁴ Even at that distance, ultrafine pollution tied to jet exhaust was still found at levels double the concentration of outside areas. Concentrations of particle-matter pollutants within a 2-mile area east of LAX reached levels ten times higher than non-impact areas.

By the study's most conservative estimates, it found that about 175 to 490 miles of freeway were needed to produce the same amount of impact as LAX. There are only about 930 miles of freeway and highway in all of Los Angeles County.

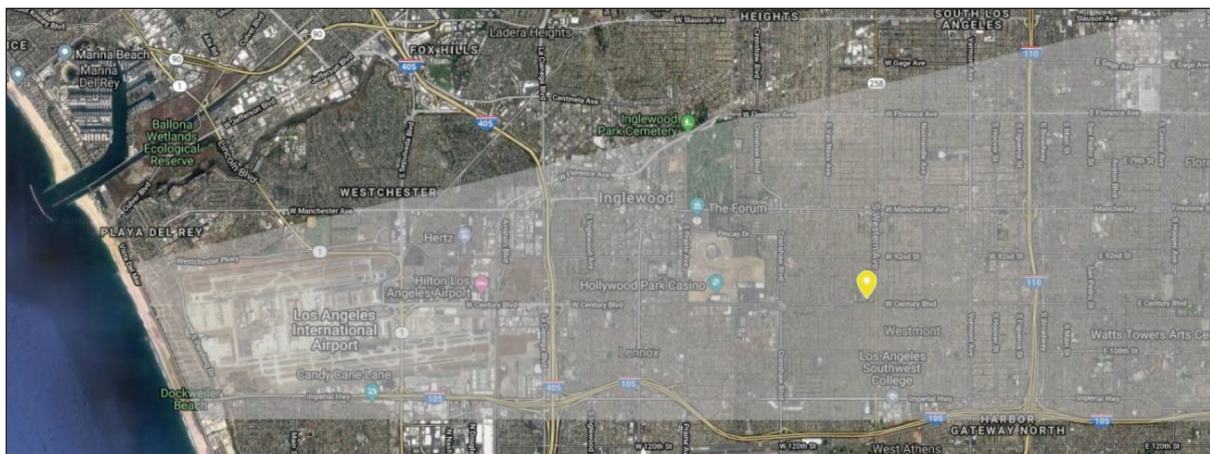
About 95% of all LAX flights take off and land into the west-to-east onshore winds, so the spread of toxic pollution generated by air travel at the airport hits the same communities in South Los Angeles that happen to be primarily non-white, such as Inglewood and Lennox. The USC study noted that "a significant fraction of urban dwellers living near airports likely receive most of their outdoor PN (particle number) exposure from airports rather than roadway traffic." It is no surprise that the study concluded by acknowledging that "LAX should be considered

one of the most important sources" of this type of pollution in all of Los Angeles.

The proposed expansion of LAX also comes at a time when the world is grappling with the irreversible threat of climate change. Increased flight volume and corresponding increases in ground traffic will not help the City of Los Angeles reach its goal of net zero carbon emissions by 2050. The industry in general has an enormous carbon footprint: if global aviation were a country, it would rank in the top 10 emitters of greenhouse gases.²⁵ Mile for mile, air travel is the most damaging way to travel for the climate.²⁶ And while fuel efficiency is improving, it is not doing enough to offset the increased demand for air travel. Between 2020 and 2050, global emissions from international aviation are expected to grow between 300 to 700%.²⁷

With this kind of context surrounding the airport, a grim picture starts to emerge with respect to the unconstrained growth of operations and passenger activity that LAX's expansion would accommodate. Over 67 million additional annual passengers, over a quarter million new flights by 2045, the impact of which set to worsen the already stratified conditions for majority minority communities near LAX. This is what environmental racism looks like before it begins.

The map shows the approximate location of the plume of ultrafine particles created by air traffic around LAX, that usually occurs when the winds are blowing steadily from the west.²⁸



²⁴ Emissions from an International Airport Increase Particle Number Concentrations 4-fold at 10km Downwind, USC Keck School of Medicine, Published 05/29/2014

²⁵ USC Environmental Health Centers, Airport pollution linked to acute health effects among people with asthma in Los Angeles, Gutschow, W. 02/14/19

²⁶ European Commission, "Reducing emissions from aviation" 2021

²⁷ BBC, "Should we give up flying for the sake of the climate?" 02/18/20

²⁸ European Commission, "Reducing emissions from aviation" 2021

Public Health Consequences

It is already the case that these communities suffer from disparate health impacts. The South Los Angeles area has some of the highest asthma emergency visit and hospitalization rates in the country²⁹ and the zip code adjacent to LAX has one of the highest rates of asthma of any neighborhood in Los Angeles County.³⁰

All of the pollutants that LAX is a statewide leader in—CO, NO_x, SO_x, Particulate Matter, organic gases

—have known health risks. Heart disease, asthma, respiratory conditions, heart conditions, headaches, even cancer. Judging by the draft EIR, this project as it is currently planned is a moral hazard in the making, gearing up to worsen conditions for communities near the airport.

Using just one example, the ultrafine particles (UFPs) downwind from LAX are an unregulated pollutant that are known to contribute to reduced lung function and airway inflammation in populations regularly exposed.³¹ A 2019 study looked at the health impact of UFPs and found that the ones from airport-related pollutants had effects that were distinct from those derived from normal ground-traffic. Ultrafine

CO (Carbon Monoxide)	A toxic gas formed by burning fuel, the primary source of which is emissions from vehicles and machinery that utilize fossil fuels. Deadly in high concentrations within an enclosed environment, elevated levels of CO outdoors are still possible outdoors and can impact people with heart disease by reducing the amount of oxygen in the blood.
NO_x (Nitrogen Oxides)	Nitrogen oxides are highly reactive gases, with nitrogen dioxide, NO ₂ , often used as an indicator for the larger group of oxides of nitrogen. Combustion of fuel is the primary source of NO ₂ , so vehicle emissions, including that of aircraft, are major contributors. NO _x can react with other chemicals in the air to form both ozone and particulate matter. NO ₂ in high concentrations can irritate human airways, and exposure can lead to respiratory symptoms and even hospital admissions. Long-term exposure may contribute to asthma or respiratory infections, and the health effects are greatest in children and the elderly.
SO_x (Sulfur Oxides)	Sulfur oxides (SO _x), with sulfur dioxide (SO ₂) being the most prevalent, are formed by the burning of fuel that contains sulfur: primarily coal and oil. SO ₂ can harm the respiratory system and cause difficulty breathing, particularly in small children, the elderly and people with asthma.
PM (Particulate Matter)	Consists of particles of dust, soot, aerosols, and other matter that is inhalable and can remain in the air for extended periods of time. It is referred to by its size: PM ₁₀ for particles smaller than 10 micrometers, PM _{2.5} for fine particulate matter. Exposure to particulate matter can affect both your lungs and your heart, and has been tied to heart attacks and heart conditions, aggravated asthma, decreased lung function and other respiratory conditions.
ROG (Reactive Organic Gases)	Reactive Organic Gases (ROG) are a class of organic compounds that react in the atmosphere to form smog, or ozone (O ₃). Ozone is not a direct emission, it is formed in the air through reactions of NO _x and volatile organic compounds (VOCs). O ₃ has been linked to chest discomfort, coughing, nausea, respiratory tract and eye irritation, and decreased pulmonary functions. There is scientific evidence to support that this can affect even healthy children and adults.
TOG (Total Organic Gases)	Total Organic Gases (TOG) refers to most gaseous organic compounds, including most compounds of carbon. It includes all gas compounds emitted to the atmosphere. This also includes all Reactive Organic Gases (ROG). Various subsets of TOG can cause headaches, dizziness, irritation to the upper respiratory tract, nausea or cancer.

²⁹ Scope LA, "Between the 110 and the 405; Environmental Injustice in South Los Angeles," 11/27/2017

³⁰ LA DoT, "Asthma (18 & Over) 2011-2012 AskCHIS Neighborhood Edition", 03/01/16



particles are known to cause asthma, but airport related UFPs cause inflammation in the blood that is tied to cardiovascular and respiratory conditions, as well as metabolic disease.

The effect of unregulated UFPs along the LAX flight path on communities of color worsens the already disparate rates of asthma and other respiratory disease. There are persistent disparities in pediatric and adult asthma hospitalizations and emergency room visits across racial and ethnic groups. Hispanic adults have asthma hospitalization rates twice that of non-Hispanic white adults, while African Americans are three times more likely to be hospitalized for asthma than their white peers.³² As LAX moves to expand, it is imperative to directly address the impact of airport pollutants within communities of color so that the airport isn't simply worsening these existing issues.

The Federal Aviation Administration has acknowledged how airports contribute to environmental racism and its resulting health impacts.³³ A 2016 presentation by the FAA's Office of Airport Planning and Programming recognized the duty to mitigate

environmental impacts and support environmental justice whenever airports modernize or expand. All federal agencies are required by law to identify and address disproportionately high and adverse health or environmental effects of its programs, policies, and activities on minority and low-income populations. Additionally, all airport-operating administrations are required to fully consider environmental justice principles throughout their planning and decision-making processes.

Pollution along the LAX flight path is making neighborhoods near the airport—predominantly populated by residents of color—dangerous and toxic. If the airport and the City of Los Angeles hope to grow equitably and truly modernize, they have a duty to address these issues in a meaningful way.

³¹ USC Environmental Health Centers, Airport pollution linked to acute health effects among people with asthma in Los Angeles, Gutschow, W. 02/14/19

³² Everage, Nicholas J. "Disparities by race/ethnicity and sex: asthma hospitalizations and emergency department visit rates in Rhode Island and Healthy People 2010 goals." *Medicine and health, Rhode Island* vol. 93,6 (2010): 177-8, 181-3.

³³ FAA National Civil Rights Training Conference, "FAA Office of Airports on Environmental Justice and Related Issues" 2016





JOVAN HOUSTON

Customer Service Agent

Where I work is a big open garage, or warehouse-style building, directly across from the jetway. All the planes park next to where we work. The air quality is really bad. I used to wear masks and scarves to protect myself even before the pandemic. When the planes first start their engines, there's a big cloud of smoke and it blows back to me. When you go home, there's a layer of filth on your hands and nails. It gets inside your nose. If you blow your nose, Black particles come out. I always leave the airport with a cough. Then if you take time off work, like for a week, you notice you're not coughing as much. I get headaches. I even got a bad nose bleed a couple of months ago and had to go home.

I think it is because of the pollution.

A while after I got transferred to the bag room, I got diagnosed with COPD [Chronic Obstructive Pulmonary Disease]. It's usually caused by smoking, but I don't smoke. I guess it's like I'm smoking jet fuel by working at the airport! I came down with what I thought was a bad cold. My chest was really heavy and I couldn't breathe and didn't sleep for 2-3 weeks because I couldn't breathe lying down. I went to the hospital. They said my lungs were inflamed. They put me on steroids, and had me using an inhaler and nebulizer for a while.

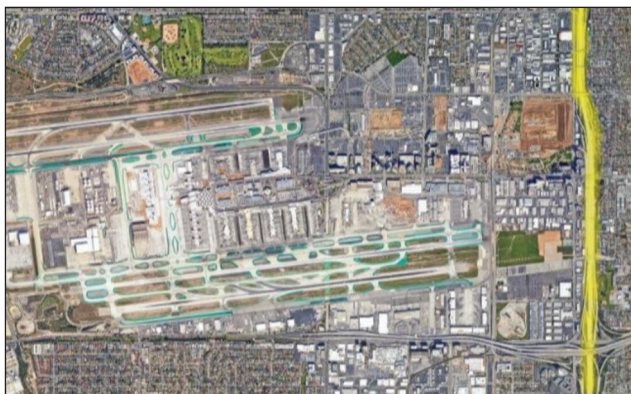
I used to be really active and play softball, but now I can't. I want to exercise more and get healthy but I feel so weak because I get tired when I can't breathe.



LAX Prepared to Contribute Even More to Region's Notorious Traffic

Los Angeles is well known for its traffic, leading the world as the most congested city for the better part of the last decade despite its sprawling geography.³³ Even within this context LAX stands out. The 405 between the 101 and the 105, which runs directly past the airport, is one of the ten most congested roads in the United States³⁴. Travelers lost 56 hours a year to congestion in that corridor alone in 2019³⁵, and Terminal 9 brings LAX closer to it.

LAX saw over 316,000 daily vehicle trips in 2019³⁶, and with the inclusion of the proposed development, nearly 100,000 additional trips are projected by 2028³⁷. In terms of Vehicle Miles Traveled (VMT),



“An irresponsible approach to development on projects with serious traffic implications in Los Angeles could mean that those burdens fall disproportionately on the Black and Brown communities adjacent to LAX...”

a common metric used in transit planning, LAX with the development is looking at 8.7 million VMT from passenger activity in 2028, a 32% increase from 2019 levels.³⁸

The project will also have both short and long-term impacts on induced travel, a term that refers to the way travel demand responds to increases in the capacity of a road system. If travel time on a road is reduced through improvements, for example, it may actually *increase* traffic through additional use. LAWA's review shows that the development will prompt significant levels of both short and long-term induced VMT, on top of the VMT generated by passengers and employees.

Judging from the draft EIR, LAWA is preparing to walk headfirst into unanticipated traffic impacts associated with this development even as early as during construction, but particularly in the years after project build-out.

The draft EIR fails to specify any transportation impacts during the seven-year construction phase of the project, including the impacts on parking, the impact of an influx of construction workers, or from the storage of equipment and materials. The draft also fails to include a “Level of Service” analysis that

³³ INRIX, Los Angeles Tops INRIX Global Congestion Ranking, 02/05/2018

³⁴ INRIX, Most Congested U.S. Roads in 2019, 03/09/2020

³⁵ INRIX, Most Congested U.S. Roads in 2019, 03/09/2020

³⁶ ATMP DEIR, Section 4.8-40

³⁷ ATMP DEIR, Section 4.8-40

³⁸ ATMP DEIR, Section 4.8-41

would have shed more light on the project’s impacts on local and area-wide roadway systems.

Perhaps most critically, the draft EIR fails to analyze long-term VMT impacts beyond 2028, even though such impacts are admitted, and even though the EIR predicts airport passenger growth going all the way to 2045. It is in this run-up to 2045 after construction where the project would have enabled significantly more growth in passenger travel and therefore a substantially greater potential increase in traffic activity. The project isn’t doing as much as it could on mitigation either, with no mitigation planned to address the significant levels of passenger VMT impact acknowledged in the EIR.

Congestion cost the city of Los Angeles \$8.2 billion in 2019—more than any other American city, with an average cost of over \$1,500 per driver and



over 100 hours lost³⁹. An irresponsible approach to development on projects with serious traffic implications in Los Angeles could mean that those burdens fall disproportionately on the Black and Brown communities adjacent to LAX and the essential workers who keep the airport operating.

**Summary of Projected VMT & Daily Trip Impact –
2019 Existing Conditions & 2028 Projected w/Project:**

	2019 Existing	2028 Projected w/Development	Increase
Daily Trips	316,128	407,942	91.8k / 29%
Passenger VMT	6,581,811	8,708,995	2.12m / 32%
Short-term Induced VMT	N/A	3,306	N/A
Long-term Induced VMT	N/A	18,220	N/A

³⁹ INRIX, Most Congested Urban Areas in the U.S., 03/09/2020



LAWA's Determination to Dismiss Noise Impacts of Expansion

For many that live in airport-adjacent communities, noise pollution is a well-known annoyance and everyday reality. What may be less obvious is that this noise has serious potential consequences, with numerous studies drawing significant links between exposure to high levels of aircraft noise and negative health outcomes, ranging from diabetes to heart disease. The California Noise Control Act explicitly describes excessive noise as a “serious hazard to public health and welfare”.

With this in mind, the noise implications of any airport expansion call for careful study, and initial data from the EIR shows that thousands of new

people and households have cause for concern. LAWA's own estimates, which experts have described as a vast understatement⁴¹, show that nearly 8,200 more people and over 2,600 households will be exposed to additional noise from the airport by 2028 when the development is finished. Well over half of these people—4,700 or so—live within what would be the new, outermost noise contours surrounding the airport—and would be newly exposed to airport noise.⁴²

Moreover, much of this growth in the noise footprint of the airport is localized to majority Black or Brown cities and neighborhoods, such as Inglewood, South Los Angeles, Vermont Vista, Westmont, and Manchester Square (*see map below*).

Following completion of the expansion, LAWA's own analysis shows that 59 non-residential “noise-sensitive uses” would be exposed to significant levels of noise from LAX, including 25 houses of worship, 29 schools, three libraries, and two colleges.⁴³

This kind of disparate impact becomes more alarming with a look at the science related to the potential health effects of airport noise. One European study from 2017 found that residents who lived underneath an airport flightpath were 86% more likely to have



⁴¹ Draft EIR Comments; LAX Airfield and Terminal Modernization Project, 03/15/2021

⁴² ATMP DEIR, Section 4.7.1-35

⁴³ ATMP DEIR, Section 4.7.1.-36

type 2 diabetes, with scientists speculating that noise, particularly when it disrupts sleep, affects the metabolism, leading to increased blood sugar levels.⁴⁴

A 2013 study even tied aircraft noise to an increased risk in older people of hospitalization for heart disease. The study determined that every 10-decibel increase in noise from planes was tied to a 3.5% increase in hospital admission rate for cardiovascular problems in seniors living near airports.⁴⁵

LAWA's language in the EIR does not inspire confidence that they are taking these potential impacts seriously, let alone the prospect of the impacts being inequitably distributed. LAWA claims that a relationship between noise and health effects "has yet to be convincingly demonstrated" and insists

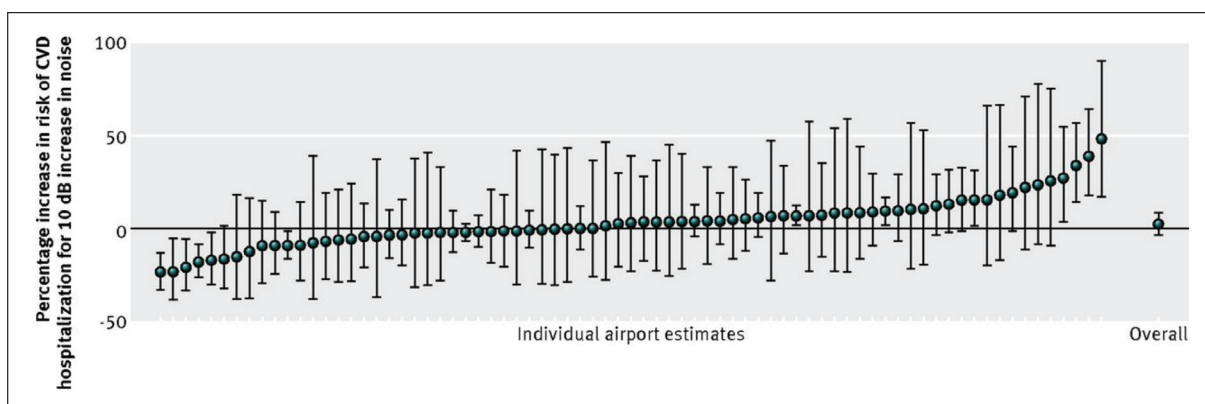
that "isolating the effects of aircraft noise alone as a source of long-term physiological change has proved to be nearly impossible."⁴⁶

Similar to their approach on traffic, LAWA completely fails to evaluate the noise impact of the project beyond its build-out year, 2028, choosing to outright ignore the prospective long-term effects of the ATMP. The limited analysis that LAWA did conduct is not without flaws either, as the noise contour maps did not change to reflect the fact that the development will be replacing existing parking lots with airport terminals.⁴⁷

With another major section of the EIR revealing a project with serious blind spots, a pattern is starting to emerge.

**Estimated Population & Housing Units with Aircraft Noise Contours —
2018 Baseline vs 2028 w/Project Conditions**

	Population				Housing Units			
CNEL Range:	65-70	70-75	75+	Total	65-70	70-75	75+	Total
2018 Baseline Conditions:	56,632	16,499	780	73,911	20,938	4,819	303	26,060
2028 w/ Project Conditions:	61,311	19,596	1,183	82,090	22,651	5,660	413	28,724
Difference:	+4,679	+3,097	+403	+8,179	+1,713	+841	+110	+2,664



⁴⁴ *Daily Mail*, "Living under flightpath roar 'may cause diabetes': Scientists say residents who are exposed to daily aircraft noise are 86 percent more likely to have the type 2 condition," 04/01/2017

⁴⁵ *The British Medical Journal*, "Residential exposure to aircraft noise and hospital admissions for cardiovascular diseases: multi-airport retrospective study," 09/05/2013

⁴⁶ ATM DEIR, Section 4.7.1-12

⁴⁷ Draft EIR Comments; LAX Airfield and Terminal Modernization Project, 03/15/2021





WILMA SHARPE

Passenger Service Agent

I live in Inglewood, directly in the LAX flight path. The planes fly so low that you can actually identify the plane. My grandson stands outside and says “Look Grammy, there’s a Delta 747.”

The planes are so low that we joke that we can see them waving to us. You can also see the jet fuel drops.

On a scale of 1-10, the noise from the planes is a 12. When a plane comes, we stop talking because it’s so loud. I’m used to it, but when my daughter, son, or other people come into town they can’t sleep because it’s so loud. I feel embarrassed because I want my kids to come visit me and be comfortable but how do I do that when there are planes flying past?

I want to tell the planes to shut up.

Where I live, everyone has new sound proof windows except me. They sent a contractor to my house to take measurements, but then they did nothing. I’ve asked the city about it and they say I’m next, but I’m still waiting.



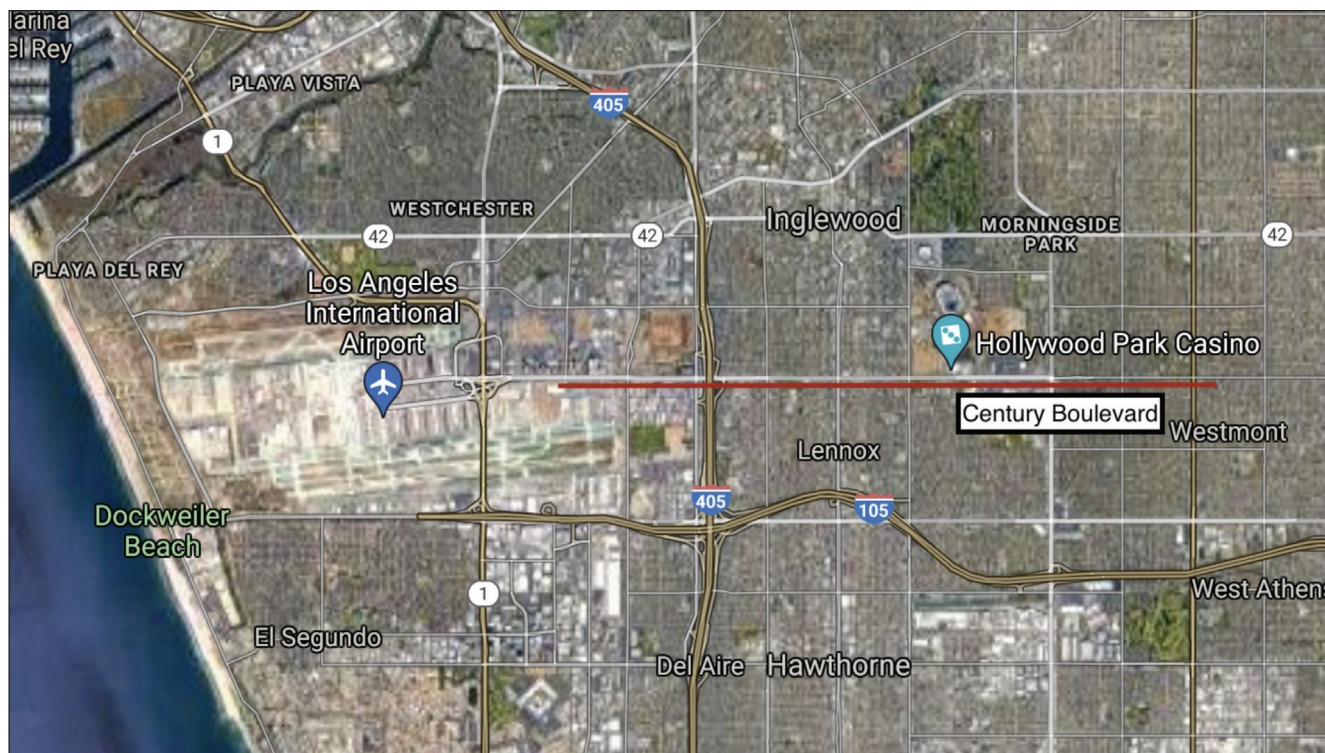
Equitable Development, Avoiding Gentrification & Displacement

Equitable development at the airport goes beyond the need for clean air in adjacent communities, it also means sustainable and just housing in these areas, too. Residents need to be protected from the effects of gentrification so that large-scale development does not necessarily translate into displacement. Airport workers should be able to continue to affordably live close to where they work. All of these principles become even more critical when one considers the fact that many communities near LAX, particularly

those east of the airport under the flightpath, are majority Black and Brown. A thoughtless approach to development at the airport risks accelerating displacement within areas that have become enclaves for minority communities in the Los Angeles area.

Housing costs in the area have already been rising at a rate well above the national average in recent years. As recently as 2017, median rent for a two-bedroom apartment in Inglewood was around \$1,500—about the average nationally. By 2019 this figure rose to \$1,950 in Inglewood and \$1,625 nationally.⁴⁸ In this same span, median home values soared at a rate far beyond the national average. Unmitigated increases in the cost of housing may lead to people being displaced or pushed into homelessness. LAX workers who have been lauded as “essential” throughout the pandemic run the risk of being squeezed out of affordable housing near their own workplace.

Recent developments along the Century corridor have already displaced some low-income residents and increased rents and the cost of living for residents near the airport.⁴⁹ Most recently the new



⁴⁸ *Los Angeles Times*, “One of California’s last Black enclaves threatened by Inglewood’s stadium deal,” 04/10/19

⁴⁹ *The Appeal*, “The Struggle Against A Stadium’s Construction Became A Battle for the Soul Of Los Angeles,” 09/10/20

SoFi stadium sparked backlash from residents of Inglewood concerned about gentrification. While the stadium was in development, locals collected over 20,000 signatures (about 20% of the entire population of Inglewood) demanding community input on the project.⁵⁰ After the stadium broke ground, Inglewood became a prime target for companies like Wedgewood Inc., a real estate firm specializing in flipping homes through foreclosure. Lack of rent stabilization policy in the city until recently has led to a spate of extreme rent increases, with some tenants seeing hikes in excess of \$1,000.⁵¹

It's not just the more affordable neighborhoods around LAX that are facing out of control housing costs—Westchester, the neighborhood immediately north of the airport, has seen the median home price increase over 50% since 2017, up to over \$1.4 million this year.⁵² El Segundo, south of LAX, is even less affordable, with a median home price of \$1.5 million this year, and an increase of nearly 70% in this same span.⁵³

It's not always the case that residents simply find more affordable housing elsewhere: increased cost of housing has a strong correlation to an increase in people living on the streets or in shelters, according to one UCLA study in 2018.⁵⁴ Any development with

“In the near 750 page main document of the draft EIR, the words ‘gentrification’ or ‘affordable housing’ fail to appear a single time.”

housing implications that lacks a robust affordable housing component may well push Los Angeles residents out of stable housing altogether.

In the near 750 page main document of the draft EIR, the words “gentrification” or “affordable housing” fail to appear a single time. If Los Angeles hopes to be an equitable city for all it needs to address issues of displacement, homelessness, and environmental racism when considering new developments like the ATMP. The impacts that development and gentrification may have on the residents and airport workers that live in the area need to be taken into account, especially when these impacts disproportionately land in communities of color.



⁵⁰ *The Appeal*, “The Struggle Against A Stadium’s Construction Became A Battle for the Soul Of Los Angeles,” 09/10/20

⁵¹ *bid.*

⁵² *Redfin*, Westchester Housing Market Trends, 2017-2021

⁵³ *Redfin*, El Segundo Housing Market Trends, 2017-2021

⁵⁴ *Los Angeles Times*, High cost of housing drives up homeless rates, UCLA study indicates, 06/13/2018





ARMANDO MUÑOZ

Passenger Services Agent

I live in South Watts, about 15 minutes from the airport. Watts is known for the projects, but because of the airport there's a lot of gentrification going on.

They're demolishing the projects and putting in new homes. With what I get paid here, I could not afford one of those. In order to survive in LA, you have to make \$27/hour and I'm only making \$18.25. Before we had 40 hours, but now I only get 7.5 hours 4 days per week. I work two other jobs on the side.

When I worked here during the recession, I had to live in my car for a few weeks and then live in a friend's garage for a few months so that I could rent out my home until I could catch up with the payments so I could avoid foreclosure. Even after that, I had to put up a wall in my living room so I could rent out the other half.



The Airline Industry's Actual Record on Essential Workers

Essential airport workers, who are largely people of color, immigrants and women, are on the frontlines at LAX, keeping cabins clean, airports secure and elderly and disabled passengers cared for—even through a global pandemic, climate disasters and busy travel seasons. Despite the essential services these workers provide, many of them—such as cabin cleaners, wheelchair agents, baggage handlers and security personnel—are underpaid and under-protected. This is no accident. Wealthy and powerful airlines that will directly benefit from the LAX development, like United and Southwest, have fragmented airport workplaces. Today, even with LAWA's Certified Service Provider Program, any given flight out of LAX might be serviced by employees of dozens of different companies with varying standards for pay, benefits and training.

Airlines have created this highly fragmented system of employment which has driven down standards for tens of thousands of workers. At the same time, the airlines, through their lobbying arm, Airlines for America (A4A), have consistently opposed any effort these workers attempt to improve their lives, including healthcare and living wages. Below, are just a few examples:

Los Angeles: In 2017, A4A sent a letter to members of the Los Angeles City Council opposing increases to

“Despite the essential services these workers provide, many of them—such as cabin cleaners, wheelchair agents, baggage handlers and security personnel—are underpaid and under-protected.”

the City's living wage agreement that covers LAX⁵⁵. And, since the airport was considering changes to its health insurance requirement, A4A also argued that “any health care mandate at LAX is impossible to justify.”⁵⁶ Finally, the airlines opposed the City's program to provide emergency response training for airport workers.⁵⁷

San Francisco: In 2021, A4A sued the City and County of San Francisco over its Healthy Airport Ordinance that will ensure SFO workers and their families have health care. The airlines argued that the law “makes no sense” and threatens job cuts.⁵⁸ The case is pending.⁵⁹

Miami: In 2014, when airport workers advocated an increase to the airport's living wage policy, the airlines and A4A refused any responsibility. From the *Miami Herald*:⁶⁰

“The airlines say they have no responsibility for the policies of their subcontractors. United Airlines referred questions about wages to its subcontractor, while JetBlue said in an email that it works with local partners to “ensure they comply with

⁵⁵ Re: Motion #15-0817-S1 on Living Wage at LAX, Airlines for America, City of LA Council File No. 15-0217-51, 09/19/17

⁵⁶ Re: Motion #15-0817-S1 on Living Wage at LAX, Airlines for America, City of LA Council File No. 15-0217-51, 09/19/17

⁵⁷ Re: Motion #15-0817-S1 on Living Wage at LAX, Airlines for America, City of LA Council File No. 15-0217-51, 09/19/17

⁵⁸ Re: Proposed City Ordinance No. 201133, San Francisco Office of the City Attorney, 10/26/20

⁵⁹ Legal Newswire, “Airlines say new San Francisco law goes too far,” 04/08/21

⁶⁰ *Miami Herald*, Union pushes for better pay for service workers at Fort Lauderdale-Hollywood airport, 08/07/2014

applicable state and local wage laws for their employees.”

“Airlines have hundreds of contractors with whom they do business, including travel agencies, aircraft manufacturers, security companies, petroleum companies and countless others, and no company—in any industry—dictates to its vendors what their employees should be paid,” a spokeswoman for Airlines for America, an airline trade association, said in an email.

Changing the minimum wage and investigating violations of wage laws is the responsibility of the local, state and federal governments, the group’s email said.

Washington DC Area: In late 2016, A4A raised opposition to a proposed living wage increase at Reagan National and Dulles airports:⁶¹

The airline industry and its contracting companies have emphasized that they abide by federal and state labor laws and say that the government should dictate wage minimums, not airport governing bodies.

“We continue to believe that the appropriate way to address minimum wages is at the statewide or national level, so that minimum-wage standards apply to all workers and employers equally, regardless of industry sector or geographic location,” said Kathy Grannis Allen, a spokeswoman for Airlines for America.

Chicago: Airlines for America fought Chicago’s 2017 airport policy that included wage increases: Airlines for America argued that there is “no legal or policy justification for imposing a higher minimum wage on a few thousand workers who provide services to one industry at two locations” and the city’s “status as an

“After layoffs during the initial months of the pandemic, many service workers have returned to work without employer-provided healthcare coverage.”

airport operator/proprietor does not give it authority to regulate private labor relations.”⁶²

Massachusetts: In 2018, A4A brought a suit against the State of Massachusetts’ sick-time law. The airlines argued in the complaint that the law placed “burdens on operations” and “is both unconstitutional and preempted by the [Airline Deregulation Act].”⁶³

New York and New Jersey: A4A lobbied heavily against the proposed minimum wage increases at the Port Authority of New York and New Jersey in 2018.⁶⁴ A4A relied largely on legal objections and rejected the Port Authority’s “legal power to regulate wages of third parties.” A4A later argued that the Port Authority’s “assertion of safety and security to justify higher wages is ‘gloss’ to mask social goals.”

State Attorneys General Lead Pushback on A4A’s Attacks: A4A’s record of opposing improvements for airline industry workers, particularly in the middle of a pandemic, triggered significant pushback from 19 State Attorneys General in 2020. The AG’s filed an amicus brief with the US Ninth Circuit Court of Appeals that supported a State of Washington law regarding sick pay. The case was being challenged in court by Airlines for America.⁶⁵ Massachusetts

⁶¹ *Washington Post*, “Contract workers at National and Dulles look to 2017 for a wage increase win,” 12/29/2016

⁶² *Chicago Sun Times*, “\$13.45-an-hour wage cleared for takeoff at O’Hare, Midway Airports,” 09/06/17

⁶³ *Courthouse News Service*, “Airlines Call Out Massachusetts Sick-Leave Law,” 04/05/18

⁶⁴ RE: Supplemental Comments Regarding Proposed Minimum Wage Mandate, Airlines for America, Port Authority of NY & NJ, 07/27/2018

⁶⁵ Brief in Support of Appellees and Affirmance, Air Transport Association of America, Inc. v. Washington State Department of Labor and Industries, et al, US Court of Appeals 9th Circuit, Case No. 19-35937, 05/18/20

Attorney General Maura Healey argued that “[w]orkers need to be able to stay home when they are sick to recover and stop the spread of serious illnesses like COVID-19 to their families, coworkers, and the public,” said AG Healey. “We filed this brief because these workers have a right to paid time off without risking their livelihoods.”⁶⁶

LAX in particular has been falling short of doing right by essential workers—past efforts to eliminate poverty jobs at the airport are being wiped away by the rapidly increasing cost of living in Los Angeles. The last increase to LAX’s Living Wage policy is set for July 1st, 2021⁶⁷, with no planned increases for subsequent years. While the current living wage is set at \$16.50 with healthcare or \$22.05 for those without, the National Low Income Housing Coalition estimated just a few years ago that Californians would need an hourly full-time wage of \$32.68 to afford a two-bedroom rental.⁶⁸ The legally required contribution for healthcare is currently just \$5.55 per hour, but costs for a family health plan in the area can be as high as \$9.50 an hour. After layoffs during the initial months of the pandemic, many service workers have returned to work without employer-provided healthcare coverage.

Airlines cutting costs can result in the hiring of irresponsible contractors with records of wage theft and skirting training requirements, and it can take years to identify and correct these violations, let alone hold employers and airlines accountable. Despite LAX having some of the strongest labor peace policies of any American airport, labor disputes are not uncommon, in part because of the total lack of funding for outreach, education and enforcement of the city’s labor standards at the airport.

⁶⁶ Press Release, AG Healey Leads Multistate Coalition Supporting Paid Sick Leave for Airline Workers, 05/19/20

⁶⁷ Living Wage and Service Worker Retention Ordinances, Los Angeles World Airports, June 2021

⁶⁸ National Low Income Housing Coalition, “Out of Reach,” 2018



Airlines Cannot Use the COVID Crisis as an Excuse to Exploit Workers & Communities

In September 2017 American Airlines CEO, Doug Parker, said “I don’t think we’re ever going to lose money again.”⁶⁹ Airline executives had reason to believe that was true: the industry had “an unbroken decade of profits in 2010” with profits during this period topping \$220 billion.⁷⁰

In the middle of that decade, between 2014 and 2019, major U.S. airlines delivered nearly \$45 billion to Wall Street in the form of stock buybacks and dividends. Southwest spent \$8.5 billion on buybacks and \$1.4 billion on dividends, American almost \$12 billion and \$1 billion, Delta \$10 billion and \$3.2 billion, and United Airlines spent nearly \$9 billion on buybacks.⁷¹

As COVID-19 hit the airline industry, taxpayers came to the rescue with nearly \$80 billion in public assistance, sustaining it through historically low

travel.⁷² Since the start of the pandemic, the federal government has allocated \$54 billion in grants and an additional \$25 billion in low cost loans.⁷³ In this same time, airlines have raised tens of billions of dollars in additional capital from private lending or from issuing additional shares.⁷⁴

With Americans arriving on the other side of the pandemic, airlines are recovering and in a position to do the right thing on projects that will be of enormous benefit to them.

The major airlines that operate out of LAX are rebounding from the pandemic and poised to return to their large profits as passengers return to travel:

- ▶ Southwest “reported a \$116 million profit, boosted by more than \$1 billion in federal payroll aid and said it expects its core cash flow to break even “or better” in June 2021.”⁷⁵
- ▶ United returned to positive cash flow in March 2021 and is telling investors about a “clear path to profitability”.⁷⁶
- ▶ Delta expects to return to profitability by the third quarter of 2021.⁷⁷
- ▶ American says the company is “well-positioned for the recovery” and has been using their increased cash to pay down debt early.⁷⁸

⁶⁹ *USA Today*, “American Airlines CEO: We’ll never lose money again”, 09/28/17

⁷⁰ Flight Global, “How the airline industry grew profitable over the past decade”, 12/30/19

⁷¹ *Washington Post*, “U.S. airlines want a \$50 billion bailout. They spent \$45 billion buying back their stock”, 04/06/20

⁷² *NASDAQ*, “U.S. extends \$14 billion lifeline to airlines in third government aid package,” 03/10/21

⁷³ *NASDAQ*, “U.S. extends \$14 billion lifeline to airlines in third government aid package,” 03/10/21

⁷⁴ *Market Watch*, “American Airlines raises about \$2 billion in funds via stock and convertible bond offerings,” 06/23/20; *The Motley Fool*, “Southwest Airlines to Raise \$2.6 billion in Equity and New Debt,” 04/28/20; *Freight Waves*, “United Airlines to raise \$1 billion in stock offering,” 04/22/20

⁷⁵ *CNBC*, “American and Southwest report stronger bookings, ramp up schedules ahead of summer,” 04/22/21

⁷⁶ *Investopedia*, “United Airlines Q1 2021 Earnings Report Recap,” 04/20/21; Press Release, “United Releases First-Quarter Financial Results - Rebounding Demand is Driving Clear Path to Profitability,” 04/19/21

⁷⁷ *Investopedia*, “Delta Air Lines Q1 2021 Earnings Report Recap,” 04/15/21

⁷⁸ *Investopedia*, “American Airlines Q1 2021 Earnings Report Recap,” 04/22/21; Press Release, “American Airlines Reports First-Quarter 2021 Financial Results,” American Airlines Newsroom, 04/22/21



LAWA's Role in Ensuring that Public Resources Going Towards the LAX Development Serve the Public Good

LAWA owes the taxpaying public who underwrite LAX and its proposed modernization with a responsible return on their investment: an airport that benefits not only airlines, but also those essential workers that make LAX successful—these workers who are largely people of color, immigrants, and women. More than that, LAWA has a responsibility to these communities to live up to its core values of respect, collaboration, and stewardship.

Airlines operating out of LAX that will directly benefit from the proposed development—such as Southwest and United—not only received billions of public dollars to see them through the pandemic, but regularly receive billions of dollars through other forms of public support. US airlines rely heavily on aviation infrastructure built with taxpayer support, and the airlines have used tens of millions in political spending and lobbying to ensure that they retain as much control over the system of airports and airport development as possible. The airlines have used laws

“Airlines operating out of LAX that will directly benefit from the proposed development—such as Southwest and United—not only received billions of public dollars to see them through the pandemic, but regularly receive billions of dollars through other forms of public support.”

like the Airline Deregulation Act in attempts to limit the power of local communities and their elected officials to ensure that our aviation system meets public interest goals.

Despite all that public support, airlines at LAX undercut essential airport worker wages through patchwork systems of contractors;⁷⁹ and as outlined above, when those workers seek better for themselves, their families and their communities, the airline industry pushes back.

It is LAWA's responsibility to hold the airlines at LAX accountable and to create an airport where every essential worker has the opportunity to thrive—no matter race, immigration status, gender, job, or where they live. It is their responsibility to ensure that development is handled responsibly, and that the airlines are not going to be the only ones who benefit as their growth comes at the expense of the health and welfare of the communities near the airport.

⁷⁹ Course Correction: Reversing Wage Erosion to Restore Good Jobs at American Airports, UC Berkeley Labor Center, October 2013



Moving Forward

So what can be done about any of this? How can the city’s leaders and decision makers help move toward a more equitable LA?

To start, LAWA needs to actually acknowledge the scope of this development and the breadth of its impacts. It is self-evident that this project will at some point increase the capacity of the airport, so an EIR that cuts off analysis at the project’s expected build-out year couldn’t possibly acknowledge the effects of that increased capacity, let alone begin to adequately mitigate them. This project isn’t merely a “modernization” of airport facilities, it’s a fundamental, permanent addition to LAX’s infrastructure and a significant factor in the airport’s ability to grow unconstrained for the foreseeable future. The project’s mitigation measures, as currently proposed, are woefully inadequate and fail to address the project’s true and cumulative impacts on the climate and surrounding communities.

“...all of this needs to be done in a way that properly reckons with issues of environmental justice and equity, front and center.”

From there, LAWA needs to meet with stakeholders and begin a process of radically re-imagining the project as a modernization centered on the needs and health of the Black and Brown communities near LAX. LAWA needs to negotiate with stakeholders and begin developing a comprehensive community benefits agreement (CBA) alongside this project to ensure that it benefits, rather than harms, communities of color.

Any CBA must include provisions that will improve the quality of jobs at LAX so that essential workers are not relegated to a second-class economy, unable to sustain themselves and their families or continue to live in the region. It is startling that in this current project, LAWA has not contemplated any new efforts to ensure that the permanent service-sector jobs resulting from this project become the kind of high quality work that airport employees can sustain a family on.

A CBA must also do more than what is currently planned on transportation and traffic reduction, particularly in a way that’s aimed at LAX workers who are forced to contend with traffic and parking at the airport on a daily basis. The proposed project fails to support workers struggling with the high cost of transportation, and even contemplates charging workers more for parking at the airport, a solution that would contribute to workers’ inability to afford housing near their work and avoid long, polluting commutes.

An adequate CBA must also do better for the communities near the airport, addressing issues of environmental health and air quality; LAX should aim to be a leading model for how a major commercial airport confronts its own impact in these areas and how it coexists with its stakeholders. Rather than set ambitious, forward-thinking targets for the use of sustainable aviation fuels or investment in research, the draft EIR only contemplates limited ways to deal with emissions from ground transportation at the airport, like electric vehicle charging stations. While this is positive change, it still ignores the catastrophic impacts of the ever-increasing emissions from an aviation industry expected to grow rapidly for decades to come. LAX must also tackle the implications of its continued growth and development on the affordability of housing near the airport, so that longtime residents and essential workers do not become victims of the airport’s success.



All of this needs to be done in a way that properly reckons with issues of environmental justice and equity, front and center. Because of the demographics and history of the communities surrounding LAX and the workers at the airport itself, anything that affects these groups cannot be separated from these issues and from history.

Finally, accountability should be a prime concern: all of this needs to be done in a way that is enforceable by community stakeholders. In past agreements, many provisions were delayed for years or never implemented, such as community-based health studies that never materialized. This underscores a need for any CBA to be legally binding and enforceable, with a structure in place to ensure that LAWA is communicating to stakeholders, reporting on its progress to the city, and funding community partners to monitor compliance and progress.

“Los Angeles has the chance to be a leading example of a modern, progressive place that offers a better future for its residents.”

LAX’s stakeholders are already doing the difficult work of improving the lives of the airport’s workers and securing LAX for the traveling public. SEIU United Service Workers West, which represents thousands of unionized aviation service workers at LAX alone, has two thousand members that live within six miles of LAX. USWW was proud to work with Mayor Garcetti to develop a comprehensive Emergency Preparedness Training program at the airport and continues to be proud of the work being done to raise standards for essential airport workers. It is vital that LAWA and the City work with a broad coalition of stakeholders in the community to reorient this project in a far more inclusive direction than what is currently planned and proposed.

The City of Los Angeles has a once in a generation opportunity before it, one where it can assert its values on the world stage. Falling short would be a devastating continuation of decades of injustice dealt to far too many communities and to the working class people that make the city thrive. Los Angeles has the chance to be a leading example of a modern, progressive place that offers a better future for its residents, carried out with justice and equity. Let’s hope *that* is the kind of legacy this city is prepared to leave.





REYNA AMAYA

Janitor at LAX

We live in this area. It is a Latino and African American area. We are breathing everything that is emitted by the airplanes. The airlines and the city officials aren't thinking about that. I don't think it's fair. They should think about us a little bit. There are human beings.

We won't get any benefits from this project, only the companies.

Most people don't think about the fact that they live in a contaminated area and how that impacts your body. One day they will die and it will be from "natural causes," but there are so many ailments that one can attribute to the chemicals we breathe—asthma, cancer, diabetes, allergies.

The airport, the mayor, and the city council should think about us, help us, make something better for us. Because right now they are not thinking about airport workers, they are not thinking about the communities around the airport. We want to see that we are taken into account with the expansion of the airport. We are people equal to them and we have families.



Additional LAX Worker Stories



ROSA RIVERA

My name is Rosa Rivera. I work in Terminal 6 for Alaska and I am a janitor.

LAX expansion is going to be a serious problem. Expanding the airport is going to cause a lot of problems for the community—for example, more pollution from flights. Sometimes the planes have emergencies and they dump fuel at a certain level when they are going to land and go near the communities. All of this is going to cause problems—problems like illness in older people, children who are young who have health problems like asthma.

I have a girl who when she was little—when she was 4 years old—suffered a lot from her bronchial tubes. She always had a really bad cough. I took her to the hospital with an asthma attack twice. It is traumatic because you are watching your child who is unable to breathe and there is nothing you can do. I imagine when everything is back to normal, there will be more pollution, more flights arriving, more people, much more traffic. It's going to be chaos.

Right now with this problem of the expansion of the airport, we fear the rent will continue to go up. Workers like me will no longer be able to afford houses.



MIGUEL TORRES

My name is Miguel Torres. I work as a janitor at LAX. I have worked in cleaning for 20 years.

With the expansion of the airport, we are going to see a profound change with traffic. Freeways are already very saturated. I drive two hours every day to get to work. At best, if there is no traffic, only an hour and a half. I spent many years battling traffic to get to work. I live in Palmdale. Because of my distance, the gas I pay is different than anyone who lives here in Los Angeles. I spend \$100 a week on gas just for work.

The salary that we have is not enough to provide the basic food necessities, with the current cost of living. We can't pay for bills and food. We cannot save money. Sometimes we have to make decisions—for example "Do we buy enough food with this payment or do we pay for electricity and gas and other bills that we have?" The expansion is very worrying. With the construction, the politicians have not thought about improving the situation of the employees. It is necessary to have medical coverage for our families that doesn't have a high copay.



ESMERALDA ESPINOZA

My name is Esmeralda Espinoza. I have been working at LAX for 8 years. I work in clean-up in the dining room area, the shops and the corridors.

Air and airport pollution affect us a lot. We are here directly receiving all the smoke, all the dust, all the things that can affect our system. Allergies affect me. This is what bothers me a lot. I always have to buy and take medicine. Even though I have days off and I am not working at the airport, the air still bothers me because I live close by. We are not very far from the airport. There are also polluting companies around where we live.

My oldest son who is 20 years old is very affected by climate change. His allergies are affected. He's asthmatic and that also affects his bronchitis.



OSCAR ANTONIO

My name is Oscar Antonio. I have worked at LAX as a security guard since 1999.

When LAX remodeled Delta's terminal, there was a lot of dust in the air, we weren't even given masks. Two other security guards working in the same area as me got sick with pneumonia, and then I got pneumonia too. I had considered myself really healthy. I was a runner and I would go hiking for hours.

I almost died. I was taken off work for a month. For four months afterwards, the doctor said I had a whistle in my lungs. I can still hear it in the morning. It's asthma. Now I have an inhaler.

The politicians can live miles from here, away from the construction and contamination, but we can't. The communities around the airport breathe in the pollution too. The companies see you as a machine, a machine to create money for them. If you're not there one day, they will just get someone else to replace you. But we have rights in this country that have to be respected.



ANA BELL GONZALEZ

My name is Ana Bell Gonzalez. I've worked at LAX for 18 years. I'm a cabin cleaner.

If we're going to have a world class airport, we need world class jobs. It's important to me that we have responsible employers that provide us with health care because I don't want what happened to me to happen to anyone else.

In 2013, I was working for a non-union company that lowered our pay because they were going to give us health insurance. I'd get insurance and then the following week I'd have no coverage again. They kept dropping me. I was literally dying—bleeding to death—and didn't have health insurance. Maybe if I'd had continuous insurance, they would have caught the cancer sooner because I was struggling to get the tests done when my coverage kept dropping. But with cancer, you can't have delays. It wasn't until a year later when I finally got insurance that they caught it. By then, I was already in Stage 3.

With this expansion, the airport needs to be more responsible to have good companies inside the airport. I don't want to go back to being non-union when we had to just keep our heads down and just take it because we needed the job and had a family to support. With a union, the companies think twice before doing what they used to do. And when there is a problem, you have a say. With the union, we work with more dignity.



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