LAX MASTER PLAN

COMMUNITY BENEFITS AGREEMENT

2015 ANNUAL PROGRESS REPORT

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Los Angeles World Airports

LAX MASTER PLAN

COMMUNITY BENEFITS AGREEMENT (CBA)

2015 ANNUAL PROGRESS REPORT

Prepared by

Los Angeles World Airports
Environmental and Land Use Planning Division

LAX Master Plan CBA 2015 Annual Progress Report

Acknowledgements

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Disclaimer: LAWA obtained data from a variety of sources to generate this report. The reporting team did not have access to each individual primary document and thus was not able to verify all data sets fully against the source

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1.0 Executive Summary

On December 6, 2004, the Los Angeles World Airports' Board of Airport Commissioners (BOAC) approved an agreement with the LAX Coalition for Economic, Environmental and Educational Justice (Coalition).

The Cooperation Agreement and the Community Benefits Agreement included therein call for measures to mitigate noise, pollutant emissions, and traffic impacts of the Master Plan, as well as benefits such as job training and hiring programs for eligible residents of the Project Impact Area (PIA)[1] and the City of Los Angeles. The agreement precludes LAWA from making expenditures or taking actions prohibited by the Federal Aviation Administration (FAA) or any other regulatory authority. The Cooperation Agreement also prohibits the use of Los Angeles City's General Fund or any other City-controlled non-airport source of funds to meet any of LAWA's obligations under the Agreement.

In accordance with Section XVI "Miscellaneous" of the Agreement, LAWA is required to prepare annual reports on the implementation of the Community Benefits Agreement and the progress of the LAX Master Plan Program. LAWA is to provide the annual reports to the Coalition Representatives and make them available for at least one month on the LAWA website. This document is the eleventh annual report on the progress of the Agreement. This document has been provided to the Coalition Representative and is available on the LAWA website at http://www.ourlax.org under Studies and Reports.

2.0 Introduction/Background

The "Community Benefits Agreement" is comprised of several documents as follows:

1. **Cooperation Agreement.** The Cooperation Agreement sets out the legal framework of the Agreement, including conditions, commitments, obligations, enforcement, and more.

2. **Community Benefits Agreement (CBA).** The CBA, an attachment to the Cooperation Agreement, details the various proposals of mitigation and benefits. The various proposals include:

   Noise Mitigation

   - Increased Funding for Airport Noise Mitigation Program
   - End-of-Block Soundproofing
   - Suspension of Avigation Easement
   - Limitations on Nighttime Departures

[1] *Project Impact Area includes the communities immediately surrounding the airport and those most impacted by airport operations, and is comprised of South Los Angeles, El Segundo, Hawthorne, Inglewood, and Lennox.*

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Settlement Agreement with Inglewood Unified School District. This Agreement calls for LAWA to (a) fund certain mitigation measures for the Inglewood Unified School District in an amount not to exceed $118,500,000 for noise abatement, (b) assist the Inglewood Unified School District in the coordination and dissemination of appropriate information related to emergency preparedness and response of local law enforcement agencies, emergency response groups, and the local communities in the event of an

airport-related emergency, and (c) work collaboratively with the Inglewood Unified School District to support a variety of community programs, such as job training and academic programs.

Settlement Agreement with Lennox School District. Similarly, this Agreement calls for LAWA to (a) fund certain mitigation measures for the Lennox School District not to exceed $111,000,000 for noise abatement, (b) assist the Lennox School District in the coordination and dissemination of appropriate information related to emergency preparedness and response of local law enforcement agencies, emergency response groups and the local communities in the event of an airport-related emergency, and (c) work collaboratively with the Lennox School District to support a variety of community programs, such as job training and academic programs.

As described in each Agreement, LAWA's obligations are conditioned upon FAA approval of these expenditures and use of airport revenues for these specific purposes. Under no circumstance will any of LAWA's obligations under these Agreements require any expenditure from the City's General Fund or any other City-controlled source of funds.

The primary purpose of this report is to document and report on the status of the current and recently completed commitments set forth in the CBA. This report covers the period January 1, 2015 through December 31, 2015.

3.0 Community Benefits Agreement Progress Update

Section III. Residential Noise Mitigation

Section III.A Funding of Aircraft Noise Mitigation Program (ANMP)

The Agreement states:

"Beginning in fiscal year 2004-2005, LAWA shall fund its Aircraft Noise Mitigation Program (ANMP) at least at the following levels:

- $4.275 million per year for the Inglewood component; and
- $4.275 million per year for the County of Los Angeles component

These funding levels shall be met by LAWA. LAWA shall use additional revenue, including Airport Improvement Program funds, as appropriate. LAWA expenditure of funds under this Section III.A is contingent on the City of Inglewood and the County of Los Angeles complying with all requirements established in BOAC Resolution Nos. 21481 and 21360, and with FAA regulations."

Status → In Progress:
The County of Los Angeles did not request any funding in calendar year 2015. At the end of 2014 the County received over $17 million dollars in two different grants in LAWA funds alone plus $4.5 million from the FAA to cover all work that was projected to be completed in 2015.

The County expedited sound insulation of 816 eligible units in anticipation of noise contour changes and the implementation of the new FAA guidelines. The County is in compliance with all program requirements.

The City of Inglewood received funding in early 2015 in the amount of $44,300,000 to treat over 1,000 units in the end-of-block area as a last attempt to treat impacted properties before the implementation of the new FAA guidelines. Across all their neighborhoods, Inglewood treated 2,077 units in 2015. Inglewood is in compliance with all program requirements.

Therefore, the allocation of new funds in 2015 is as follows:

Calendar Year 2015

County of Los Angeles (component)		*$0*
Inglewood (component)		*$44,300,000*
	Total	*$44,300,000*

Section III.B Acceleration of Noise-Mitigation Programs for City

The Agreement states:

"Within eight months of the effective date of this Agreement, LAWA will provide a written schedule and work program to the Coalition Representative that is designed to achieve completion of the ANMP soundproofing program for the City by the end of 2008, and will take all reasonable steps to timely implement that schedule and work program."

Status →Completed:
LAWA staff completed notification to all eligible property owners of the availability of the program in April 2010. Construction was substantially completed in December 2013. The last construction contract was closed in late fall of 2014. LAWA spent approximately $160 million on the implementation of this program. Over 7,300 dwelling units were sound insulated in the communities of South Los Angeles, Playa del Rey and Westchester.

Section III.C Acceleration of Noise-Mitigation of Places of Worship

The Agreement states:

"LAWA shall accelerate the program of soundproofing Places of Worship as part of the ANMP in effect as of the effective date of this Agreement. Within eight months of the effective date of this Agreement, LAWA shall conduct a needs assessment for this program, in consultation with the Coalition Representative. LAWA shall provide annual reports on the progress of the program."

Status → In Progress:
Coordination with the Coalition on this provision is ongoing.

Section III.D End of Block Soundproofing

The Agreement states:

"Within one year of the completion of the current ANMP for participating jurisdictions, LAWA shall commence an end-of-block soundproofing program, under which, if any residence on a particular city-block falls within the applicable noise contour for that block, then each residence on that block will be eligible for noise mitigation as described in this Section III.D. Offers of soundproofing shall be made to the owner of each residence, whether or not the owner of that residence chose to participate in previous soundproofing programs. Soundproofing under this program shall reduce interior noise at participating residences to an interior CNEL of 45 decibels or less, within habitable rooms."

City of Los Angeles Status → Completed in 2014
Within the City of Los Angeles, over 700 end-of-block eligible property owners were notified (via certified mail) of their eligibility in the program. In all, 514 dwelling units were added under the block rounding program that utilizes Passenger Facility Charge

(PFC) funding approved by the FAA. The City of Los Angeles' program was completed in 2014.

Other Jurisdictions Status → Ongoing:
The City of Inglewood, the County of Los Angeles, and the City of El Segundo completed work on end-of-block eligible properties from the 4Q92 and the Alternative D noise contours on December 31, 2015.

Section III.E Suspension of Avigation Easement

The Agreement states:

1. Present Avigation Easement Requirements. All homeowners receiving LAWA provided or funded noise insulation measures within the 65 dBA CNEL noise contour presently must execute express, full avigation easements (as set out in Exhibit A). In return for LAWA's providing these noise insulation benefits, each homeowner presently must sign a full, express avigation easement (as set out in Exhibit A), expressly waiving his or her ability to sue LAWA with respect to the impacts (listed in the avigation easements) that are created by aircraft operations at LAX on the affected residences.

2. Proposed Modified Easement Requirements. In order to promote the cooperation between LAWA and the Coalition that is envisioned by this Agreement, and as long as this Agreement remains in effect, LAWA agrees to suspend its requirement that express, full avigation easements (as set out in Exhibit A) be executed by homeowners receiving LAWA provided or funded noise insulation benefits for particular residences located within the 65 dBA CNEL noise contour in the City of Los Angeles, City of Inglewood, and Los Angeles County communities of Lennox and West Athens, and only under the following circumstances:

    a. Caltrans approves LAWA' compromise position as described in this Agreement during the effective term of this Agreement. This approval is necessary because Caltrans currently requires avigation easements as part of LAWA's ongoing noise variance within its permit from Caltrans to operate LAX;

    b. In lieu of requiring full, express avigation easements (as set out in Exhibit A), the homeowners will execute the Noise Easement attached as Exhibit B. The homeowners will provide, among other things, a written acknowledgment, accompanying the homeowner's authorization to proceed with the installation that the homeowner is aware of the proposed level of noise reduction that the installation is intended to provide. After the installation, the homeowner will execute an acknowledgement that the improvements have been installed and have attenuated the noise.

LAWA promises to make all reasonable efforts to obtain Caltrans' expedited approval of suspension of the requirement for full, express avigation easements (as set out in Exhibit A) and use of the Noise Easement (as set out in Exhibit B) in its place."

Status → Completed:
The dedication of avigation or any other easements in return for funding of, or participation in the residential soundproofing program was eliminated pursuant to the terms of the LAX Master Plan Stipulated Settlement Agreement, except under very limited circumstances as required by California Airport Noise Standards. Under these limited criteria, a modified noise easement similar to the one proposed by the CBA was used. The Stipulated Settlement Agreement expired on December 31, 2015, except for certain gate provisions. With the expiration of the Settlement Agreement, LAWA began evaluation of the existing Supplemental Funding Policy (BOAC Resolution 21481), including the provision regarding avigation easements for residential soundproofing, to determine if there is a need to reinstate the requirement that the jurisdictions provide avigation easements in exchange for sound insulation treatments, or modify the existing policy to remain consist with past practice over the past 10 years.

Section III.F Compatibility with Local Building Codes

The Agreement states:

"LAWA shall not require property owners participating in the ANMP to satisfy regulations or standards related to property conditions where these regulations or standards are more stringent than those actually enforced by the local government jurisdiction possessing code enforcement authority over the property in question."

Status → Completed:
No action is required on this provision as LAWA does not impose regulations or standards related to property conditions that are more stringent than those enforced by the local government jurisdiction as these requirements are not part of LAWA's noise mitigation programs.

Section III.G Limitations on Nighttime Departures

The Agreement states in part:

"LAWA and the Coalition agree that restrictions on departures between the hours of midnight and 6:30 a.m. over the communities to the east of LAX would be desirable, when LAX is operating under normal weather conditions (when LAX is either in Over-Ocean Operations or remains in Westerly Operations and excluding times when LAX operates in Easterly Operations). This is known as the "LAX Proposed Restriction".

1. Part 161 Study. By April of 2005, LAWA shall have completed a Contract Award Process for a study on the feasibility of implementing the LAX Proposed Restriction (the "Part 161 Study"). Within 90 days of the contract award, the contract will have commenced. LAWA shall require that the Part 161 Study meet the relevant requirements of 14 C.F.R. Part 161, and that the entity performing the Study provide annual reports to LAWA on study progress and findings"...

2. Record of Eastbound Departures. LAWA shall maintain a record of all nighttime eastbound departures during Over-Ocean Operations and Westerly Operations.

This record shall be made available to the public on the LAWA website and shall be updated monthly.

3. Community Response Program. LAWA shall operate a community response program through which the public may report nighttime flights in the areas east of LAX. LAWA shall maintain a record of all individual reports, and shall prepare annual reports documenting individual reports, including records of airline, flight, date, and time of each reported flight, where possible. All records of reports, excluding the reporting individual's name and address, shall be maintained as public records and posted on the LAWA website."

Status → Completed:
The Part 161 Study process encompassed three general elements including: (1) data collection and analysis to justify the LAX Proposed Restriction; (2) evaluation and explanation of the legal, environmental, and economic impacts of the proposed restriction; and (3) preparation and submittal to the FAA of the required reports and application materials. LAWA began the Part 161 Study in June 2005. In May 2014, LAWA submitted the final application to impose a runway use restriction at LAX. On June 10, 2014, the FAA submitted a letter to LAWA indicating that LAWA's application was determined to be administratively complete. On November 8, 2014, the FAA formally rejected LAWA's application. See the 2014 CBA Annual Report for a more complete accounting of these efforts.

With the formal rejection of LAWA application by the FAA in 2014, the Part 161 Study process is complete. All materials related to this application and study, and all formal communications with LAWA and FAA may be found at http://www.lawa.org/LAXPart161.aspx?id=7203.

Although the Part 161 Study itself is completed, the Record of Eastbound Departures and nonconforming East Departures Annual Complaint Reports were posted on LAWA's website at http://www.lawa.org/LAXNoiseEDR.aspx.

LAWA maintained a community response program where the public could report flights and their related locations at all times of the day. LAWA maintained records of flights and their related locations at all times of the day. LAWA maintained records of all individual reports and prepared monthly and annual summary reports. All reports are available on the LAWA website at http://www.lawa.org/LAXNoiseEDR.aspx.

Section IV. Job Training

The Agreement states in part:

"Job Training Program. Beginning in fiscal year 2005-2006, LAWA shall provide $3 million per year for five years, not to exceed $15 million over five years, to fund job training for Airport Jobs and Aviation-Related Jobs, and for Pre-apprenticeship Programs. Any funds unspent in a particular year shall be rolled over to the subsequent year. At the conclusion of the five-year period, any unused funds shall revert to the job training funds described in Section XV…"

Status → In Progress:

Job Training Program

Although the FAA has not approved a job training program (JTP) for LAWA, and therefore no LAWA funds were used for job training, LAWA leveraged its relationships with various agencies funded to provide job training.

By leveraging relationships with over 15 JTP partners, LAWA, through its Business and Job Resources Division (BJRD), initiated its JTP in January 2007. LAWA was successfully able to work with agencies funded through other means to provide job training opportunities to residents in the Project Impact Area (PIA). During the reporting period, LAWA worked with agencies that provide an array of training, including computer skills, customer service, time management, bilingual skills, leadership skills, and other classes.

Many local residents have completed training in customer service, retail sales, auto mechanics and other disciplines through the LAWA partnerships. The Mayor's Office has initiated discussions with area Work Source Centers, the Los Angeles Community College District and surrounding LAWA businesses to conduct Hospitality Training for local residents. Plans are underway to create training modules that will result in career paths for residents within the hospitality industry. Upon the completion of training, these candidates will be well-positioned to compete for job opportunities at the hotels or with various Airport employers.

JTP Referrals in 2015:	*45*	*Program-to-Date:*	*883*
Completed Training in 2015:	*22*	*Program-to-Date:*	*510*

Section V. First Source Hiring Program

The Agreement states in part:

"First Source Hiring Program for Airport Jobs. The First Source Hiring Program shall provide early access to targeted applicants for available Airport Jobs, and employers will receive prompt, cost-free referrals of qualified and trained applicants. Except where City's Worker Retention Policy requires retention of particular workers, LAWA shall require participation in the First Source Hiring Program with regard to all Airport Jobs by any:

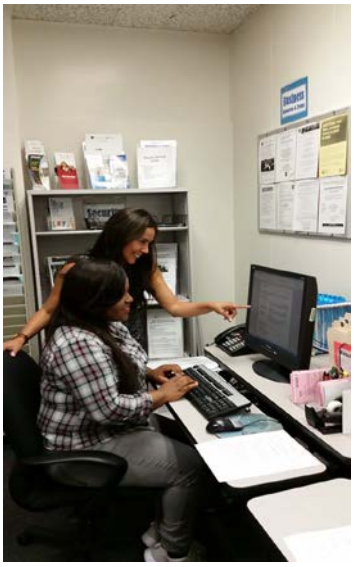
- New Airport Contractor, Airport Lessee, and/or Airport Licensee resulting from the approved LAX Master Plan Program;
- Airport Contractor that enters into or receives a new, amended, or renewed Airport Contract, or receives a voluntary extension of an existing Airport Contract;
- Airport Lessee that enters into or receives a new, amended, or renewed lease of any property owned by LAWA, or receives a voluntary extension of an existing lease; and
- Airport Licensee that agrees, receives, or is subject to a new, amended, extended, or revised licensing or permitting agreement or set of requirements.

As of July 1, 2005, LAWA shall ensure that the First Source Hiring Program, attached as Exhibit C, is a material term of all Airport Contracts, lease agreements, and licensing or permitting agreements or sets of requirements that are new, extended, amended, renewed, or revised. Under these Airport Contracts, agreements, or requirements, employer participation in the First Source Hiring Program shall commence on the effective date of the Airport Contract agreement, or requirement in question, or on July 1, 2005, whichever is later…."

Status → Ongoing:
The First Source Hiring Program (FSHP) is designed to provide residents from the communities surrounding the airport and those most impacted by airport operations access to airport jobs. Those communities are a part of the Project Impact Area (PIA) and are comprised of South Los Angeles, El Segundo, Hawthorne, Inglewood, and Lennox.

The Business and Jobs Resources Center (BJRC) works closely with local Community Organizations such as Work Source Centers, One-Stop Centers, and faith-based organizations to promote airport jobs for LAX employers. FSHP provides training to these organizations on how to apply for jobs at LAX and what is needed to obtain a job at LAX.

In October 2015, the FSHP implemented a new online website and technology named Jobs@LAX. The new website can be viewed by the public at www.jobsatlax.org. Jobs@LAX's technology allows airport employers to have their jobs automatically posted to the website from their company website and, also, allows the airport employer to manually post jobs to the website. This technology is a vast improvement from the former technology used by the FSHP because it encourages airport employer participation resulting in more airport jobs being posted for job seekers. The public's and airport's responses to the new technology have been positive. BJRC also participated in community job fairs and events to promote the FSHP and provide employment assistance to job seekers. In 2015, BJRC attended 37 job fairs.



LAWA representative informing job seeker at El Camino College Job Fair of employment opportunities available at LAWA

LAWA representatives announcing new website, Jobs at LAX, at a job fair

	January 1 to October 13, 2015 Former Technology (9.5 months)	***October 14 to December 31, 2015 New Technology (2.5 months)***
Job Openings	*1,246*	*742*
LAX Employers	*168*	*137*
Community Organizations	*104*	*104*

For more information on the First Source Hiring Program, please visit the program website at http://www.lawa.org/bjrc/Employment.aspx?id=2058.

Gateways Internship Program

The Gateways Internship Program provides college and high school students with exposure to career opportunities in the aviation industry and other airport-related jobs. The Internship Program gives students on-the-job practical experience in various airport jobs through education, training, and mentoring activities to better prepare them to enter the workforce.

The Gateways Internship Program has partnered with various colleges such as UCLA, USC, Cal State University of Long Beach, Cal State University of Los Angeles, Loyola Marymount, West Los Angeles College, Cal State Fullerton, Cal State University, Northridge, Cal State University Dominquez Hills, Cerritos College, Santa Monica College, East Los Angeles Community College, Los Angeles Trade Technical College, and Southwest College.

LAWA partners with various community and faith-based organizations such as the Brotherhood Crusade, Watts Labor Community Action Committee (WLCAC), and Los Angeles Job Corps to place students into its internship program. Since its inception, the Gateways Program has placed more than 1,212 students in a wide range of internship positions including: Accounting, Administration, Airport Operations, Airports Development Group, City Attorney Office, Commercial Development Group, Community Relations, Human Resources, Information Management and Technology Group, Planning and Engineering, Facilities Maintenance and Utilities, Environmental and Land Use Planning, Office of Regulatory Compliance & Standards, Public Relations, and FAA-related.

LAWA's Gateways Program is comprised of four internship programs

- *Gateways College Student Professional Worker Program*
- *Gateways College Volunteer Internship Program*
- *Gateways International Student Professional Worker Program*
- *Gateways High School Volunteer Internship Program*

In 2015, the BJRC was able to place over 42 students through its four programs within various internships in LAWA divisions. Placement of students into the internship program was accomplished primarily through Business & Job Resources partnerships with local universities, community colleges, and community and faith-based organizations.

The BJRC conducted extensive outreach to students by attending Career Days and job fairs facilitated by various colleges, community organizations and Worksource Centers. Internship job descriptions were posted to college career and social media websites such as Facebook to create awareness. BJRC staff worked with various colleges' career advisors to continue strengthening its partnership and in 2015, LAWA's BJRC staff disseminated internship information at 34 community job fairs. Additionally, BJRC established a relationship with the Port of Los Angeles in order to create a referral system that would afford interested students living in communities surrounding the airport, an opportunity to be placed into an internship in another City Department. BJRC has and will continue to work with the Economic Workforce Development Department to be a worksite for the Mayor's Hire LA's Youth Program. Other organizations that remain partners are the International Trade Education Program (ITEP) and the Gardena Global Leadership Academy.

In addition to students from local and out-of-state schools, the BJRC also attracts international students who wish to intern at LAX. In 2015, BJRC placed international students from Brazil, China, Hong Kong, Japan, Korea and Taiwan.

Section VI. Living Wage, Worker Retention, and Contractor Responsibility

The Agreement states:

"LAWA shall apply to all Airport Contractors, Airport Lessees, and Airport Licensees the City's Living Wage Ordinance, as set forth in Los Angeles Administrative Code Section 10.37; the City Worker Retention Policy, as set forth in Los Angeles Administrative Code Section 10.36; and the Contractor Responsibility Program set forth in BOAC Resolution No. 21601, in accordance with City policy."

Status → Completed:
This provision currently applies to all LAWA contracts as set forth in Board Resolution No. 21601.

Section VII. Air Quality Study

The Agreement states in part:

"Air Quality Study. LAWA shall fund a study by an Independent Expert of toxic air contaminants and criteria air pollutant emissions from jet engine exhaust and other emission sources ("Air Quality Study"). In addition to other contaminant and pollutant emissions, the Air Quality Study shall measure jet engine exhaust emissions and provide chemical composition data from a representative sample of engine types and ages under a variety of conditions that reflect actual operations, and shall include this data and all other relevant study results as part of the final study provided to LAWA."

Status → Completed:
The LAX Air Quality and Source Apportionment Study (AQSAS) was completed in 2013, and presented to LAWA's Board of Airport Commissioners on June 18, 2013.

The study and informational materials can be found on the web page titled, Final Report and Materials, at http://www.lawa.org/AirQualityStudy.aspx?id=7716.

The completion of this study fulfills the CBA commitment to conduct an air quality source apportionment study.

Section VIII. Health Study

The Agreement states in part:

"Health Study. LAWA shall fund a study to measure and investigate upper respiratory system and hearing loss impacts of LAX operations due to the LAX Master Plan Program. LAWA, in consultation with the Coalition Representative, shall develop a scope of work and objectives for the Health study…"

Status → In Progress:
The funding and implementation of the CBA health study is subject to LAWA's ability to use airport revenue to the extent permissible under federal law and policies, or to develop other state or federal funding sources. On November 23, 2015, LAWA received a letter from the FAA stating that airport revenues may not be used to provide funding for CBA Section VIII. Health Study. Pursuant to Section V.A.5. of the Cooperation Agreement, LAWA began discussions in late 2015 with the LAX Coalition to develop substitute programs or activities designed to achieve equivalent levels of mitigation and/or benefit through an equivalent expenditure of airport revenues. After LAWA and the LAX Coalition agree to a substitute program or activity, the FAA must approve LAWA's ability to use airport revenue.

Section IX. Community-Based Research Studies as Part of LAWA's Future LAX Master Plan Program Project-Level Analysis

The Agreement states in part:

"Inclusion in Project-Level Environmental Analysis. LAWA acknowledges that, pursuant to CEQA, it will perform additional environmental review on the various LAX Master Plan Program project components as they are processed for future approval. In undertaking this additional environmental review, LAWA shall require the general contractor preparing the environmental documents for these future project-level analysis to subcontract with an Independent Expert to coordinate community-based research studies as described in Section IX.B (the "Community-Based Studies"), that are designed to become a part of the environmental analysis. LAWA shall expend no less than $300,000 on the Community-Based Studies. As future project-level environmental documents are prepared for LAX Master Plan Program projects, LAWA is not required to utilize the Community-Based Studies as part of each project-level environmental review, and shall have discretion to determine whether a particular project-level analysis would be appropriate for including the Community-Based Studies…"

Status → In Progress:
LAWA secured $300,000 for Community-Based Studies within Ricondo & Associates, Inc., project-level environmental analysis contract approved in 2014 for the Landside Access Modernization Program (LAMP). In 2015, LAWA solicited ideas for the Community-Based Studies with the LAX Coalition, and the focus looked at how LAWA's investment in the LAMP facilities could generate jobs and provide other benefits to communities in the Project Impact Area. Ricondo issued a Request for Qualifications and selected Estolano LeSar Perez (ELP) Advisors as the independent expert to conduct the Study. On October 14, 2015, the Independent Expert held a meeting and sought input from community leaders, including,

1. *LAX Coalition*
2. *City of Inglewood*
3. *City of Hawthorne*
4. *Office of Supervisor Mark Ridley-Thomas*
5. *Office of Representative Maxine Waters*
6. *Office of Senator Isadore Hall*
7. *Office of Assemblymember Autumn Burke*

The Study is expected to be completed in 2016.

Section X. Air Quality

The Agreement states in part:

Section X.A. Electrification of Passenger Gates

"1. Passenger Gate Electrification Schedule. LAWA shall ensure that all Passenger Gates are equipped and able to provide electricity sufficient for aircraft needs under the following schedule:

a. All Passenger Gates for which new construction (excluding maintenance) is completed after the effective date of this Agreement shall be equipped and able to provide electricity to parked aircraft from date of initial operation and at all time thereafter.

b. Three years from the effective date of this Agreement, and at all times thereafter, at least fifty percent of Passenger Gates at LAX shall be equipped and able to provide electricity to parked aircraft.

c. Five years from the effective date of this Agreement, and at all times thereafter, one hundred percent of Passenger Gates at LAX shall be quipped and able to provide electricity to parked aircraft.

2. Aircraft Use of Gate-Provided Electricity. LAWA shall ensure that gate-provided electricity is provided to all aircraft parked at Equipped Passenger Gates and, except for the exemptions identified in this section, that all aircraft use the gate-provided electricity in lieu of engine operation of aircraft or mobile/ground auxiliary power units…

3. Assessment of Electrification of Passenger Loading Areas. LAWA shall conduct an assessment of operations at Passenger Loading Areas for the purpose of determining whether electrification of Passenger Loading Areas is Operationally Infeasible. The assessment shall include, but not limited to, inventory utilization, operations, technological trends, and capital and maintenance costs…

4. Commuter Flight Loading and Unloading. By the conclusion of the LAX Master Plan Program, loading and unloading of passengers of commercial aircraft shall - be performed only through Passenger Gates."

Status → Completed:
All passenger gates, i.e., terminal and regional boarding ramp gates are electrified with 400 hertz ground power.

Section X.B. Electrification of Cargo Operations Areas

"1. Cargo Operations Areas Electrification Schedule. LAWA shall ensure that all, unless determined under procedures described below to be Operationally Infeasible and/or Technically Infeasible, all Cargo Operations Areas are equipped and able to provide electricity sufficient for aircraft needs as following:

a. All Cargo Operations Areas for which new construction, not maintenance, is completed after the effective date of this Agreement shall be equipped and able to provide electricity to parked aircraft from date of initial operation of the Cargo Operations Area at LAX and at all time thereafter.

b. Three years from the effective date of this Agreement, and at all times thereafter, at least fifty percent of Cargo Operations Areas at LAX shall be equipped and able to provide electricity to parked aircraft.

c. Five years from the effective date of this Agreement, and at all times thereafter, one hundred percent of Cargo Operations Areas at LAX shall be equipped and able to provide electricity to parked aircraft.

2. Aircraft in Cargo Operations Areas Use of LAX-Provided Electricity if Available. LAWA shall ensure that electricity sufficient for aircraft needs is provided to all aircraft parked at Equipped Cargo Operations Areas and that all these aircraft use LAX-provided electricity as power in lieu of engine operation of aircraft or ground/mobile auxiliary power units…

3. Assessment of Electrification of Cargo Operation Areas and Feasibility Evaluation. LAWA shall conduct an assessment of Cargo Operations Areas for the purpose of evaluating whether electrification of a particular Cargo Operations Areas is Operationally Infeasible and/or Technically Infeasible. The assessment shall include, but not limited to, inventory utilization, operations, technological trends, and capital and maintenance costs…"

Status → In Progress:
In 2013, LAWA completed a comprehensive feasibility assessment study for the electrification project for the LAX cargo operations. In May 2015 LAWA completed the Project Definition Booklet for electrification of seven Remain Overnight (RON) (W) Parking Positions, and the RON (W) Parking Positions project moved into the design phase. Also in 2015, LAWA began work to develop an Electrification Program at LAX, including identifying budget, a construction schedule, and next steps.

Section X.C. Electrification of LAX Hangars

"LAWA shall conduct an assessment of operations at LAX Hangars for the purpose of determining whether electrification of LAX Hangars to provide electricity sufficient for aircraft needs at LAX Hangars is Operationally Infeasible and/or Technically Infeasible. The assessment shall include, but not be limited to, inventory utilization, operations, technological trends, and capital and maintenance costs…"

Status → In Progress:
In 2013, LAWA completed a comprehensive feasibility assessment study for the electrification project for the LAX hangars. In 2015, LAWA worked to develop an Electrification Program at LAX, including identifying budget, a construction schedule, and next steps.

Section X.D. FAA Prohibition

"If an FAA Determination, as defined in and pursuant to the procedures set out in the Cooperative Agreement, or any other regulatory authority prohibits LAWA from taking actions required by Subsections A through C of this Section X, or threatens to withhold federal funding if LAWA takes actions required by Subsections A through C of this Section, then LAWA shall set aside $1.7 million to the air quality fund described in Section XV."

Status → Not applicable at this time:
Action is required only if the FAA prohibits LAWA from implementing this section.

Section X.E. Reporting

"LAWA shall report in writing to the Coalition Representative on the progress of electrification of Passenger Gates, Cargo Operations Areas, and LAX Hangars semiannually. Reports shall include, but not be limited to, the number and types of facilities and areas electrified, operational guidelines issued, a summary of exemptions granted, reports of violations of usage requirements, and actions taken by LAWA to enforce usage requirements."

Status → In Progress:
LAWA has provided a status of the electrification program in each of the annual CBA reports.

Section X.F. Construction Equipment

Best Available Emission Control Devices Required. LAWA shall require that all diesel equipment used for construction related to the LAX Master Plan Program be outfitted with the best available emission control devices primarily to reduce diesel emissions of PM, including fine PM, and secondarily, to reduce emissions of NOx. This requirement shall apply to diesel-powered off-road equipment (such as construction machinery), on-road equipment (such as trucks) and stationary diesel engines (such as generators).

Status → In Progress:
As stipulated in Section X.F.8 of the CBA, an Independent Third Party Monitor was retained by LAWA to monitor compliance with the requirements of Section X.F. The role of the Independent Third Party Monitor is to monitor, document, and report on a semi-annual basis to LAWA and the Coalition on compliance with all elements of Section X.F, including but not limited to the use of verified diesel emission control systems (VDECS) on LAX Master Plan Program construction-related diesel equipment, a summary of exemptions granted, and any reports of violations or noncompliance with the requirements of CBA Section X.F.

The following is an update of activities and findings reported by the Independent Third Party Monitor as it relates to diesel construction equipment utilized on the Tom Bradley International Terminal (TBIT) Renovation – East Aprons, the West Aircraft Maintenance Area (WAMA), and the Qantas Hangar construction projects:

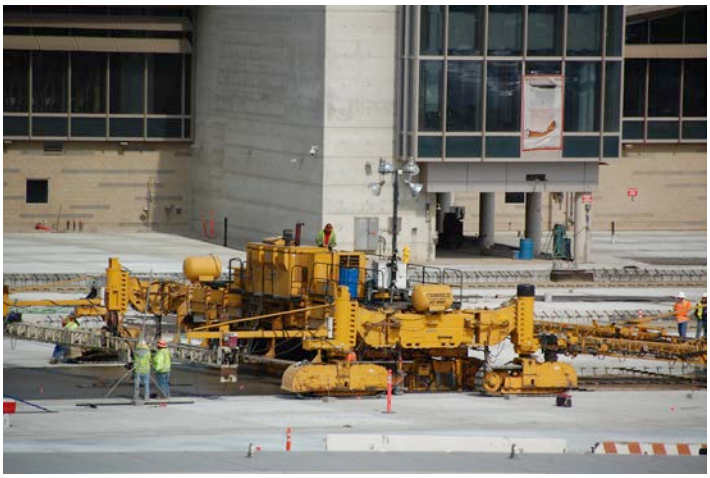
Section X.F.1 – Best Available Emissions Control Devices Required
All diesel equipment used for construction related to the LAX Master Plan Program is required to be outfitted with best available emission control devices, primarily to reduce diesel particulate matter emissions, including fine particulate, and secondarily to reduce emissions of oxides of nitrogen (NOx). This requirement applies to diesel-powered off-road equipment, on-road equipment, and stationary diesel engines. The emission control devices utilized for the equipment at the LAX Master Plan Program construction shall be verified or certified by the California Air Resources Board (CARB) or Environmental Protection Agency (EPA) for use on on-road or off-road vehicles or engines.

Status → In Progress:
The Independent Third Party Monitor reviewed the documentation submitted by the Contractors for each piece of diesel equipment utilized or planned for possible utilization on the TBIT Renovation – East Aprons, WAMA, and the Qantas Hangar projects relative to compatibility with Best Available Emissions Control Devices. Approximately 703 pieces of diesel equipment were assessed to determine compatibility with a CARB-verified or EPA-certified diesel emission control device.

To assist in performance of this Section, the Independent Third Party Monitor developed and implemented a monitoring process to track each piece of diesel equipment and document each construction firm's compliance as it related to outfitting their diesel construction equipment with the best available emissions control devices.

The results for this Section are as follows:

- *Construction continues on the Tom Bradley International Terminal Renovation – East Aprons. As of December 2015, a total of 343 pieces of equipment were evaluated. For on-road vehicles, a total of 80 trucks were evaluated; 28 met or exceeded the EPA 2007 standards and were equipped with a factory installed VDECS. Five (5) additional vehicles have undergone a VDECS retrofit. It was determined that 34 on-road vehicles did not have a compatible CARB-verified or EPA certified VDECS available at the time construction commenced. Finally, 13 on-road trucks were found to have a compatible VDECS available; these vehicles were either awaiting VDECS installation prior to accessing the airfield construction site or were removed from consideration by the construction contractor. Relative to off-road diesel equipment, a total of 263 pieces of construction equipment have undergone independent monitoring. One hundred-sixty (160) were certified by the US EPA as compliant with Tier 4 or Tier 4-Interim Emissions Standards – this equipment is configured with a factory-installed diesel emission control system. Thirty-seven (37) pieces of off-road equipment have undergone a VDECS retrofit. Ten (10) pieces of equipment were determined to not have a VDECS available at the time construction commenced. Twenty-two (22) pieces of equipment were granted a driver safety "line of sight" exemption in accordance with Cal/OSHA requirements and CBA Section X.F.4. A total of 30 vehicles were identified as having one or more compatible VDECS commercially available; these vehicles were either awaiting VDECS installation or were removed from project consideration. Finally, the third party monitor was unable to identify any documentation relative to four (4) pieces of equipment – this equipment may no longer be proposed for airfield use.*



Paving Equipment Operating at TBIT Renovation – East Apron

- *The West Aircraft Maintenance Area (WAMA) construction is in progress with major project elements substantially complete as of December 2015, and a total of 360 pieces of equipment had undergone Independent Third Party Monitor evaluation. Of this value, 298 pieces were approved by LAWA for airfield use. A total of 142 on-road vehicles were evaluated; 103 met or exceeded the EPA 2007 standards and were equipped with a factory installed VDECS. Forty-two (42) on-road vehicles, primarily dirt and rock-hauling trucks, were granted an exemption in accordance with CBA Section X.F.4. With respect to off-road equipment, a total of 218 pieces of construction equipment have undergone independent monitoring. One hundred (100) were certified by the US EPA as compliant with Tier 4 or Tier 4-Interim Emissions Standards – this equipment is configured with a factory-installed diesel emission control system. Finally, 62 vehicles or equipment were not approved for airfield use by LAWA due to their failure to meet CBA Section X.F.1 requirements.*

Qantas Hangar Construction Adjacent to WAMA Site

- *The Qantas Hangar project was substantially constructed during 2015. It was constructed coincident with the WAMA project; as such, the construction equipment utilized on WAMA was applicable to the Qantas Hangar.*

Paving Substantially Complete at WAMA Construction Site as of December 2015

- *Off-road diesel equipment operating on the TBIT Renovation – East Aprons, WAMA, and the Qantas Hangar construction projects whose engines were determined to be compatible with a Level 3 VDECS, but not retrofitted with the best available emissions control technology, were documented to ensure that the equipment had been granted an exemption in accordance with Section X.F.4.*

Section X.F.2 - Demonstration Projects

Notwithstanding the verification or certification requirement set forth in Section X.F.1, LAWA may allow diesel equipment used for construction related to the LAX Master Plan Program to be outfitted with a new emission control device designated by LAWA as a "Demonstration Project", even if the device has not yet been verified or certified by CARB or EPA for use in on-road or off-road vehicle or engine applications. These devices shall, at a minimum, meet all pollution reduction requirements specified in Section X.F.3.

Status → Not applicable at this time:
Not required at this time. The Independent Third Party Monitor is available to assist LAWA and the LAX Coalition in identifying potential opportunities to conduct a Demonstration Project in accordance with Section X.F.2. No Demonstration Projects were initiated during 2015.

Section X.F.3 - Emission Reduction Standards

Emission control devices used pursuant to Section X.F.1 shall achieve emission reductions no less than what would be achieved by a Level 2 (50 percent particulate matter reduction) diesel emission control strategy for a similar sized engine as defined by CARB regulations. Under no circumstances shall an emission reduction device or strategy used on the LAX Master Plan Program construction site increase the emission of any pollutant above that which is the standard for that engine.

Status → In Progress:
The LAWA Environmental Monitor, in coordination with the Independent Third Party Monitor assessed each piece of diesel construction equipment equipped with a VDECS pursuant to Section X.F.1 and documented its compliance as it related to meeting or exceeding Level 2 diesel emission reductions.

Final results for this Section are as follows:

- *With respect to the TBIT Renovation – East Aprons, WAMA, and the Qantas Hangar construction projects, approximately 443 vehicles and equipment were equipped with diesel emission control systems that met or exceeded the CARB Level 3 standard of 85 percent or greater reduction in diesel particulate matter. No Level 1 or Level 2 VDECS were identified for equipment assessed pursuant to Section X.F.1.*

- *The Third Party Monitor verified with CARB that the Level 3 devices utilized on the TBIT Renovation – East Aprons, WAMA, and the Qantas Hangar construction projects did not result in an increase of any pollutant above which is standard for that equipment's engine.*

Section X.F.4 – Exemptions
The requirements of Sections X.F.1 through X.F.3 do not apply to a piece of construction related diesel equipment for which the operator provides a written finding, based upon appropriate market research and approved by LAWA, that the best available emission control device for reducing the emissions of pollutants as required by Sections X.F.1 through X.F.3 is unavailable for that equipment, in which case the contractor shall use

whatever technology for reducing exhaust emissions is available and appropriate for that vehicle or engine, if any. In addition, Sections X.F.1 through X.F.3 do not apply to a piece of construction related diesel equipment that is used on LAX Master Plan Program construction sites for fewer than twenty (20) calendar days per calendar year.

Status → In Progress:
The Third Party Monitor reviewed each piece of diesel construction equipment proposed for use on the TBIT Renovation – East Aprons, WAMA, and the Qantas Hangar construction projects as it pertained to the requirements of Sections X.F.1 and X.F.3 and independently determined if a CARB verified or EPA certified diesel emission control system was compatible. These results were documented and compared with exemptions granted by LAWA.

Results for this Section are as follows:

- *Equipment whose engine is compatible with a CARB verified or EPA certified diesel emission control system, but whose use on the TBIT Renovation – East Aprons, WAMA, and the Qantas Hangar construction projects would not exceed twenty (20) calendar days per calendar year was granted a "20-day" exemption by LAWA. The Third Party Monitor maintained an independent database of all equipment operating under the 20-day exemption rule, including the date the equipment was moved onsite and the date the equipment was required to be removed from the airfield. No 20-day exemptions have been granted to date on the Tom Bradley International Terminal Renovation – East Aprons project. Three (3) pieces of equipment received a 20-day exemption on the West Aircraft Maintenance Area (WAMA)/Qantas Hangar construction projects;*
- *The Third Party Monitor reviewed and documented cases where it was determined that the VDECS would impair the equipment operator's field of vision. These vehicles were granted a safety exemption by LAWA. Specific classes of diesel equipment, including motor graders, received an exemption from LAWA on the basis of safety. The Independent Third Party Monitor reviewed and documented each piece of diesel construction equipment that received a safety exemption. To date, approximately 24 pieces of equipment have been granted a safety waiver on approximately 22 pieces used on the Tom Bradley International Terminal Renovation – East Aprons project, and one (1) piece on the WAMA/Qantas project. In addition, one (1) piece of construction equipment was granted an exemption based on having an engine less than 50 horsepower (hp) on the WAMA/Qantas Hangar construction projects.*
- *The Third Party Monitor also independently assessed and documented diesel equipment for which no CARB verified or EPA certified diesel emission control system was available. This equipment was granted an exemption by LAWA on the basis of unavailability.*

Section X.F.5 - Ultra-Low Sulfur Diesel and Other Fuels

All diesel equipment used for construction related to the LAX Master Plan Program shall use only Ultra-Low Sulfur Diesel Fuel (ULSD) with a sulfur content of fifteen (15) parts per million or lower. If adequate supplies of ULSD are not available in the Southern California area, other fuels may be used, provided that the other fuels do not result in greater emissions of fine particulate matter or oxides of nitrogen than that which would be produced by the use of ULSD.

Status → In Progress:
The Third Party Monitor independently reviews and documents fuel purchase records for diesel fuel used on the TBIT Renovation – East Aprons, WAMA, and the Qantas Hangar construction projects.

Results for this Section are as follows:

- *South Coast AQMD Rule 431.2, which took effect on June 1, 2006, requires diesel fuel refined and sold for on-road and off-road use within the jurisdiction of the AQMD to contain no more than 15 parts per million (ppm) sulfur by weight. This requirement was subsequently adopted on a statewide basis by the California Air Resources Board, effective September 1, 2006. Thus, ULSD is the only diesel fuel legally available for purchase within California;*

- *No shortage of ULSD was experienced within Southern California during the TBIT Renovation – East Aprons, WAMA, and the Qantas Hangar construction activities in 2015. No substitution of any fuel in lieu of 15 ppm ULSD occurred during any LAX Master Plan construction project;*

- *The Independent Third Party did not monitor on-road vehicles operating on the TBIT Renovation – East Aprons, WAMA, and the Qantas Hangar projects that were fueled off-site.*

Section X.F.6 - Operational Requirements

Operational Requirements pertaining to excessive vehicle idling and required engine maintenance intervals shall be issued by LAWA and enforced.

Status → In Progress:
The Third Party Monitor monitored excessive vehicle idling enforcement and compliance with engine maintenance intervals based on independent observation, review of enforcement action documentation, and review of construction firm engine maintenance procedures and records.

Results as it relates to this Section are as follows:

- *No written violations pertaining to excessive equipment idling were cited by LAWA on any construction firm. On infrequent occasions, vehicles deemed to be idling beyond the period of time stipulated in CARB regulations were instructed to turn off their engines. Formal enforcement actions were not deemed necessary by LAWA;*
- *Each construction firm proposing a piece of diesel equipment was required to submit in writing the scheduled maintenance procedures for that piece of equipment. The Third Party Monitor has reviewed each maintenance plan submitted to LAWA.*

Section X.F.7 – Enforcement by LAWA

Compliance with all requirements delineated in Sections X.F. is required of all Airport Contractors, Airport Lessees, and Airport Licensees. LAWA shall enforce the findings and determinations of the Independent Third Party Monitor.

Status → In Progress:
The Third Party Monitor was informed that on at least one occasion a trucking company was fined for violating delivery curfew rules. However, it is not know which LAX Master Plan Project the delivery was supporting. No additional formal actions were taken.

Section X.F.8 – Independent Third Party Monitor

Compliance with requirements of Section X.F. is required to be monitored, documented, and reported by an Independent Third Party Monitor.

Status → In Progress:
LAWA retained an Independent Third Party Monitor. The findings of the Independent Third Party Monitor are reported in this document and in Appendix C.

Section X.F.9 – Reassessments of Emission Control Devices

"LAWA shall designate the best available emission control devices annually or more frequently, in consultation with the Coalition Representative and the Independent Third Party Monitor. LAWA, in consultation with the Coalition Representative, shall establish processes to revise these designations and incorporate the requirement to use the emission control devices newly designated as best available into construction bid documents to take into account advances in emission control devices prior to bidding of new construction phases of the LAX Master Plan Program. The process of emission control technology review shall include any new relevant requirements promulgated by CARB or EPA. Results from the reassessments shall not be applied retroactively."

Status → In Progress:
The LAWA Environmental Monitor, in coordination with the Independent Third Party Monitor reviewed each piece of diesel construction equipment proposed for use on the TBIT Renovation – East Aprons, WAMA, and the Qantas Hangar projects for compatibility with newly verified Level 2 and 3 VDECS. While it was understood that the requirement to utilize new VDECS could not be applied retroactively for equipment operating on the TBIT Renovation – East Aprons, WAMA, and the Qantas Hangar construction projects, the reassessment process conducted in 2015, will be used to designate best available control emission devices for subsequent LAX Master Plan Program construction projects. It is important to note that a high percentage of equipment utilized on LAX Master Plan Projects is not factory-equipped with diesel emission control systems that satisfy CBA requirements as stipulated in CBA Section X.F.1.

Section X.G. Ground Service Equipment Diesel Emissions Reduction Incentive Program

"GSE Incentive Program. LAWA shall create a program providing incentives for the reduction of GSE diesel emissions ("GSE Incentive Program"). LAWA shall expend at least $500,000 on the GSE Incentive Program. Participation by GSE operators in the GSE Incentive Program shall be voluntary. Funding for the program shall commence in fiscal year 2005-06."

Status → In Progress:
In April 2015, the BOAC adopted an Emissions Reduction Policy (see Section X.I. below), and LAWA worked to develop a GSE Incentive Program.

Section X.H. Ground Service Equipment Inventory

"1. Scope of GSE Inventory. LAWA shall prepare a study ("GSE Inventory") detailing all GSE operated On-Site. The GSE Inventory shall include, but not be limited to, an inventory of the number, type, sizes, model year, usage history, and identify of operator for all GSE operated On-Site at the time of the GSE Inventory…

2. Determination of 1997 GSE Fleet for Nonparticipating GSE Operators. The GSE Inventory shall include a determination of the number and types of On-Site GSE that were operated On-Site in 1997 by each Nonparticipating GSE Operator…"

Status → Completed:
The study was completed and the results were issued to the Coalition in May of 2007. In 2012, LAWA began the process to update the LAX GSE inventory and conduct a comprehensive e-GSE feasibility study in 2013. The updated comprehensive feasibility study was completed and presented to the Coalition at the January 28, 2014 CBA meeting.

Section X.I. Requirements for Emissions Reductions by Nonparticipating GSE

"In order to achieve emission reductions from GSE operated at LAX by Nonparticipating GSE Operators, LAWA shall issue requirements leading to the use of less-polluting GSE by Nonparticipating GSE Operators, as described in this Section X.I. New, amended, renewed, or extended Airport Contracts, lease agreements, and any relevant LAX licensing or permitting requirements for Nonparticipating GSE Operators shall include language requiring compliance with requirements of this Section X.I. and allowing assessment of liquidated damages as described in this Section X.I against any entity responsible for a violation…"

Status → Completed:
In April 2015 LAWA's Board of Airport Commissioners adopted a Ground Support Equipment Emissions Policy to reduce emissions at LAX. The Policy calls for GSE operators to:

1. *Reduce their fleet-wide GSE emissions to 2.65 g/bhp-hr by December 31, 2021;*
2. *Provide LAWA with an interim assessment of the fleet-wide emission as of March 1, 2019;*
3. *Provide LAWA with an annual accounting of the composite HC plus NOx emission factors of their LAX GSE fleet; and*
4. *Provide LAWA with fleet inventory data for their LAX GSE Fleet that is consistent with data provided to the California Air Resources Board (CARB) and in a form or forms as requested by LAWA on an annual basis.*

Following adoption of the policy, LAWA worked with the GSE operators in 2015 to develop annual reporting requirements, and a model and procedures for calculating the average GSE emission factor associated with individual GSE fleets operating at LAX. LAWA amended the LAX Rules and Regulations to include provisions of the Policy. LAWA also set up a program to monitor compliance with the LAX GSE Emissions Goal. This requirement is in effect at LAX.

Section X.J. Emission Reductions from On-Road Trucks, Buses, and Shuttles

"1. Inventory of On-Road Heavy-Duty Vehicle Traffic and Study of Feasible Mitigation

a. Heavy-Duty Vehicle Study. LAWA shall fund a study of on-road Heavy-Duty Vehicle traffic related to LAX Operations. This study shall begin no later than one year from the effective date of this Agreement. The study shall be completed within twelve months of its initiation. The Study shall be conducted by an Independent Expert, selected through a Contract Award Process…"

Status → In Progress:
A draft scope for this study was submitted to the Coalition in July 2005.

"2. Conversion of Truck, Shuttles, Passengers, Vans and Buses to Alternative Fuel

a. Covered Vehicles. Requirements established under this Section X.J.2 shall apply to all on-road vehicles, including trucks, shuttles, passenger vans, and buses, that are 8,500 lbs gross vehicle weight rating or more and are used in operations related to LAX ("Covered Vehicles"). Diesel equipment for construction related to the LAX Master Plan Program that is subject to Section X.F. of this Agreement shall be exempt from requirements established pursuant to this Section X.J.2.

b. Conversion Schedule. LAWA shall ensure that by five years from the effective date of this Agreement, 50 percent of the Covered Vehicles operated by any Airport Contractor, Airport Lessee, and Airport Licensee (collectively "Operators") are Alternative-Fuel Vehicles or Optional Low NOx Standard Vehicles. LAWA shall ensure that by ten years from the date of execution of this Agreement, 100 percent of the Covered Vehicles operated by each Operator are Alternative-Fuel Vehicles or Optional Low NOx Standard Vehicles.

c. Least-Polluting Available Vehicles. In cases where Operators cannot comply with requirements established pursuant to Section X.J.2.b because neither Alternative-Fuel Vehicles nor Optional Low NOx Standard Vehicles are commercially available for performance of particular tasks, LAWA shall instead require Operators to use Least-Polluting Available Vehicles for such tasks. An Independent Third Party Monitor shall determine on an annual basis whether Alternative-Fuel Vehicles or Optional Low NOx Standard Vehicles are commercially available to perform particular tasks, and, in cases where Alternative-Fuel Vehicles or Optional Low Standard Vehicles are not commercially available for performance of a particular task, shall identify the Least Polluting Available Vehicles for performance of that task."

Status → In Progress:
LAWA has an Alternative Fuel Vehicle Requirement Program that applies to all on-road vehicles with a gross vehicle weight rating of 8,500 pounds or greater. This program is currently in effect and requires the conversion of rental car shuttles, trucks, and other large vehicles in use at LAX.

One hundred percent (100%) of the LAX courtesy shuttles are alternative fuel, as are the Americans with Disability Act (ADA) shuttles.

In 2015, LAWA continued to work with the operators of the Covered Vehicles to meet this commitment. Environmental and Land Use Planning Division (ELUP) staff conducted meetings to inform the contract managers of improvements to the reporting process and to provide information to aid the operators to reach compliance with this commitment.

Throughout 2015, LAWA successfully implemented a new online LAX Alternative Fuel Vehicle Semi-Annual Reporting Form and database. The on-line reporting form is user-friendly, streamlines the reporting process and reduces reporting errors. Fleet vehicle data is automatically populated into the database to track and determine compliance status.

In the second half of 2015, LAWA began an evaluation of the LAX Alternative Fuel Vehicle Requirement in light of new low emission technologies currently available in the marketplace.

Section X.K. Particulate Matter (PM 2.5)

"1. Assessment of PM 2.5. LAWA shall assess and mitigate impacts of PM 2.5 in compliance with all applicable provisions of state and federal law. LAWA's obligation to mitigate PM 2.5 impacts within the context of the CEQA may be limited by feasibility, overriding considerations or other requirements articulated in applicable state and federal laws.

2. Determination of PM 2.5 Significance Thresholds. The assessment and mitigation of PM 2.5 impacts shall comply with the requirements for both attainment of PM 2.5 ambient air quality standards and the mitigation of significant project-related and cumulative impacts under CEQA.

3. Conferring with Applicable Agencies. LAWA shall confer with applicable agencies, including SCAQMD, CARB, and the EPA, to assure compliance with state and federal PM 2.5 ambient air quality standards after guidance for measuring and evaluating exceedances has been established. With respect to projects requiring CEQA analysis, LAWA shall include the SCAQMD as a responsible agency in the review process to seek adherence to the threshold standards to be established.

4. LAWA Project Assessment of PM 2.5. LAWA shall conduct and complete a CEQA assessment of PM 2.5 impacts related to the first LAX Master Plan Program project to be initiated after establishment of applicable thresholds, either by SCAQMD or as outlined above. This assessment shall be completed in consultation with SCAQMD as a responsible agency in the CEQA review process."

Status → Completed:
In 2008, LAWA initiated the environmental analysis of the Crossfield Taxiway Project (CFTP) and published a Draft Environmental Impact Report (EIR) on September 25, 2008. The Draft EIR included an assessment of PM2.5 impacts in its air quality analysis. Note: This requirement did not apply to the SAIP (the CEQA analysis for that project was already well underway before the CBA took effect - the SAIP EIR NOP was published in August 2004, while the CBA was executed in February 2005).

Section X.L. Rock-Crushing Operations and Construction Material Stockpiles

"LAWA shall locate rock-crushing operations and construction material stockpiles for all construction related to the LAX Master Plan Program in areas away from LAX-adjacent residents to reduce impacts from emissions of fugitive dust…"

Concrete Crusher loading hopper (left) &
Tier 3 engine Rubber Tire Loader (center)

West Aircraft Maintenance Area → Completed:
Concrete crushing operations for West Aircraft Maintenance Area started in January, 2015 and finished in February, 2015. To reduce the environmental impact, the concrete crusher used grid power instead of a diesel-powered generator, and had high-pressure water sprays at each material transfer point to eliminate dust. The rubber tire loader had a clean-burning Tier 3 engine.

Section X.M. Limits on Diesel Idling

"LAWA shall prohibit diesel-powered vehicles from idling or queuing for more than ten consecutive minutes On-Site, unless CARB adopts a stricter standard, in which case LAWA shall enforce that standard. Exemptions to this rule may be granted for safety-related and operational reasons, as defined in CARB regulations."

Status → Completed:
Subject requirement was included in construction specifications for the TBIT Renovation – East Aprons, WAMA, and Qantas Hangar projects. No written violations pertaining to excessive equipment idling were cited by LAWA on any construction firm. On infrequent occasions, vehicles deemed to be idling beyond the period of time stipulated in CARB regulations were instructed to turn off their engines. Formal enforcement actions were not deemed necessary by LAWA. This requirement will be included in construction specifications for all upcoming projects at LAX.

Section X.N. Provision of Alternative Fuel

"LAWA shall ensure that its infrastructure for providing fuel to Alternative-Fuel Vehicles is sufficient and available, where not Operationally Infeasible and/or Technically Infeasible, to meet all requests for alternative fuel from contractors and other uses of LAX."

Status → In Progress:

LAWA has a private liquefied natural gas (LNG)/compressed natural gas (CNG) facility located on the west side of the airport property to service LAWA vehicles. In 1996 Clean Energy opened LAWA's first public fueling station which is located at 10400 Aviation Blvd, Los Angeles. This site also provides publicly accessible hydrogen fueling. This station has six dispensers and provides CNG at both 3,000 psi and 3,600 psi.

In early 2013, Clean Energy completed building a second CNG station at 9601 Aviation Boulevard, one block north of Century Boulevard. This station was a $3 million private-sector investment. Clean Energy owns and operates the station under a long-term property lease with Hertz. This Clean Energy CNG station is the largest capacity public-access CNG station in the U.S, and is capable of fueling up to six full-size transit buses or 10 light-duty vehicles, simultaneously.

In July, 2014, Clean Energy opened its third CNG fueling station near LAX. The station is located at 9131 Aviation Boulevard in Inglewood, and is very close to LAX's remote parking lot buses providing a convenient fueling option for the airport. The station has eight fast-fill hoses and has a fueling capacity of approximately 10 gallons per minute. Since 2014, all three of Clean Energy's CNG fueling stations are dispensing Renewable Natural Gas.

In 2015, LAWA installed its first level-3 DC fast charger in parking structure P1, inside the LAX Central Terminal Area. The fast charger is available on a first come, first serve basis for a maximum of 30 minutes parking. It can charge an electric vehicle in 20 minutes or less. The construction project was completed by the Los Angeles Department of Water and Power (LADWP) in September 2015, bringing the number of electric vehicle (EV) charging stations at LAX to 60, including 53 for public use. Additionally LAWA's Commercial Development Group (CDG) identified the Admin West, P2-B, and P7 parking lots as the locations for 24 new level-2 chargers to be installed during 2016. The new chargers are funded by a CEC (California Energy Commission) grant, PON-13-606, awarded to LADWP and LAWA as part of their Alternative and Renewable Fuel and Vehicle Technology Program.

EV Charger Locations at LAX

Location	Level 2 EV Charger	Direct Current Fast Charger
Parking Garage 1 (P-1)	15	1
Parking Garage 6 (P-6)	15	
Long Term Parking Lot C	14	
Van Nuys FlyAway Terminal Parking at LAX	8	
Admin West Building LAWA Fleet	4	
Maintenance Services LAWA Fleet	3	
TOTAL	**59**	**1**

LAWA currently has sufficient alternative fuel infrastructure at LAX. LAWA continues to assess demand and look for appropriate opportunities to expand its alternative fuel infrastructure.

Section X.O. Hydrogen Fuel Cell Infrastructure

"LAWA shall support efforts to place a hydrogen fuel cell system for the generation of electricity at or near LAX. This fuel cell system shall meet or exceed CARB 2007 distributed generation certification standard."

Status → Completed:
LAWA investigated the use of hydrogen fuel cells for the Central Utility Plant Replacement Project (CUP-RP) Environmental Impact Report published in 2009. The use of hydrogen fuel cells would not be feasible due to size constraints and energy inefficiency.

Section X.P. Cleaner Burning Jet Fuels

"LAWA shall support efforts to encourage the airlines and petroleum industries to embark on a study to promote the use of jet fuels that minimize air pollutant emissions from jet engines."

Status → In Progress:
LAWA continues to support cleaner burning jet fuels working with its airline and tenant stakeholders, as well as airport industry organizations and air quality agencies.

In 2013, United Airlines announced an agreement with AltAir Fuels to purchase 15 million gallons of alternative jet fuel over a three year period. According to AltAir Fuels, the biofuels will replace petroleum-based fuel, which requires no modification to factory-standard engines or aircraft. AltAir Fuel will begin manufacturing the biofuels as its first fuel production project in Los Angeles. The AltAir refinery in Paramount California experienced production delays during 2015 and has postponed delivering a biofuel blend for use in United Airlines aircraft flying out of LAX until at least early 2016.

Section XI. Green Building Principles

The Agreement states in part:

"To the extent practical and feasible, in accordance with local building codes and California state codes, and subject to limitation or restrictions in accordance with FAA or Transportation Security Administration standards guidelines, LAWA shall incorporate Leadership in Energy and Environmental Design (LEED) building standards into demolition, design, construction and operation of all aspects of the LAX Master Program. LAWA shall apply the LEED standards for New Commercial and Major Renovations, Version 2.1, as defined by the U.S. Green Building Council.

LAWA shall abide by all applicable City regulations with respect to energy efficiency, sustainability and green building design."

Status → In Progress:
This measure is currently in practice to the extent feasible and practical.

In April 2015, the New Tom Bradley International Terminal (TBIT) received LEED Gold Certification from the U.S. Green Building Council (USGBC). Project features that enabled the project to achieve Green certification included, but were not limited to,

- *The new terminal is bright and airy, with abundant natural daylight and natural ventilation to minimize energy use.*
- *Low-E glass was used along the airside concourse to minimize heat gain, and lighting controls reduce energy use.*
- *Low-flow water fixtures have reduced water usage 47.8 percent over baseline predictions.*
- *The building structure and finishes employed regional and recycled materials.*
- *Sustainable techniques used during construction included designating specific routes to and from the site for construction vehicles, and recycling construction materials and demolition debris.*
- *Concrete mixers and other equipment were placed onsite in order to reduce the number of trips made, and construction equipment was retrofitted with emission- and noise-reduction devices.*

Villaraigosa Pavilion at the new
Tom Bradley International Terminal

LAWA's new Central Utility Plant Replacement Project (CUP-RP) was completed in late 2015 and also received LEED Gold Certification from the USGBC. Performance testing of the gas turbine generators and electric chillers in the new CUP demonstrated that the new equipment exceeded the specified outputs and efficiencies required by the contract, resulting in overall thermal efficiency improvements of almost 30 percent compared to the old CUP. In addition, thoughtful design decisions made during the project and careful construction management and choices by the Project team contributed to the project's ability to meet LEED Gold standards.

Building projects in the City of Los Angeles are subject to the Los Angeles Green Building Code (LAGBC), which is based on the California Green Building Code (Cal Green). As the LAGBC replaced LEED in the Los Angeles Municipal Code in 2008, LAWA has since adopted

Tier 1 compliance with the LAGBC as its standard for the sustainable planning, design, and construction of new building projects.

In early 2015, the Los Angeles City Council approved LAWA award of a contract to the joint venture of Turner/PCL for the design and construction of the LAX Midfield Satellite Concourse-North Concourse.

Section XII. Traffic

The Agreement states in part:

"A. Construction Traffic

1. Designated Routes. LAWA shall designate routes for construction equipment, construction-related vehicles, and trucks participating in construction projects related to the LAX Master Plan Program to access LAX. These route designations shall ensure that such construction equipment, construction-related vehicles, and trucks do not travel (i) on 111th Street between Hawthorne Boulevard and Inglewood Avenue; (ii) on 104th Street between Hawthorne Boulevard and Inglewood Avenue; (iii) on Inglewood Avenue between Century Boulevard and Inglewood Ave….

   a. Community Response Program. LAWA shall establish a mechanism for members of the public to report instances of non-compliance with designated truck routes….

2. Lennox/405 Interchange. If LAWA participates in construction of an interchange to the 405 Freeway at Lennox Boulevard, LAWA shall consult with the Coalition Representative and impacted residents in developing mitigation measures that shall be included in the project's Environmental Impact Report, to minimize negative impacts such as residential relocations and the demolition of a community center. These mitigation measures shall include pedestrian and bicycle access over or under the 405 Freeway at Lennox Boulevard, to ensure that local residents can safely access both sides of the 405 Freeway at Lennox Boulevard."

Status → In Progress:
Designated routes for construction-related trucks, vehicles and equipment are specified in LAWA construction contracts, including LAX Master Plan projects undergoing construction in 2015. The designated routes avoid the roadway segments identified in this measure. LAWA inspectors and monitors checked that trucks used the designated routes.

LAWA developed and maintains a website at http://www.lawa.org/laxdev to provide construction information for the public. The general, program-wide construction hotline number, which is posted on the website, to report incidences of non-compliance is (310) 649-LAWA (5292). Please see Appendix B for a summary of calls in 2015 to the LAX construction hotline.

The Lennox Boulevard/I-405 interchange and associated mitigations are no longer being considered within the context of an overall landside improvement plan for LAX.

Section XIII. Minority Business Enterprise, Women Business Enterprise, and Small Business Utilization and Retention Program

The Agreement states in part:

"A. LAWA shall coordinate with the Mayor's Office, CDD, and other relevant business advocacy and assistance organizations to initiate a program to increase participation in the planning, construction, operation and maintenance of LAX by PIA small businesses and minority-owned business enterprises and women-owned business enterprises (MBE/WBE)….."

Status → Ongoing:
In collaboration with the Procurement Services Division, the Business Outreach Unit (BOU) conducts a monthly workshop, "Doing Business with LAWA." The workshop provides the business owner an opportunity to learn about the procurement processes, administrative requirements and certification and bond assistance services.

LAWA presenters are from Procurement Services, including the Purchasing and Contract Administration sections, LAWA's Certification staff, Bond Assistance Program, and Business and Job Resources/Business Assistance. Business owners are given the opportunity to introduce their company so that the presenters know who is in the audience so the presenters can provide information on a particular product or service. Annually, attendance at the workshops averages 123 business representatives. Attendance at the monthly workshops averages 15. There is no charge for parking.

In October 2012 the Board of Airport Commissioners adopted a mandatory Small Business Enterprise (SBE) program to replace the Minority/Women/Other Business Enterprise (M/W/OBE) program. SBE is defined as an independently-owned and operated business that meets criteria set forth by the Federal Small Business Administration (SBA), or State of California SBE Program, whichever is greater. LAWA sets a specific, mandatory percentage of small business subcontracting on construction, professional and non-professional projects valued in excess of $150,000; there is a penalty for failure to meet goal. Unlike the M/W/OBE program, Primes that are certified SBEs are credited for 100 percent participation. The first two years (2014 & 2015) results were very good, with an average of 29 percent participation by SBEs, of which 17.9 percent were identified as M/WBEs.

The BOU developed a database, BizConnect, of approximately 6,500 businesses that are seeking to do business with LAWA. This database was developed with the support of LAWA's Information Management and Technology Group, and is maintained by the BJRC staff. Staff periodically requests updated information from the listed businesses so that current information is available. BizConnect lists the companies' contact, concept, and certification information for distribution internally and externally. The database is accessible to the public at http://www.lawa.org/bjrc.

The BOU actively participates in LAWA Division's Request for Qualifications, Request for Proposals, and Request for Bids meetings. Announcements on potential procurement opportunities are sent to businesses listed on BizConnect and to other business assistance agencies that LAWA partners with for distribution. The BJRC is also a Strategic Partner with the Mayor's Office of Economic Development through its Minority Business Development

Center (MBDA) operated out of the University of Southern California (USC). For the period January 1, 2015 through December 31, 2015 this partnership has resulted in the following:

- *In 2015, LAWA awarded a total of $45.7 million to MBE, WBE, and SBE firms, of which $14.4 million was awarded to MBE firms.*[2]
- *Excess of $2 million in financial transactions, which represents over 4 percent of the MBCA annual goal*
- *Airport successes:*
    - *Assisted in growing a $3 million MBE construction company into a $14 million company in 6 years, from 2010 to 2015*
    - *Assisted in growing a $8 million MBE construction company into an $22 million company from 2010 to 2015*

The BOU also participates and supports outreach events by LAWA's Divisions, City Departments, and other public agencies. In 2015, LAWA conducted or participated in approximately 200 meetings and events. The unit is actively involved with local Chambers and ethnic business organizations.

Contact information for the Business Jobs Resource Center (BJRC) is posted at http://www.lawa.org/bjrc/About.aspx?id=1968

[2] *Based on the quarterly reports that were submitted to the Mayor's Office.*

Section XIV. Community Preparedness for Airport-Related Emergency

The Agreement states:

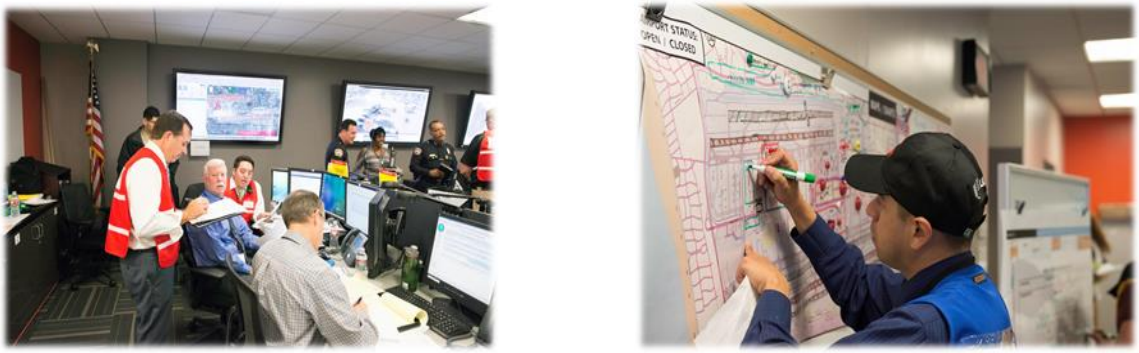
"LAWA shall assist in the coordination and dissemination of appropriate information related to emergency preparedness and response of local law enforcement agencies, emergency response groups (e.g., Red Cross, FEMA), and the local communities in the event of an airport-related emergency."

LAWA Department Operations Center

Status → Ongoing:
In 2015, LAWA assisted its partner agencies and airport stakeholders in the coordination and dissemination of appropriate information related active incidents at LAX.

There were several high profile incidents that impacted LAWA in 2015, including a suspicious package in the Administration East mailroom (the building was evacuated), the landing of United SkyWest Airline #5316 with its gear up, Special Olympics ground transportation issues, and several power outage incidents – one with impacts airport-wide. In each incident, the Department Operations Center was activated supporting first responders, maintain situational awareness, and serving as a conduit for information.

Also in 2015, LAWA continued to plan and execute training and exercise opportunities to the airport community. In November, a terminal evacuation and repopulation functional exercise was conducted to measure the response and recovery capabilities following an evacuation. Over 50 actors played the role of passengers to add realism to the exercise. In the same month, LAWA participated in a day-long Citywide Emergency Operations Center (EOC) functional exercise. This brought over 100 LAWA and partner agencies to the LAWA Department Operations Center (DOC) to test coordination and communication capabilities between the DOC and EOC following a fictional anthrax incident in the region. Emergency Management Division also delivered a series of Terminal Floor Warden Team trainings to the airline community with the objective of creating a team of airline staff who can assist passengers during a controlled terminal evacuation. This 1 hour classroom and 1 hour on-site drill were offered multiple times and at different terminals throughout the year.



Citywide Emergency Operations Center (EOC) Functional Exercise

The Los Angeles Fire Department also facilitated series of "Trunk-Top Exercises". This dynamic 1 hour exercise brought personnel from LAWA, partner agencies from law and fire, and airlines to collaborate with one another towards achieving common operating picture between the Incident Command Post and the DOC in various hazard scenarios. Additionally, LAFD Specialty Training Program continued in 2014 with curriculum that focuses on Incident Command Post (ICP) and Department Operations Center (DOC) response and all capabilities that support effective functioning of both components. These courses were intended for LAWA staff who would respond to the DOC when activated.

Trunk-Top Training Exercises

LAWA continued to maintain existing resources that may be utilized during an emergency. LAX has nine Point of Distribution (POD) containers filled with provisions to support mass-care and comfort for the traveling public in case of an emergency event. The POD's are pre-positioned inventories of supplies that have been placed both on and off the airport. The Airport Response Team (ART) is an important asset that focuses on passenger comfort, face to face communication, and support for the ADA population. ART is entirely made up of LAWA civilian employees.

Section XV. Designated Airport Fund

The Agreement states in part:

"Where this Agreement provides that LAWA shall contribute airport revenues to job training funds or air quality funds, LAWA will follow the procedures set forth in the Cooperative Agreement regarding "Alternative Job Training and Air Quality Expenditure."

Status → In Progress:
On November 23, 2015, LAWA received a letter from the FAA stating that airport revenues may not be used to provide funding for CBA Section VIII. Health Study. Pursuant to Section V.A.5. of the Cooperation Agreement, LAWA began discussions in late 2015 with the LAX Coalition to develop substitute programs or activities designed to achieve equivalent levels of mitigation and/or benefit through an equivalent expenditure of airport revenues.

Section XVI. Miscellaneous

The Agreement states in part:

"A. Implementation Meetings. To facilitate implementation of this Agreement, address concerns, and ensures an ongoing dialogue between the Coalition Representative and LAWA, the Coalition Representative and LAWA shall have regular Implementation Meetings….

B. Annual Reports. LAWA shall prepare annual reports on the implementation of this Agreement and the progress of the LAX Master Plan Program, and shall forward these reports to the Coalition Representative and post the reports on the LAWA website for at least a one-month period….

C. Contract Award Process. Where a provision of this Agreement refers to a Contract Award Process, that process shall be as described in this Section XVI.C. A Contract Award Process is "initiated" on the date the draft protocols and/or scope of work to be included in the RFP are provided to the Coalition Representative…"

D. Special Arbitrator…"

E. General LAWA Enforcement Responsibility…"

Status → In Progress:
Implementation meetings are regularly scheduled with the Coalition. LAWA ensures that one deputy executive director and one other management-level LAWA staff member attend each meeting. LAWA prepares annual reports on the implementation of the CBA and the progress of the LAX Master Plan Program. The annual reports are posted on LAWA's website at http://www.lawa.org/ourLAX/AnnualReports.aspx?id=8034.

4.0 Lennox School District – Sound Attenuation Measure

The Agreement states in part:

"LAWA Funding of Certain District Mitigation Measures. Subject to FAA Determination regarding the use of airport funds under the federal anti-revenue diversion laws, LAWA will fund certain mitigation measures for the District not to exceed $111,000,000 for noise abatement. Mitigation measures include replacement of HVAC equipment with pollution abatement, double-paned windows and/or sound reduction windows and doors, roofing upgrades, replacement of relocatable classrooms, and temporary housing during construction.

Security-Related Items. LAWA will assist the District in the coordination and dissemination of appropriate information related to emergency preparedness and response of local law enforcement agencies, emergency response groups (e.g., Red Cross, Federal Emergency Management Agency) and the local communities in the event of an airport-related emergency.

Community Programs. LAWA will work collaboratively with the District to support a variety of community programs, such as job training and academic programs; and…"

Status → In Progress:
On December 7, 2005, LAWA and Lennox School District (Lennox) submitted a request to the FAA for an advisory opinion on the use of airport revenues for noise mitigation measures at Whelan School. In their response on January 12, 2006, the FAA raised questions and issues regarding the Los Angeles County Superior Courts' April 8, 1976 Judgment and Final Order.

On October 2, 2008, Public Law 110-337 authorized the Secretary of Transportation to expand the use of passenger facility fees for the purpose of carrying out certain noise mitigation at Lennox and Inglewood Unified School Districts.

In July 2009, LAWA submitted a letter to the FAA on behalf of Lennox asking that the Secretary of Transportation make a determination, based on Public Law 110-337, that certain schools in Lennox are adversely affected by airport noise, and thereby would be eligible for PFC funding for noise mitigation. Subsequently, the FAA indicated to LAWA that this determination will be made as part of the PFC application process.

On January 10, 2011, the BOAC authorized LAWA to submit the PFC application to the FAA for authorization to collect and use PFC funds to sound insulate impacted schools in the Lennox, with the application submitted to FAA on February 2, 2011.

On May 2, 2011 the FAA issued the Final Agency Decision finding the schools in Lennox to be "significantly impacted and adversely affected by aircraft noise," and authorized the expenditure of up to $34,089,058 in PFC funds to insulate the schools listed in the Settlement Agreement between LAWA and Lennox.

On September 19, 2011, the BOAC approved the Letter of Agreement between LAWA and Lennox, and authorized the release of $10 million to Lennox for the first year of the sound insulation program. The funds were delivered to Lennox on December 12, 2011. A new school, Dolores Huerta Elementary School, was completed in 2011, and later in 2011 LAWA provided Lennox with an additional $1,214,600 for reimbursement of sound insulation construction for this school.

In September 2012, sound attenuation work was completed for the Animo Leadership High School, the District's charter school under the management of Green Dot.

In September 2013, the District sent LAWA a written request to remove Lennox Fine and Performing Arts Academy from the list of approved new schools to be mitigated. The school will not be built by the District.

In April 2014, the sound attenuation portion of Jefferson ORG was completed (ORG stands for Overcrowding Relief Grant).

Jefferson Elementary School, October 2014
Construction of new section of the school

On June 2, 2014, LAWA authorized $10 million for the Second Work Plan and released $4,079,000 as the first installment. This Second Work Plan focuses on existing Jefferson Elementary and Buford Elementary Schools. Sound attenuation plans for both of these schools were submitted to the Division of State Architect (DSA), and the District is awaiting approval.

In August 2015, work at both Lennox Middle School and Felton Elementary were deemed completed and closed out by the Lennox School Board.

The District is in compliance with all program requirements.

5.0 Inglewood Unified School District – Sound Attenuation Measure

The Agreement states in part:

"LAWA Funding of Certain District Mitigation Measures. Subject to FAA Determination regarding the use of airport funds under the federal anti-revenue diversion laws, LAWA will fund certain mitigation measures for the District not to exceed $118,500,000 for noise abatement. Mitigation measures include replacement of HVAC equipment with pollution abatement, double-paned windows and/or sound reduction windows and doors, roofing upgrades, replacement of relocatable classrooms, and temporary housing during construction.

Security-Related Items. LAWA will assist the District in the coordination and dissemination of appropriate information related to emergency preparedness and response of local law enforcement agencies, emergency response groups (e.g., Red Cross, Federal Emergency Management Agency) and the local communities in the event of an airport-related emergency.

Community Programs. LAWA will work collaboratively with the District to support a variety of community programs, such as job training and academic programs; and…"

Status → In Progress:
LAWA worked with the Inglewood Unified School District (IUSD) and the FAA to complete the PFC application process requesting authorization to use PFC funding for sound insulation of impacted schools for the IUSD. The PFC application was submitted to the FAA on August 19, 2013 for $64 million dollars which would attenuate seven schools plus the Child Development Center at Woodworth Elementary.

In October, 2014, the FAA issued the Final Agency Decision (FAD) for the Inglewood Unified School District, finding the schools to be "significantly impacted". The FAA approved $44,378,659 to fund sound attenuation projects in the IUSD with Passenger Facility Charge (PFC) funds. The Los Angeles International Airport will collect PFC funds to pay for the sound attenuation of five campuses and the Child Development Center at Woodworth. Two schools, Inglewood High School and Hudnall Elementary, are located outside the 65 dB of the FAA-approved noise contour and were not approved for PFC funding by FAA. The schools/campuses approved for sound attenuation are as follows:

- *Morningside High School*
- *Oak Street Elementary School*
- *Payne Elementary School*
- *Woodworth Elementary School*
- *Monroe Middle School*
- *Child Development Center at Woodworth Elementary*

In the spring of 2015, LAWA worked with IUSD to develop their First Work Plan which will outline which schools are scheduled for design and construction phases first. The District identified Payne Elementary, and Woodworth Elementary and Woodworth Child Development Center for the schools in the First Work Plan.

The Work Plan and the initial funding allocation for $10 million dollars were approved by the Board of Airport Commissioners in August of 2015.

In the fall of 2015, the District contracted with an architectural firm to begin solidifying designs for Payne Elementary School.

6.0 Summary

During 2015, LAWA continued to implement applicable provisions from the Community Benefits Agreement. Construction-related provisions were included in the TBIT Renovation – East Aprons, WAMA and Qantas Hangar projects using contract specifications and were being implemented during construction. These provisions were also being incorporated into ongoing Master Plan projects at this time. Working together with the Coalition, LAWA monitored and implemented the required provisions as the LAX Master Plan Program moved forward.

APPENDIX A

UPDATED NOISE MITIGATION PROGRAM AND SCHEDULE

LAWA - Residential Soundproofing Program

December 2015

LAX Residential Soundproofing Program- Complete

Background

Los Angeles World Airport's (LAWA) voluntary Residential Soundproofing Program (RSP) was established in 1997 to implement the LAX Aircraft Noise Mitigation Program by soundproofing dwelling units in noise-impacted areas in the City of Los Angeles. Funded with Passenger Facility Charge funds (PFCs), $160 million was spent for construction contracts and program administration to sound insulate 7,327 dwelling units. At this time, the City of Los Angeles' Residential Soundproofing Program is closed.

On April 2010 LAWA notified (via certified mail) all remaining homeowners who had not responded to previous correspondence, of the program's completion, and stated that the final deadline to sign up for the program was June 1, 2010. The final construction contract was completed in late 2014. The program included 8,710 residential units within the City of Los Angeles, including portions of Playa del Rey, Westchester and South Los Angeles. These dwelling units were located in LAWA's Fourth Quarter 1992 contour with a Community Noise Equivalent Level (CNEL) of 65 decibels (dB) and higher. Of these 8,710 eligible units, 7,327 units were treated. The remaining 1,383 dwelling units or 16% of the homeowners did not respond after numerous contacts and/or certified mailings, or the homeowners chose not to participate in the program. Of the 7,327 residential units treated, 514 were end-of-block dwelling units which became eligible by the Community Benefits Agreement (CBA) calling for the soundproofing of properties within the same block as impacted properties.

Program Status

To date, there have been 135 construction contracts awarded, totaling approximately $135 million, in construction costs.

Project Budget: $160 million

Project Completion Date: 2015

Project Spent to date: $160 million

Project Percent Complete: 100%

APPENDIX B

SUMMARY OF CALLS IN 2015 TO LAX CONSTRUCTION HOTLINE

Summary of Calls in 2015 to LAX Construction Hotline

Overview: A total of 176 calls were received on the LAX Construction Hotline in 2015. The vast majority of the calls were not directly related to construction, particularly with regards not being construction-related complaints and concerns that Los Angeles World Airports could take immediate action to address and resolve. Those types of "non-construction related" calls generally include, but are not limited to, the following:

- Calls regarding whether a specific departing or arriving flight(s) will be delayed by construction
- Calls regarding the availability of all or certain food and beverage establishments within terminals undergoing construction activities
- Calls inquiring about construction-related employment or offering construction products and services
- Calls asking about contact information, insurance information, or subcontractor payment information for specific contractors
- Calls regarding future development projects at LAX
- Calls regarding malfunctioning equipment within terminals unrelated to construction
- Calls regarding traffic congestion in and around LAX unrelated to construction
- Calls expressing general concerns about LAX overall

Calls received on the LAX Construction Hotline that were considered to be "construction-related" generally include, but are not limited to, the following:

- Call from passengers in gate waiting areas or airline lounges located near interior terminal construction/improvement areas expressing concerns about noise, dust, or vibration.
- Calls from residents living near LAX, particularly in areas immediately north of airport, expressing concerns about late-night or early-morning noise, including, in particular, equipment/vehicle noise in nearby construction staging/laydown areas
- Calls with other specific concerns directly related to construction

The following provides a breakdown of calls received on the LAX Construction Hotline in 2015

Month	# of Calls Received	Construction Related	Non-Construction Related
January	10	3	7
February	12	2	10
March	17	3	14
April	13	1	12
May	17	3	14
June	16	2	14
July	12	4	8
August	16	3	13
September	20	2	18
October	17	0	17
November	18	2	16
December	8	0	8
Total	176	25	151

LAWA responded to all calls where the caller left contact information, regardless of whether the call was construction related or non-construction related.

APPENDIX C

THIRD PARTY MONITOR SEMI-ANNUAL REPORT DATED APRIL 2016

LAX Master Plan Projects Semiannual Report
Independent Third Party Monitor

Prepared by:

Clean Fuel Connection, Inc.

April 2016

TABLE OF CONTENTS

Cover Photo Courtesy of Ray Gorski

SECTION 1 - INTRODUCTION

This Semiannual Report was prepared by Clean Fuel Connection Inc. (CFCI), Independent Third Party Monitor for LAX Master Plan Projects, and is submitted in accordance with Section X.F.8 of the Community Benefits Agreement (CBA)[1]. The purpose is to document CFCI's efforts as they relate to the monitoring of LAX Master Plan construction activities and construction contractor conformance to all requirements incorporated in CBA Section X.F.

This Semiannual Report covers the period commencing July 1, 2015 and ending December 31, 2015. During this timeframe, three (3) LAX Master Plan projects that were undergoing construction activities - these include the Tom Bradley International Terminal (TBIT) Renovation – East Aprons, the West Aircraft Maintenance Area (WAMA), and the Qantas Hangar Projects. Construction work is ongoing for the TBIT East Aprons, WAMA, and Qantas projects.

Third Party Monitoring - CFCI's efforts in monitoring, documenting, and reporting on the status of CBA Section X.F as it pertains to LAX Master Plan projects include:

- **Development of an Equipment database to include all known equipment utilized in each Master Plan Project**. This database documents the technical specifications of each piece of on and off-road construction equipment. The database documents each piece of equipment relative to compatibility with diesel emission control devices, the emission control device used or planned for use on each piece of construction equipment, or whether the equipment was determined to be incompatible with any available emission control system. The database also documents all equipment operating under an approved Los Angeles World Airports (LAWA) exemption, including but not limited to "20-day" exemptions, driver-visibility safety exemptions, or special circumstance exemptions;
- **Field verification of the equipment database and reconciliation with LAWA's environmental monitor vehicle records**. The construction contractors provide LAWA's environmental monitor with airfield equipment lists on a periodic basis (typically monthly). The Third Party Monitor reviews all available vehicle records for the purpose of verifying compliance with 20-day exemption obligations as well as reconciling LAWA's environmental monitor records with the Third Party Monitor equipment database;

[1] http://www.ourlax.org/comBenefits.cfm

- **Examination and verification of requests for exemptions from installation of Best Available Control Technology (BACT).** As discussed in Section 2 of this Report, CFCI independently reviews each piece of construction equipment proposed for use on a LAX Master Plan project to determine compatibility with a commercially available California Air Resources Board (CARB) or U.S. Environmental Protection Agency (EPA) verified Diesel Emission Control System (VDECS). The results of this independent assessment are documented in each Semiannual Report as well as the equipment database;
- **Examination of fuel purchase records to verify that low sulfur diesel is being used**. This task has been substantially reduced in scope due to enactment of state law that allows only ultra-low sulfur diesel (ULSD) to be sold for on and off-road vehicles in California;
- **Monitoring of installed emission control devices on construction equipment**. This includes physical inspections of diesel construction equipment retrofitted with a VDECS to ensure emission control devices are properly installed and functioning;
- **On-airfield monitoring of construction equipment operations enforcement**. This includes, but is not limited to, observation of construction operations to determine compliance with equipment idling restrictions, fugitive dust emissions mitigation requirements, as well as identification of construction equipment in an apparent state of disrepair due to the presence of visible smoke;
- **Annual Reassessment of Available Emission Control Systems**. On an annual basis, the Third Party Monitor conducts a comprehensive evaluation of available CARB and EPA-verified emission control systems. The purpose of this reassessment is to ensure LAWA incorporates the any newly designated best available control strategies into construction bid documents prior to bidding of new construction phases of the LAX Master Plan Program. The process of emission control technology review also includes any new, relevant requirements promulgated by CARB or EPA. This Semiannual Report includes the results of the Annual Emission Control System Reassessment.

The CFCI project staff is comprised of the following individuals:

- Enid Joffe, founder and owner of Clean Fuel Connection, Inc.;
- Ray Gorski, lead air quality engineer and principal field engineer;
- Lauren Dunlap, air quality engineer and principal analyst in determining compatibility of emission control devices and calculations of emission reductions for VDECS installed on Master

Plan project equipment. In addition, Lauren quantifies air quality benefits associated with onsite concrete crushing and batch plant concrete production.

During the reporting period, the Third Party Monitor has independently reviewed approximately 703 pieces of construction equipment associated with the TBIT – East Aprons, WAMA, and Qantas Hangar projects.

SECTION 2 - TASK-BY-TASK STATUS REPORT

The following section documents CFCI's work during the past reporting period on each of the specific tasks in the Third Party Monitor Scope of Work.

Task 1: Best Available Emissions Control Devices Required

Section X.F.1 of the Community Benefits Agreement (CBA) for the LAX Master Plan Program requires that all diesel equipment used for construction be outfitted with the best available emission control devices, primarily to reduce diesel particulate matter on the order of 10 microns[2] in diameter (PM_{10}), and fine particulate, which is on the order of 2.5 microns in diameter ($PM_{2.5}$). A secondary objective of this requirement is to reduce oxides of nitrogen emissions (NO_x), which are ozone precursors. Section X.F.1 of the CBA applies the requirement to outfit all diesel equipment, including off-road vehicles such as heavy-duty construction equipment, as well as on-road vehicles such as trucks, street sweepers, etc. The requirement also affects non-mobile diesel sources, such as portable generators, air compressors, and light towers. Thus, the requirement to retrofit diesel equipment used in LAX Master Plan construction projects encompasses every piece of diesel equipment, irrespective of its status as on-road mobile, off-road mobile, or stationary.

Section X.F.1 requires that the diesel emission control systems used to retrofit diesel equipment be verified or certified for use on on-road or off-road vehicles or engines by the California Air Resources Board (CARB), or verified by the U.S. Environmental Protection Agency (EPA) for use on on-road or off-road vehicles or engines. Section X.F.1 further allows CARB and EPA-verified "mobile source" devices to be applied to "stationary sources", such as generator engines, and allows technologies verified for "on-road" engines to be applied to "off-road" equipment. Thus, the overall context of Section X.F.1 is very

[2] One micron equals $1x10^{-6}$ meter or 0.000001 meter.

broad and allows maximum flexibility in matching diesel emission control systems with diesel equipment used in Master Plan construction.

The role and responsibilities of the Independent Third Party Monitor as it relates to Section X.F.1 of the CBA is delineated in the following contract Task statements:

- Task 1.1 - Contractor shall develop a monitoring process and database to track each piece of diesel equipment used for construction, including documentation procedures and reporting requirements;
- Task 1.2 – Contractor shall monitor, document, and report independently from LAWA, each construction firm's compliance as it relates to outfitting their diesel construction equipment with the best available emissions control devices available.

The following are the results and findings of the Third Party Monitor as they relate to Tasks 1.1 and 1.2 for the period commencing in July 1, 2015 through December 31, 2015.

Task 1.1 – Monitoring Process, Database Development, and Documentation:

Key elements of the monitoring process include:

- *Review of available documentation* – The principal source of technical information for each vehicle proposed for operation on the Tom Bradley International Terminal Renovation – East Aprons, WAMA, and Qantas Hangar projects are the equipment reports submitted by the construction contractors for review by LAWA's environmental monitor and environmental management staff. These reports document whether or not a compatible verified diesel emission control system (VDECS) is available for a given piece of diesel equipment;
- *Incorporation of all available data into an Equipment Database* – All relevant information derived from review of the equipment reports or field inspections is documented in the equipment database. This database is the principal tool for performing independent verification and validation of the information contained in the equipment reports reviewed and approved by LAWA;
- *Identification and documentation of missing, inconsistent, or inaccurate data* – The database notes which pieces of information are either missing or whose accuracy is suspect;

- *Request for Additional Information and/or Clarification* – Missing data or data that require validation are compiled, and a request for clarification is issued by the Independent Third Party Monitor to LAWA's environmental monitor staff;
- *Field Inspections* – In specific cases, the Independent Third Party Monitor will request permission to conduct a field inspection of the specific piece of equipment under scrutiny;
- *Task 1.2 Independent Verification and Validation* – For each piece of diesel construction equipment included in the database, an independent determination of whether or not a compatible VDECS device is available is conducted;
- *Documentation of Analysis Results* – For each piece of diesel equipment assessed, the availability and compatibility of a VDECS is recorded in the database;
- *Data Reconciliation* – The Third Party Monitor reconciles information contained in the database with the reports maintained by LAWA's environmental monitor and the construction manager's staff.

The Database Development element of Task 1.1 was conducted in accordance with a single objective – record as much data and supporting information as possible to fully characterize each piece of equipment proposed for operation on an LAX Master Plan construction project. To ensure completeness the database incorporates the following data fields:

- *Equipment ID Number* – Most equipment operating on an LAX Master Plan construction project is marked with a unique identifying number by the equipment owner. It has been the practice of the Independent Third Party Monitor and LAWA's environmental monitor staff to use this unique ID when describing, discussing or documenting a specific piece of equipment. All equipment is tracked and monitored relative to this ID number;
- *Owner* – the owner of the piece of diesel equipment, including prime contractor and name of subcontractor or equipment rental company;
- *Equipment Category* – A brief description for the type of diesel equipment, such as "articulated dump truck";
- *Equipment Manufacturer* – The manufacturer of the piece of equipment, usually the equipment chassis. In most cases the manufacturer of the chassis is different from the engine manufacturer;

- *Equipment Model Year* – The year of manufacture of the equipment or vehicle, usually referring to the chassis and vehicle body. It should be noted that it is common for the equipment chassis or body and diesel engine to be different model years;
- *Equipment Model Number* – The number or other descriptive terminology used by the equipment manufacturer in marketing the vehicle, oftentimes used to differentiate similar products;
- *Equipment Serial Number* – This differs from the Equipment ID number described above. The equipment serial number is the vehicle chassis or body identification number assigned by the equipment manufacturer;
- *Engine Manufacturer* – The manufacturer of the main diesel engine used in the equipment. In some cases, most notably off-road heavy-duty scrapers and on-road street sweepers, the equipment has two diesel engines. The first and second engines are designated #1 and #2, respectively, in the database;
- *Engine Model* – The number or other descriptive terminology used by the manufacturer in engine marketing, used to differentiate similar products;
- *Engine Model Year* – The year of manufacture of the diesel engine, diesel emission control devices are often verified for a specific engine model year;
- *Engine Serial Number* – A unique identification number or alphanumeric code assigned by the engine manufacturer;
- *Engine Displacement* – The total volumetric size of the engine's combustion cylinders, usually described as "cubic inches" or "liters". Displacement expressed in cubic inches is calculated by multiplying the number of cylinders by the piston area (square inches) and by the length of the piston stroke (inches). The commonly used metric designation of "liters" is the total engine displaced volume measured in cubic centimeters (1 liter = 1,000 cubic centimeters);
- *Engine Horsepower* – The rated horsepower of the engine by the engine manufacturer;
- *Engine Family* – Engine Family is a descriptive designation given by CARB to a diesel engine upon certification. It is a code, similar to an automobile Vehicle Identification Number, that identifies the engine model year, engine manufacturer, the engine's displacement, on-road or off-road applicability, emissions equipment included during certification testing. This piece of

data, along with engine manufacturer and engine model year, is essential to determine conclusively if a VDECS is compatible with the engine undergoing assessment. With practice, one can quickly ascertain a substantial amount of information about an engine by deciphering the engine family designation;

- *Engine #2 Data* – Similar to the above for Engine #1, data are documented for the second diesel engine on a piece of equipment. In the case of heavy-duty earth moving scrapers, the two engines are front and rear; in the case of street sweepers, the second engine is an auxiliary engine that operates the vehicle's rotary brooms and vacuum system.

For each piece of diesel equipment, the database also documents:

- Whether that piece of equipment has or is currently operated on a Master Plan project. For equipment that has been removed, the date of removal is recorded if known. This portion of the database is currently undergoing reconciliation with the results of the airfield equipment inventory.
- For equipment operating under a 20-day exemption, the date the equipment was placed on the airfield and the date removed. For more discussion on 20-day exemption status, please refer to the Task 4 Section of this report;
- Each piece of equipment's compatibility with both off-road and on-road Verified Diesel Emission Control Systems available at the time the equipment was originally submitted by the owner for review by environmental monitor staff.

During the period ending December 31, 2015, a total of approximately 703 pieces of construction equipment associated with the Tom Bradley International Terminal Renovation – East Aprons, WAMA, and Qantas Hangar projects were assessed – the results of this assessment are included in the following Sections of this Report.

<u>Task 1.2 – Independent Monitoring, Documentation, & Reporting of Compliance with CBA Section X.F.1; Best Available Emission Control Devices Required</u>:

The primary objective of this Task is to independently verify and validate the findings of LAWA's environmental monitor and contractor staff as it relates to the availability and compatibility of diesel emission control systems for diesel equipment operating on a Master Plan Project. Using the methodology described under Task 1.1, CFCI staff regularly coordinates with LAWA's environmental

monitor, requesting and receiving access to files and records for diesel equipment operating or proposed for operation on a Master Plan project.

Only CARB and/or EPA-verified devices available at the commencement of construction activities on a specific Master Plan project were considered when assessing compliance with CBA Section X.F.1. This is based upon the following language included in the CBA:

- The CBA stipulates in Section X.F.9.a. "Reassessments of Emission Control Devices", that *"the process of emission control technology review shall include any new relevant requirements or regulations promulgated by CARB or EPA. Results from the reassessments shall not be applied retroactively"*;
- CBA Section X.F.9.b. states under "Application of New Requirements", that *"any new designations of emission control devices as best available shall apply only to projects that start after the devices are verified or certified for use by CARB or EPA, or approved for use as part of a Demonstration Project"*.

At the time of commencement of construction activities on the Tom Bradley International Terminal renovation – East Aprons, WAMA, and Qantas Hangar projects, multiple diesel emission control devices were verified by CARB for off-road use. CARB assigns a designation to each diesel emission control device as a function of its effectiveness in reducing diesel particulate matter (PM) emissions. This is referred to as the "Verification Level" of the device; CARB currently recognizes three verification levels, as follows:

- Level 1 – greater than or equal to 25% reduction of diesel PM;
- Level 2 – greater than or equal to 50% reduction in diesel PM;
- Level 3 – greater than or equal to 85% reduction in diesel PM.

As shown above, CARB Level 3 offers the highest level of diesel pollution reduction. In accordance with the CBA, the "Best Available Control Technology" (BACT) is Level 3 verification.

Task 1.2 Results

Each piece of diesel equipment submitted for LAWA's environmental monitor review was independently assessed to determine their compatibility with a CARB and/or EPA-verified diesel emission control

system. The following sections discuss conformance with Task 1.2 for LAX Master Plan projects monitored during the previous six months.

1.2.1 Tom Bradley International Terminal Renovation – East Aprons - Construction continues on the Tom Bradley International Terminal Renovation (TBIT) – East Aprons. The following photos illustrate construction progress during the reporting period on the TBIT – East Aprons project.

Figure 1.2.1-1: TBIT – East Apron Construction Progress

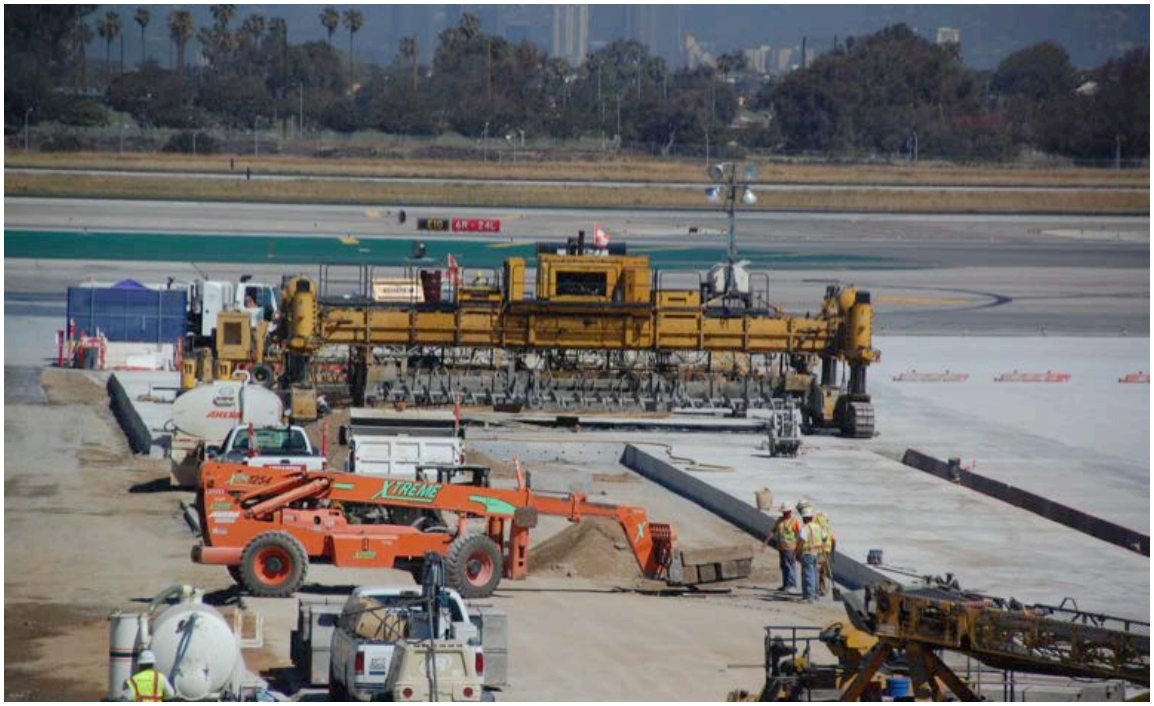
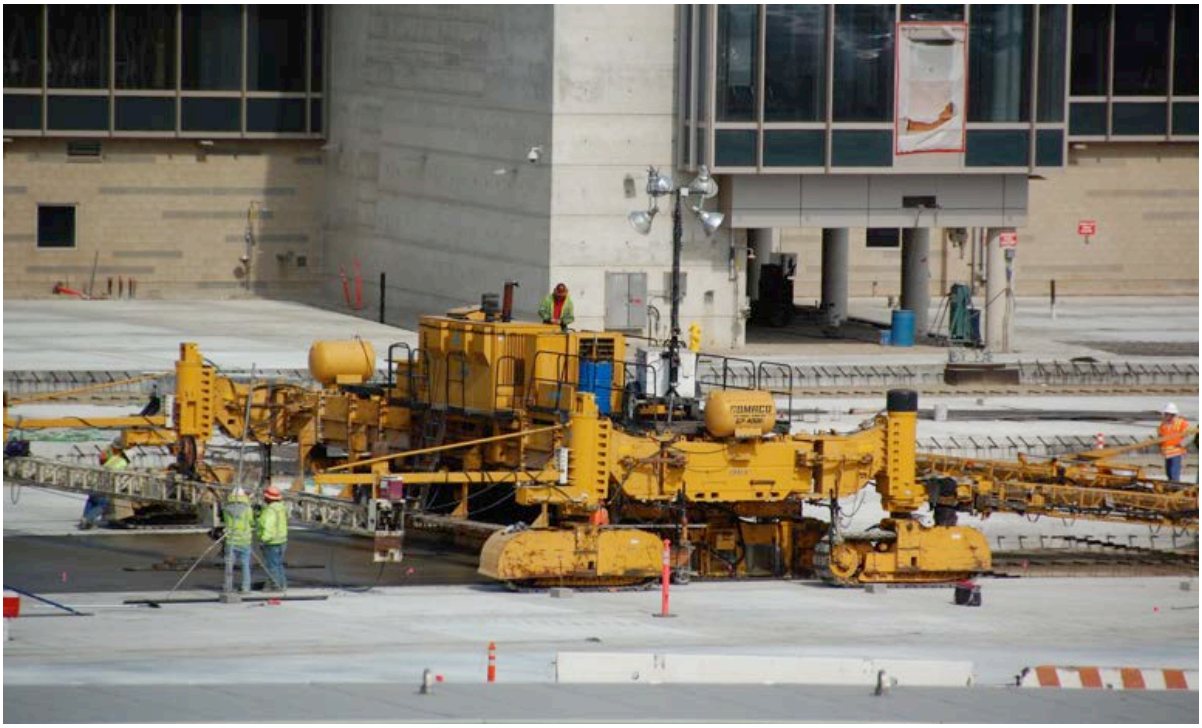


Figure 1.2.1-2: TBIT – East Apron Construction Progress – Heavy-Duty Paving Equipment in Use



During the reporting period, a total of 343 pieces of construction equipment were evaluated. The listing of approved airfield construction equipment is shown below in Table 1.2.2-1:

Table 1.2.1-1: TBIT – East Apron Construction Equipment Approved by LAWA

REF	VEHICLE TYPE	EMISSION CHARACTERISTICS
173	Truck 49182	Y
177	Truck 276869	Y
181	Truck 301681(3)	Y
183	Truck 338444(1)	Y
900	Truck 33459	Y
901	Truck 33459 (2)	Y
902	Truck 33459 (3)	Y
1524	RFI for Scania Rock Trucks - approved with Tier 3 Engines, not sure how many trucks.	Y
345	Truck 324172	Y
346	Truck 324172	Y
347	Truck 421530	Y
348	Truck 421530	Y
349	Truck 244028	Y
350	Truck 248775	Y
427	Truck 9D57054	Y

REF	VEHICLE TYPE	EMISSION CHARACTERISTICS
423	Truck 9E46773	Y
422	Truck 9E77508	Y
421	Truck 9E83229	Y
420	Truck 9F00005	Y
909	Truck 239447(1)	Y
910	Truck 239447(2)	Y
920	Truck 415053(1)	Y
915	Truck 331866	Y
916	Truck 331866(2)	Y
918	Truck 346134(1)	Y
927	Truck 446213(1)	Y
926	Truck 426846(2)	Y
473	Water Truck ID 9614142	Y
408	Truck 349928	No DPF verified
409	Truck 386317	No DPF verified
410	Truck 308125	No DPF verified
911	Truck 286036	No DPF verified
912	Truck 292757	No DPF verified
913	Truck 328460	No DPF verified
914	Truck 329435	No DPF verified
917	Truck 333145	No DPF verified
919	Truck 346134(2)	No DPF verified
921	Truck 421068(1)	No DPF verified
922	Truck 421068(2)	No DPF verified
923	Truck 421068(3)	No DPF verified
924	Truck 421068(4)	No DPF verified
925	Truck 426846(1)	No DPF verified
928	Truck 447420(1)	No DPF verified
418	Truck CHIEF 9B36608	No DPF verified
419	Truck CHIEF 9D67585	No DPF verified
351	Cal Earth Truck CA-109701	B. DPF on order
352	Cal Earth Truck CA-0323218	B. DPF on order
353	Cal Earth Truck CA-22739	No DPF verified
354	Cal Earth Truck CA-0370851	B. DPF on order
355	Cal Earth Truck CA-182138	B. DPF on order
356	Cal Earth Truck CA-041334	B. DPF on order
357	Cal Earth Truck CA-322604	B. DPF on order
358	Cal Earth Truck CA-0269106	B. DPF on order
359	Cal Earth Truck CA-172873	B. DPF on order
360	Cal Earth Truck CA-180561	No DPF verified
361	Cal Earth Truck CA-298953	B Prop 1B funding requested
362	Cal Earth Truck CA-0181842	B Prop 1B funding requested
363	Cal Earth Truck 1FUWDCYA6YLA89933	B Prop 1B funding requested
364	Cal Earth Truck CA-0332817	B Prop 1B funding requested

REF	VEHICLE TYPE	EMISSION CHARACTERISTICS	
365	Cal Earth Truck CA-0234897	No DPF verified	
366	Cal Earth Truck CA-217549	B Prop 1B funding requested	
426	US Demolition Truck 9B37639	No DPF verified	
428	US Demolition Truck 9D48927	No DPF verified	
429	US Demolition Truck 9D41082	No DPF verified	
430	US Demolition Truck 9E43458	No DPF verified	
431	US Demolition Truck 9D57074	No DPF verified	
432	US Demolition Truck 9B51306	No DPF verified	
440	Truck Star Scrap Metal Co. - Recycle #1	A	Has DPF installed
441	Truck Star Scrap Metal Co. - Recycle #2	A	Has DPF installed
442	Truck Star Scrap Metal Co. - Recycle #3	A	Has DPF installed
443	Truck Star Scrap Metal Co. - Recycle #4	A	Has DPF installed
444	Truck Star Scrap Metal Co. - Recycle #5	A	Has DPF installed
446	CHIEF Trucking 7Y16739	No DPF verified	
447	CHIEF Trucking - 8L49983	No DPF verified	
448	CHIEF Trucking - 8X07256	No DPF verified	
449	CHIEF Trucking - 55456F1	No DPF verified	
450	CHIEF Trucking - 7T38386	No DPF verified	
451	CHIEF Trucking - 7S40880	No DPF verified	
452	CHIEF Trucking - 08896N1	No DPF verified	
453	CHIEF Trucking - 8C15432	No DPF verified	
425	CAT 330DL Excavator	C	Six DPFs are verified. Needs DPF or Letter for line of sight.
370	John Deere 444K Loader	A	Has line of sight letter
371	John Deere 710J Backhoe	C	Six DPFs are verified. Needs DPF as replacement for muffler.
372	John Deere 644K Loader	A	Has line of sight letter
373	John Deere 710J Backhoe	A	Has line of sight letter
374	John Deere 410J Backhoe	A	Has line of sight letter
375	John Deere 544J Loader	A	Has line of sight letter
376	John Deere 644J Loader	C	Three DPFs are verified. Needs DPF as replacement for muffler.
377	John Deere 644K Loader	A	Tier 4 Interim
378	Takeuchi TL 420 Track Loader	A	No DPF verified
379	Link Belt Excavator AL-4HK1X	A	Tier 4
380	Kawasaki Loader EIN WT5D73	A	Tier 4
381	Kawasaki Loader EIN HT8C99	A	Tier 4
382	Kawasaki Loader EIN TK3R54	A	Tier 4
383	Kawasaki Loader EIN AF5V36	A	Tier 4
384	Link Belt Excavator EIN ER8E79	A	Tier 4
385	Link Belt Excavator EIN EP9C76	A	Tier 4 Interim
454	Mack Concrete Pump Truck Lic 6WKD941	A	Has DPF installed
386	LinkBelt Excavator EIN KX3B74	A	Tier 4 interim
387	LinkBelt Excavator EIN PD3U66	A	Tier 4 interim
388	LinkBelt Excavator EIN TD7D94	A	Tier 4 interim
389	LinkBelt Excavator EIN MG3B46	A	Tier 4 interim
390	LinkBelt Excavator EIN VX6E48	A	Tier 4 interim

REF	VEHICLE TYPE		EMISSION CHARACTERISTICS
391	LinkBelt Excavator EIN CX9X47	A	Tier 4 interim
392	Kawasaki Loader EIN TN6Y77	A	Tier 4 interim
393	LinkBelt Excavator EIN VN8T59	A	Tier 4 interim
394	LinkBelt Excavator EIN CH3V67	A	Tier 4 interim
395	LinkBelt Excavator EIN DA3R97	A	Tier 4 interim
396	LinkBelt Excavator EIN JX3W57	A	Tier 4 interim
437	Drilling Rig Bauer BG-15 EIN YM7K76	C	Has Tier 3 with multiple DPFs verified
438	CAT Forklift NJ9F57	A	Tier 4 interim
439	TEREK Crane RT-555 EIN GS3K99	C	Has Tier 3 with multiple DPFs verified
1115	Bobcat Skid Steer EIN CD8V59	A	Tier 4 interim
1117	John Deere Backhoe 310K VN 35409	A	Tier 4 interim
1118	John Deere Backhoe 310K VN 35410	A	Tier 4 interim
1119	John Deere Backhoe 310K VN 35606	A	Tier 4 interim
1120	John Deere Backhoe 310K VN 35647	A	Tier 4 interim
1121	John Deere Backhoe 310K VN 36508	A	Tier 4 interim
1122	John Deere Backhoe 310K VN 35661	A	Tier 4 interim
1123	John Deere Backhoe 310SK VN 35439	A	Tier 4 interim
1124	John Deere Backhoe 310SK VN 36401	A	Tier 4 interim
1125	John Deere Backhoe 310SK VN 36628	A	Tier 4 interim
1126	John Deere Backhoe 310SK VN 36662	A	Tier 4 interim
1127	John Deere Backhoe 310SK VN 37107	A	Tier 4 interim
1128	ABI Loader SN 53561003	C	Has Tier 3 with multiple DPFs verified
1129	ABI Loader SN 53561004	C	Has Tier 3 with multiple DPFs verified
1129-R1	ABI Loader SN 53561004	C	Has Tier 3 with multiple DPFs verified, has letter for only one Huss.
1130	Grove Crane RT890E EIN GX4Y59	C	Has Tier 3 with multiple DPFs verified
1131	LinkBelt Crane RTC 8075 EIN CM3H79	C	Has Tier 3 with multiple DPFs verified
1152	Skid Steer Bobcat T190 SN 837897RA	A	Tier 4 interim
1153	TAKEUCHI Excavator TB180FRC 1221992	A	Tier 4 interim
1154	JOHN DEERE Loader 644K SN 10034040	A	Tier 4
1155	CASE 821F Loader SN 1213719	A	Tier 4
1156	JOHN DEERE Excavator 35D SN 865434RA	A	Tier 4 interim
1157	JOHN DEERE Excavator 35D SN 865439RA	A	Tier 4 interim
1158	TAKEUCHI TB235C Excavator SN 1201457	A	Tier 4
1159	HAMM HD12VV Roller 10025319	A	Tier 4 interim
1234	OC Vacuum Truck CA 0000519	A	No DPF verified
1235	OC Vacuum Truck CA 9E94436	A	No DPF verified
1236	OC Vacuum Truck CA 9E98758	A	No DPF verified
1237	OC Vacuum Truck CA 9E98756	A	No DPF verified
1238	OC Vacuum Truck CA 9E98757	A	No DPF verified
1239	OC Vacuum Truck CA 47648H1	A	No DPF verified
1240	OC Vacuum Truck CA 9D17857	A	No DPF verified
1241	OC Vacuum Truck CA 9E24129	A	No DPF verified
1242	OC Vacuum Truck CA 9E24127	A	No DPF verified

REF	VEHICLE TYPE		EMISSION CHARACTERISTICS
1243	OC Vacuum Truck CA 9E24128	A	No DPF verified
459	Merli Concrete Pump 151	A	Has DPF
460	Merli Concrete Pump 115	A	Has DPF
461	Merli Concrete Pump 20	A	Has DPF
465	Merli Concrete Pump 61	A	Has DPF
466	Merli Concrete Pump 107	A	Has DPF
467	Merli Concrete Pump 59	A	Has DPF
517	#140519043 GTH-5519 Genie Forklift	A	Tier 4 Final
1160	HAMM HD10VV Roller 10029931	A	Tier 4 interim
1161	HAMM HD12VV Roller 10025317	A	Tier 4 interim
1162	HAMM 3205 Roller 10032114	A	Tier 4 interim
1333	Water Truck Lic No 4QAW494	A	2009 engine, no DPF verified
477	Loader 950K EIN 7K4L56	A	Tier 4
470	LinkBelt Crane RTC8090 SN ER3-3238	A	Tier 4
471	Loader 930K EIN AL8N43	A	Tier 4 interim
471	Loader 938K EIN AW6G39	A	Tier 4 interim
475	Roller EIN CL6M93	A	Tier 4 interim
474	Grader EIN CG4E58	A	Tier 4 interim
483	Murray Drilling Rig TM22D EIN CV9R93	A	Line of Sight waiver
484	JD 270LC Excavator	A	DPF installed
1349	Coffman Concrete Pavers (5 units)	A	Line of Sight waiver
1356	Hitachi 350 and 380 Excavator	A	Tier 4 interim
1357	Bragg 470 GLC Excavator	A	Tier 4 interim
1187	Coffman Water Truck License 74V3808	A	Has DPF installed
1188	Coffman Water Truck License 6E91612	A	A device is installed
1189	Coffman Paver - Duplicate of 1349	A	Line of Sight waiver
1190	Coffman Paver - Duplicate of 1349	A	Line of Sight waiver
1191	Coffman Paver - Duplicate of 1349	A	Line of Sight waiver
1192	Coffman Paver - Duplicate of 1349	A	Line of Sight waiver
1193	Coffman Paver - Duplicate of 1349	A	Line of Sight waiver
1194	Coffman Lube Truck	A	Has DPF installed
1195	Coffman Dump Truck License 01438M1	A	Has DPF installed
1196	Coffman Truck License 8Y97101	A	Has DPF installed
1197	Coffman Dump Truck License 7G46308	A	Has DPF installed
1198	Coffman Dump Truck License CP94187	A	Has DPF installed
1199	Coffman Dump Truck License CP35277	A	Has DPF installed
1200	Coffman Dump Truck License CP78769	A	Has DPF installed
1201	Coffman Dump Truck License CP86586	A	Has DPF installed
1202	Coffman Dump Truck License CP86587	A	Has DPF installed
1203	Coffman Dump Truck License CP86612	B	The truck is allowed to operate without a DPF only until the CARB-imposed deadline of June 30, 2014. It musthave a DPF installed by that date, or be removed from the site.
1204	Coffman Dump Truck License CP86613	A	Has DPF installed
1205	Coffman Dump Truck License CP86614	A	Has DPF installed
1206	Coffman Dump Truck License CP86615	A	Has DPF installed

REF	VEHICLE TYPE		EMISSION CHARACTERISTICS
1207	Coffman Dump Truck License 6X75745	A	Has DPF installed
1208	Coffman Dump Truck License 6Y36618	A	Has DPF installed
1209	Coffman Dump Truck License CP86675	B	The truck is allowed to operate without a DPF only until the CARB-imposed deadline of June 30, 2014. It must have a DPF installed by that date, or be removed from the site.
1210	International Crane License 53153H1	B	The crane is allowed to operate without a DPF only until the CARB-imposed deadline of June 30, 2014. It must have a DPF installed by that date, or be removed from the site.
1368	Various Excavators - 3 each	A	Tier 4
1419	Liebherr Crane LTM 1220-5.1	C	Must have DPF installed. 20 day exemption does not exist.
1163	Skid Steer Number 859761RA	A	Tier 4
1164	JLG Forklift Number 10070169	A	Tier 4
1165	JLG Forklift Number 10098569	A	Tier 4
1166	JLG Forklift Number 10100328	A	Tier 4
1167	JLG Forklift Number 10101701	A	Tier 4
1168	JLG Forklift Number 10102483	A	Tier 4
1169	JD 410J Backhoe Number 1721	A	Line of Sight waiver
1170	SWEEPER RIDE ON 8' WINDROW SM300 8FT	A	Tier 4
1171	JD Backhoe 310K Number 10059855	A	Tier 4
1172	JD Backhoe 310K Number 10059855	A	Tier 4
1173	TAKEUCHI Mini Excavator TB228 Number 10166930	A	Tier 4
1174	TAKEUCHI Mini Excavator TB235 Number 10171292	A	Tier 4
1175	TAKEUCHI Mini Excavator TB235 Number 10185238	A	Tier 4
1176	TAKEUCHI Mini Excavator TB250 Number 10146347	A	Tier 4
1177	HAMM Roller HD12VV Number 10191551	A	Tier 4
1178	JD Backhoe 310K Number 10164445	A	Tier 4
1179	Peterbilt Truck CA-0293690	A	Has DPF installed
1180	Kenworth Truck CA-49447	A	Has DPF installed
1181	Kenworth Truck CA- 294182	A	Has DPF installed
1182	Kenworth Truck CA-291482	A	Has DPF installed
1183	Peterbilt Truck CA-0292793	A	Has DPF installed
1184	Peterbilt Truck CA-0182395	A	Has DPF installed
1185	Peterbilt Truck CA-0426846	A	Has DPF installed
1186	Peterbilt Truck CA-317697	A	Has DPF installed
1211	JD 710 J BACKHOE Number 1722	A	Line of Sight waiver
1212	Dump Truck Number 1102	A	Has DPF installed
1213	JD 644 J LOADER Number 1642	A	Line of Sight waiver
1214	JD 710J BACKHOE Number 1650	A	Line of Sight waiver
1215	JD 35 D MINI EXCAVATOR Number 1723	A	Tier 4
1216	FORD F-750 DUMP TRUCK Number 2248	A	Tier 4
1217	FORD F-750 DUMP TRUCK Number 2249	A	Tier 4
1218	FORD F-750 WATER TRUCK Number 2250	A	Tier 4
1230	Penhall	C	no information
1231	Penhall	C	no information

REF	VEHICLE TYPE		EMISSION CHARACTERISTICS
1232	Penhall	C	no information
1233	Penhall	C	no information
1248	Shoring Engineers	C	requested 20 day exemption - does not exist
1251	Shoring Engineers	C	requested 20 day exemption - does not exist
1252	Shoring Engineers	C	requested 20 day exemption - does not exist
1253	Shoring Engineers	C	requested 20 day exemption - does not exist
1393	Hitachi Excavator 520 LCH-3	A	Line of Sight waiver
1254	Shoring Engineers	C	requested 20 day exemption - does not exist
1255	Shoring Engineers	C	requested 20 day exemption - does not exist
1256	Shoring Engineers	C	requested 20 day exemption - does not exist
1257	Shoring Engineers	C	requested 20 day exemption - does not exist
1258	Shoring Engineers	C	requested 20 day exemption - does not exist
1259	Shoring Engineers	C	requested 20 day exemption - does not exist
1260	Shoring Engineers	C	requested 20 day exemption - does not exist
1263	JD 210K Skip Loader Number 37087	A	Tier 4
1264	JD 210K Skip Loader	A	Tier 4
1265	JD 210K Skip Loader	A	Tier 4
1266	JD 210K Skip Loader	A	Tier 4
1267	JD 210K Skip Loader	A	Tier 4
1268	JD 210K Skip Loader	A	Tier 4
1269	JD 210K Skip Loader	A	Tier 4
1270	JD 210K Skip Loader	A	Tier 4
1271	JD 210K Skip Loader	A	Tier 4
1272	JD 210K Skip Loader	A	Tier 4
1273	JD 210K Skip Loader	A	Tier 4
1274	JD 210K Skip Loader	A	Tier 4
1275	JD 410K Backhoe	A	Tier 4
1276	JD 410K Backhoe	A	Tier 4
1277	JD 210K Skip Loader Number 37087	A	Tier 4
1278	JD 410K Backhoe	A	Tier 4
1279	JD 410K Backhoe	A	Tier 4
1280	35126 JD 450J Dozer ***	A	Tier 4
1281	35353 JD 524K Loader	A	Tier 4
1282	36670 JD 450J Dozer ***	A	Tier 4
1283	35336 JD 544K Loader	A	Tier 4
1284	36959 JD 524K Loader	A	Tier 4
1285	36458 JD 544K Loader	A	Tier 4
1286	36126 JD 544K Loader	A	Tier 4
1287	37862 JD 624K Loader	A	Tier 4
1288	36752 JD 544K Loader	A	Tier 4
1289	38031 JD 624K Loader	A	Tier 4
1290	36036 JD 550K Dozer	A	Tier 4
1291	35498 JD 644K Loader	A	Tier 4
1292	38032 JD 644K Loader	A	Tier 4
1293	38216 JD 624K Loader	A	Tier 4

REF	VEHICLE TYPE		EMISSION CHARACTERISTICS
1294	34822 JD 644K Loader	A	Tier 4
1295	35413 JD 710K Backhoe	A	Tier 4
1397	LinkBelt Crane RTC 8090 Number N4K3 3543	A	Tier 4
1398	JD Excavator 240 DLC EIN TN7P79	C	Needs line of sight letter
1372	Gradall Forklifts - Shoring Engineers (6)	A	Tier 4
498	Maxim Crane	A	Line of Sight waiver
437	Malcom Drilling	C	requested 20 day exemption - does not exist
491	Equipment Log May 2014	A	
522	Penhall Diesel Equipment	A	Tier 4
735	June Monthly Noise and Vibration Test Report (2014)	A	
861	CAT Backhoe	A	Tier 4
862	B95C Holland Backhoe	A	Tier 4
876	Doosan Excavator	A	Tier 4
1169	Wheel Loader 821F	A	Tier 4
1170	Sweeper SM300	A	Tier 4
1171	Backhoe 310K	A	Tier 4
1172	Backhoe 310K	A	Tier 4
1173	Mini Excavator	A	Tier 4
1174	Mini Excavator	A	Tier 4
1175	Mini Excavator	A	Tier 4
1176	Mini Excavator	A	Tier 4
1177	Smooth Roller	A	Tier 4
1178	Backhoe 310K	A	Tier 4
1179	Truck CA-0293690	A	Has DPF installed
1180	Truck CA-49447	A	Has DPF installed
1181	Truck CA-294182	A	Has DPF installed
1182	Truck CA-291482	A	Has DPF installed
1215	JD 35 D MINI EXCAVATOR	A	Tier 4
1296	JD 710K Backhoe Number 35412	A	Tier 4
1319	Coastline ZX670 Excavator	A	Tier 4
1320	Roller VIB Art Double Drum Smooth	A	Tier 4
1321	F750 Water Truck Serial #73403409	A	Engine is newer than 2007, its is 2012
1322	JD 824K Loader Number 38035	A	Tier 4
1323	JD 850K Dozer Number 35354	A	Tier 4
1324	F750 Water Truck Serial #73511510	A	Engine is newer than 2007, its is 2013
1325	JD 824K Loader Number 36774	A	Tier 4
1326	F750 Water Truck Serial #73408096	A	Engine is newer than 2007, its is 2012
1327	JD 850K Dozer Number 34429	A	Tier 4
1334	772G RDO Motor Grader SN #656483	A	Tier 4
1355	ABI Loader TM22D	A	Line of Sight waiver
1358	Lattice Boom Crane and Vibratory Pile Rig	C	requested 20 day exemption - does not exist
1375	ABI 16-20 Mobilram	C	Needs line of sight letter
1396	ABI TM22 Drill Rig	A	Has line of sight letter
1419	Liebherr Crane LTM 1220	A	Has line of sight letter

REF	VEHICLE TYPE		EMISSION CHARACTERISTICS
1608	Excavator ZX350	A	Tier 4
1297	Grader 672G	A	Tier 4
1298	Grader 672G	A	Tier 4
1299	Grader 672G	A	Tier 4
1300	Dozer 650K	A	Tier 4
1301	Grader 672G	A	Tier 4
1302	Dozer 700K	A	Tier 4
1303	Backhoe 710K	A	Tier 4
1304	Backhoe 710K	A	Tier 4
1305	Backhoe 710K	A	Tier 4
1306	Backhoe 710K	A	Tier 4
1307	Backhoe 710K	A	Tier 4
1308	Backhoe 710K	A	Tier 4
1309	Backhoe 710K	A	Tier 4
1310	Backhoe 710K	A	Tier 4
1311	Backhoe 710K	A	Tier 4
1312	Loader 724K	A	Tier 4
1313	Loader 744K	A	Tier 4
1314	Loader 724K	A	Tier 4
1315	Loader 744K	A	Tier 4
1316	Dozer 750K	A	Tier 4
1317	Loader 744K	A	Tier 4
1318	Grader 772G	A	Tier 4
1819	Blade CAT 140M3	A	Tier 4
1820	Skip loader	A	Tier 4
1249	20 Day exemption request for Shoring	C	no 20 day exemption exists
1250	20 Day exemption request for Shoring	C	no 20 day exemption exists

As noted in the above Table, specific pieces of diesel construction equipment was allowed to operate without a verified diesel emission control system (VDECS, “best available control device”) only within the period specified by the California Air Resources Board (CARB). Operation on the airfield beyond the CARB-imposed deadline was not allowed unless the equipment was retrofitted with a VDECS.

Also, it is important to note that “20-day exemptions” were not granted for any diesel construction equipment operating on the TBIT – East Apron project.

CFCI evaluated a total of 80 on-road trucks. Twenty-eight (28) meet or exceed the EPA 2007 standards and are equipped with a factory installed VDECS. Five (5) additional vehicles underwent a VDECS retrofit. It was determined that 34 on-road vehicles did not have a compatible CARB-verified or EPA certified VDECS available at the time construction commenced. Finally, 13 on-road trucks were found to have a compatible VDECS available; these vehicles were either awaiting VDECS installation prior to

accessing the airfield construction site or were removed from consideration by the construction contractor.

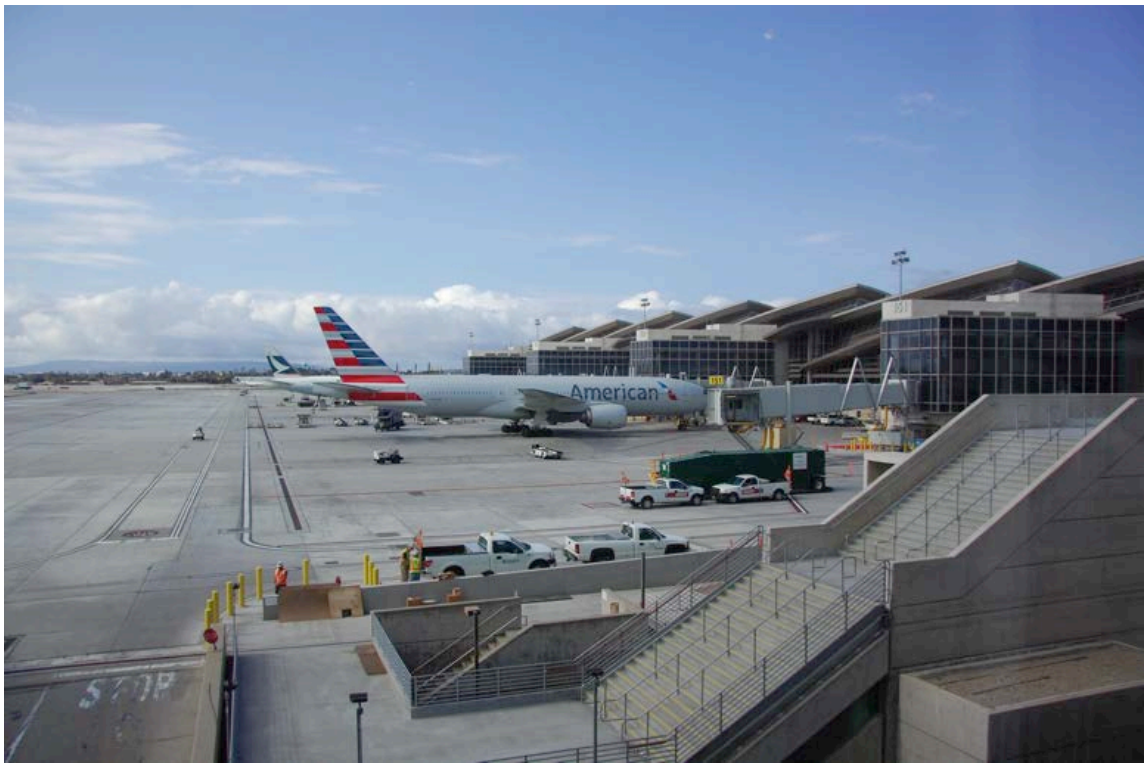
Relative to off-road diesel equipment, a total of 263 pieces of construction equipment have undergone independent evaluation and monitoring. One hundred-sixty (160) are certified by the US EPA as compliant with Tier 4 or Tier 4-Interim (Tier 4i) Emissions Standards – this equipment is configured with a factory-installed diesel emission control system.

In addition, thirty-seven (37) pieces of off-road equipment underwent a VDECS retrofit. Ten (10) pieces of equipment were determined to not have a VDECS available at the time construction commenced.

Twenty-two (22) pieces of equipment were granted a driver safety "line of sight" exemption in accordance with Cal/OSHA requirements and CBA Section X.F.4. A total of 30 vehicles were identified as having one or more compatible VDECS commercially available; these vehicles were either awaiting VDECS installation or were removed from project consideration.

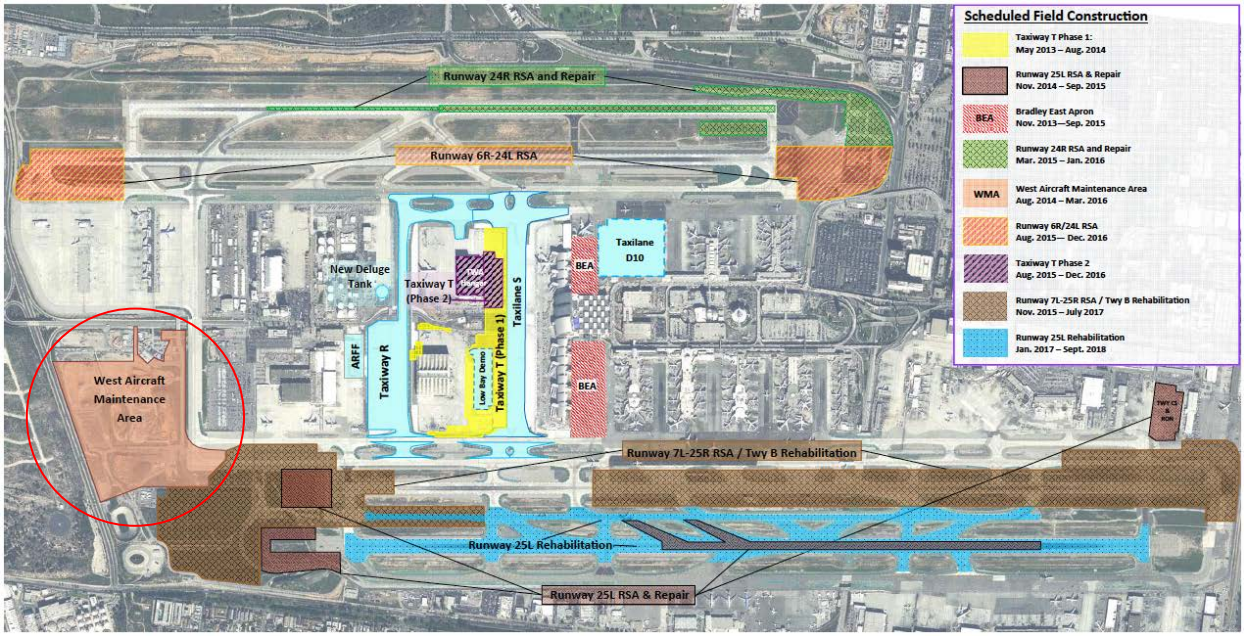
Finally, the Third Party Monitor was unable to identify any documentation relative to four (4) pieces of equipment – this equipment may no longer be proposed for airfield use.

Figure 1.2.1-3: TIBIT - East Aprons Nearing Project Completion



1.2.2 West Aircraft Maintenance Area (WAMA) - The West Aircraft Maintenance Area (WAMA) project was given partial Notice to Proceed on October 27, 2014. The WAMA Master Plan construction project is located at the far western edge of the airfield adjacent to Pershing Drive.

Figure 1.2.2-1: WAMA Construction Site Location



The following photos illustrate construction progress during the reporting period on the WAMA project.

Figure 1.2.2-2: WAMA Construction Site

Figure 1.2.2-3: WAMA Construction Progress

During the reporting period, a total of 360 pieces of equipment underwent Independent Third Party Monitor evaluation. These are shown in Table 1.2.3-1, below:

Table 1.2.2-1: WAMA Construction Equipment Submitted for Evaluation

Vehicle	EIN	Manufacturer	Model Year	Emissions Characteristics
Backhoe	EF6F49	JOHN DEERE	2014	T4-I
Skip Loader	NY4J83	JOHN DEERE	2013	T4-I
Excavator	RY9H86	PERKINS	2012	T4-I
Excavator	KB3U43	CAT	2012	T4-I
Rubber Tire Loader	DS8K85	PERKINS	2013	T4-I
Backhoe	AH4V53	JOHN DEERE	2012	T4-I
Skip Loader	BM9A93	JOHN DEERE	2013	T4-I
Rubber Tire Loader	YU7D39	PERKINS	2012	T4-I
Roller	BY5L86	CAT	2012	T4-I
Excavator	MP7C47	ISUZU	2011	T4-I
Excavator	HE9P36	CAT	2013	T4-I
Excavator	FY3C84	ISUZU	2010	T4-I
Excavator	RP3L33	ISUZU	2011	T4-I
Skip Loader	EX8K37	CASE	2012	T4-I
Excavator	LT5X49	YANMAR	2008	T4-I
Excavator	WW9F59	ISUZU	2011	T4-I
Excavator	UD5B75	CAT	2012	T4-I
Excavator	EP9R96	MITSUBISHI	2012	T4-I
Excavator	CH4C46	ISUZU	2012	T4-I
Dozer	HM9D78	CAT	2011	T4-I
Excavator	CG9U46	CAT	2011	T4-I
Excavator	SV6W45	CAT	2012	T4-I
Excavator	CF4E66	ISUZU	2012	T4-I
Excavator	HB3S59	MITSUBISHI	2012	T4-I
Excavator	SA8V74	CAT	2012	T4-I
Excavator	DM5F68	CAT	2012	T4-I
Excavator	YE6R76	YANMAR	2011	T4-I
Dozer	CE8X48	JOHN DEERE	2011	T4-I
Excavator	VJ6G97	CAT	2011	T4-I
Water truck		Water truck 3730, 2014 model		Tier 4F
Water truck		Water truck 3731, 2014 model		Tier 4F
		Initial, 2014		
Generator		United rentals - trailers - start 12/3/14	2014	
Forklift	DV3U39	King Equipment Forklift EIN DV3U39	2013	T4-I
Loader				
Loader	EV8E85	Coffman Loader 972K CAT		T4-I
Loader				
Loader	XL5A77	Coffman Loader 950K CAT		T4-I
Forklift		0072 Ahern Equipment Forklift 144138		

Vehicle	EIN	Manufacturer	Model Year/Tier
Forklift		0072 Ahern Equipment Forklift 144138	T4-I
Dozer		0073 Ecco Dozer 5142	
Dozer	RS9G54	0073 Ecco Crawler Tractor 5142	Tier 4F
Scraper		Coffman Specialties-Scraper-CT1141	Tier 0
Scraper		Coffman Specialties-Scraper-CT1171	Tier 0
Scraper		Coffman Specialties-Scraper-CT1171	Tier 2
Scraper		Coffman Specialties-Scraper-CT1172	
Scraper		Coffman Specialties-Scraper-CT1172	Tier 2
Scraper		Coffman Specialties-Scraper-CT1194	
Scraper		Coffman Specialties-Scraper-CT1194	Tier 3
Scraper		Coffman Specialties-Scraper-CT1195	
Scraper		Coffman Specialties-Scraper-CT1195	Tier 3
Loader	SH8H78	LaLonde CAT 966K - Tier 4	Tier 4F
Pavement Surfacer		Pavement surfacer	T4-I
Pavement Surfacer		Pavement surfacer	Tier 3
Pavement Surfacer		Pavement surfacer 1049	Tier 3
Pavement Surfacer		Pavement surfacer	Tier 3
Pavement Surfacer		Pavement surfacer 1048	Tier 3
Truck		ARB Vacuum Truck - 216005	2012
Excavator, mini		Ahern-Mini Excavator - 133308	Tier 4F
Dozer D10		0101 for a D10 CAT Dozer Sukut 10-38	Tier 3
Dozer D10		0101 for a D10 CAT Dozer Sukut 10-38	Tier 3
Dozer D10	FL3F34	0101 for a D10 CAT Dozer Sukut 10-38	Tier 3
Rock Truck		CAT 740 haul truck	Tier 3
Rock Truck		CAT 740 haul truck	Tier 3
Rock Truck		CAT 740 haul truck	Tier 3
Rock Truck		CAT 740 haul truck	Tier 3
Rock Truck		CAT 740 haul truck	Tier 3
Rock Truck		CAT 740 haul truck	Tier 3
Rock Truck		CAT 740 haul truck	Tier 3
Rock Truck		CAT 740 haul truck	Tier 3
Excavator		Griffith - CAT 328D Excavator - 3685	T4-I
Loader		Finegrade Rubber Tire Loader CAT 980-2	Tier 1
Loader		Finegrade Rubber Tire Loader CAT 980-2	Tier 1
Dozer		Finegrade Rubber Tire Dozer	Tier 0
Sweeper		Griffith Sweeper - 3717	N/A

Vehicle	EIN	Manufacturer	Model Year/Tier
Sweeper		Griffith Sweeper - 3717	N/A
Sweeper		Griffith Sweeper - 3738	CNG
Sweeper		Griffith Sweeper - 3734	CNG
Loader		CAT 980C	Tier 0
Loader		CAT 980C	Tier 0
Motor Grader		Fine Grade Equip. CAT 140H Grader - 140-10	Tier 1
Motor Grader		Fine Grade Equip. CAT 140H Grader - 140-11	Tier 1
Motor Grader		Fine Grade Equip. CAT 140H Grader - 140-12	Tier 1
Loader	WR6X39	Quinn Cat Loader 982M	Tier 4F
Paver SSPD-8	MB8W79	Griffith Company – Paving Equipment – 3644	T4-I
Roller	GK7H49	Griffith Company – CAT CB24 Roller – 3591	T4-I
Scraper	WN4U44	Geerlings – CAT 637D Scraper– 2	Tier 3
Scraper	EG7C98	Geerlings – CAT 637D Scraper– 3	Tier 3
Scraper	PJ6G35	Geerlings – CAT 637D Scraper– 4	Tier 3
Scraper	AL4B53	Geerlings – CAT 637D Scraper– 5	Tier 3
Backhoe	VD9H74	Griffith Deere 710K Backhoe - 3630	T4-I
Scraper	GB3V66	Geerlings – CAT 637D Scraper– 6	Tier 3
Scraper	GA6E77	Geerlings – CAT 637D Scraper– 7	Tier 3
Scraper	CH8G76	Geerlings – CAT 637D Scraper– 8	Tier 3
Roller		Griffith – Roller – 3629	Tier 3
Roller	UG3M59	Griffith – Roller – 3629	Tier 3
Roller	GC6T36	Griffith – Roller – 3705	T4-I
Loader	YW4X54	Griffith – Rubber Tire Loader – 3606	T4-I
Backhoe	DX4H54	Griffith – Backhoe – 3678	T4-I
Skip Loader	FV5W99	Griffith – Skip Loader – 3713	T4-I
Skip Loader	KR3A59	Griffith – Skip Loader – 3712	T4-I
Backhoe	HK8F43	Griffith – Backhoe - 3679	T4-I
Loader	HY7B78	Griffith-Skid Steer Loader – 3670	T4-I
Loader	UM6M78	Griffith - Rough Terrain Forklift – 3709	T4-I
Motor Grader	GG9W87	John Deere 772 Grader -	Tier 4F
Dozer	ET8W73	Geerlings – CAT 824C Dozer - 1	Tier 3
Loader	WE7X53	Quinn Cat Loader 980M - 417 hp	Tier 4F
Dozer	HK6L69	Sukut Cat Dozer 824B	Tier 3
Loader		So Cal Grading – Rubber Tire Loader– 810	
Equipment List		November, 2014	
Dozer	AM7U83	Coffman Specialties – CAT D9T Dozer – CT1186	Tier 3
Forklift	TB6V79	Griffith - Rough Terrain Forklift – 3710	T4-I
Motor Grader	SV7U78	SoCal Grading – Motor Grader– 510	Tier 4F
Excavator	XV4K67	SoCal Grading – 336EL Excavator –	Tier 4

Vehicle	EIN	Manufacturer	Model Year/Tier
Scraper	LJ5F47	Fine Grade Equipment – Scraper – 623E -8	Tier 3
Loader	GF7N56	SoCal Grading – Rubber Tire Loader 950K – KC809	T4-I
Scraper	PR3L74	Fine Grade Equipment – Scraper – 623-10	Tier 3
Scraper	KM6D73	Fine Grade Equipment – Scraper – 623-5	Tier 3
Scraper	GM9N87	Fine Grade Equipment – Scraper – 623-9	Tier 3
Dozer	YW9K96	Fine Grade Equipment – Dozer – D8-1	Tier 3
Dozer	VY5N95	SoCal Grading – Rubber Tire Dozer – CTZ8	
Motor Grader	MW6L34	John Deere 672GP Grader -	Tier 4F
Loader	F000344	Griffith – Skid Steer Loader – 3732	Tier 4F
Backhoe	CE7Y99	King – Backhoe 401K – 130410006	T4-I
Excavator	XE7F94	Coffman Specialties – 349E Excavator – CT1193	T4-I
Truck - Bottom Dump	CA-244028	Cal Earth Transport – Bottom Dump – CA-244028	2011
Truck - Bottom Dump	CA-234172	Cal Earth Transport – Bottom Dump	2009
Truck - Bottom Dump	CA-046321	Cal Earth Transport – Bottom Dump	2009
Truck - Bottom Dump	CA-0452023	Cal Earth Transport – Bottom Dump	2008
Truck - Bottom Dump	CA-234172	Cal Earth Transport – Bottom Dump	2008
Truck - Bottom Dump	CA-421530	Cal Earth Transport – Bottom Dump	2008
Truck - Bottom Dump	CA-421530	Cal Earth Transport – Bottom Dump	2007
Truck - Bottom Dump	CA-456723	Cal Earth Transport – Bottom Dump	2007
Truck - Bottom Dump	CA-248775	Cal Earth Transport – Bottom Dump	2008
Truck - Bottom Dump	CA-0165858	Cal Earth Transport – Bottom Dump	2008
Forklift	EU7D89	King – Reach Forklift – 18	T4-I
Dozer	TN5F56	FINE GRADE - RUBBER TIRE DOZER - 566	Tier 3
Water Truck	58820D1	JZ Water Truck- 2010	2010
Dust Log		Fugitive Dust Log - Nov 2014	
Motor Grader	CT7W37	Fine Grade 18G Motor Grader	Tier 3
Truck - Bottom Dump	CA-0152627	Cal Earth Transport – Bottom Dump	2006
Truck - Bottom Dump	CA-0032340	Cal Earth Transport – Bottom Dump	2006
Truck - Bottom Dump	CA-172873	Cal Earth Transport – Bottom Dump	2006
Truck - Bottom Dump	CA-0046289	Cal Earth Transport – Bottom Dump	1998
Truck - Bottom Dump	CA-0332817	Cal Earth Transport – Bottom Dump	2000
Truck - Bottom Dump	CA-0290163	Cal Earth Transport – Bottom Dump	2001
Truck - Bottom Dump	CA-0234897	Cal Earth Transport – Bottom Dump	2001
Truck - Bottom Dump	CA-0181154	Cal Earth Transport – Bottom Dump	1999
Truck - Bottom Dump	CA-0196992	Cal Earth Transport – Bottom Dump	2000
Truck - Bottom Dump	CA-0222141	Cal Earth Transport – Bottom Dump	2000
Truck - Bottom Dump	CA-0269106	Cal Earth Transport – Bottom Dump	1999

Vehicle	EIN	Manufacturer	Model Year/Tier
Truck - Bottom Dump	CA-0182138	Cal Earth Transport – Bottom Dump	1998
Truck - Bottom Dump	CA-0284883	Cal Earth Transport – Bottom Dump	1999
Truck - Bottom Dump	CA-0311071	Cal Earth Transport – Bottom Dump	1999
Dozer	EG7H37	Ecco Rubber Tire Dozer -3857	Tier 3
Truck Super 10		Super 10 dump truck	2010
Truck Super 10		Super 10 dump truck	2010
Truck Super 10		Super 10 dump truck	2010
Truck Super 10		Super 10 dump truck	2010
Truck Super 10	2	CPR – Super 10 – CA-6X79616	1998
Truck Super 10	2	CPR – Super 10 – CA-70626K1	1998
Truck Super 10	2	CPR – Super 10 – CA-8W05667	1999
Truck Super 10	2	CPR – Super 10 – CA-66449B1	1999
Truck Super 10	2	CPR – Super 10 – CA-7X19812	1999
Truck Super 10	2	CPR – Super 10 – CA-8M56827	1999
Truck Super 10	2	CPR – Super 10 – CA-7P88813	1999
Truck Super 10		CPR – Super 10 – CA-51993D1	2000
Truck Super 10		CPR – Super 10 – CA-7S90580	2000
Truck Super 10	2	CPR – Super 10 – CA-7V65878	2000
Truck Super 10	2	CPR – Super 10 – CA-76328D1	2006
Truck Super 10	2	CPR – Super 10 – CA-21808E1	2009
Roller		Fine Grade – Roller – C-25	Tier 3
Motor Grader	JR5A94	Fine Grade – Grader – 160-1	Tier 3
Truck Super 10	CA-0317697	Cal Earth Transport	2012
Truck Super 10	CA-0415450	Cal Earth Transport	2013
Truck Super 10	CA-0415450	Cal Earth Transport	2013
Truck Super 10	CA-0293690	Cal Earth Transport	2013
Truck Super 10	CA-225863	Cal Earth Transport	2010
Truck Super 10	CA-049447	Cal Earth Transport	2008
Truck Super 10	CA-0426846	Cal Earth Transport	2008
Truck Super 10	CA-0218486	Cal Earth Transport	2009
Truck Super 10	CA- 0182395	Cal Earth Transport	2007
Truck Super 10	CA-218486	Cal Earth Transport	2009
Truck Super 10	CA-294182	Cal Earth Transport	2009
Truck Super 10	CA-225863	Cal Earth Transport	2009
Truck Super 10	CA-294182	Cal Earth Transport	2008
Truck Super 10	CA-294182	Cal Earth Transport	2008
Truck Super 10	CA-218486	Cal Earth Transport	2009
Truck Super 10	CA-225863	Cal Earth Transport	2007
Truck Super 10	CA-103169	Cal Earth Transport	2013
Grader	ED9H58	Fine Grade Equipment Grader- 16-28	Tier 3

Vehicle	EIN	Manufacturer	Model Year/Tier
Dozer	NE5U99	Geerlings – D8-Dozer– 1	Tier 3
Loader	AA5W75	Fine Grade – JD Loader 210LJ-5	Tier 3
Excavator	AK4M77	Fine Grade – Excavator -- 328-1	Tier 3
Scraper	JW5C94	Fine Grade – SCRAPER – 631-1	Tier 3
Roller	TD7W58	NEFF RENTAL – ROLLER – 791670	Tier 3
Loader	SS5D96	Geerlings – CAT 988-B LOADER -988-1	Tier 3
Grader	KP7K75	Coastline Equipment – GRADER – 35820	T4-I
Forklift	TL3X84	KING – ROUGH TERAIN FORKLIFT – 35820	T4-I
Loader	BR7C39	Coffman Specialties – Loader – CT1198	T4-F
Excavator	CT-1199	Coffman Specialties – Excavator – CAT 336	T4-F
Loader		Nold's – Skip loader – 01	Tier 3
Excavator	SH8H78	Fine Grade – Excavator CAT 966K – 450-1	T4-I
Scraper	RX8J67	Fine Grade – SCRAPER – 762-2	Tier 3
Scraper	GD7A47	Fine Grade – SCRAPER – 762-3	Tier 3
Haul truck off-road	NW6S74	Fine Grade – Off Highway Truck – AT-2	Tier 3
Roller	TL4T98	Fine Grade – Roller – C-23	Tier 3
Crawler tractor	KY8T38	Fine Grade – Crawler Tractor – 850-1	Tier 3
backhoe	WM7L67	Royal – CAT 430F Backhoe – TR-056	T4-I
ditch witch	TN7E89	Royal – Ditch Witch – TL-106	T4-I
Roller	DT4C36	Fine Grade Equipment – 84" Roller – 621053	T4-I
Forklift	WB3R77	Royal – Rough Terrain Forklift – FL-018	T4-I
Loader	SS3D94	So Cal Grading – Rubber Tire Loader– 810	T4-I
Loader	JJ8J98	LaLonde – Loader – 819	Tier 3
roller	MT4X75	Fine Grade Equipment – 84" Roller – 210047	Tier 3
roller	MT4X75	Fine Grade Equipment – 84" Roller – 210047	Tier 3
roller	SU9Y34	Fine Grade Equipment (Ahern) – 84in Roller – 139992	T4-I
Truck Super 10	CA-0317697	Cal Earth Transport	2012
Truck Super 10	CA-0415450	Cal Earth Transport	2013
roller	TD7W58	Fine Grade Equipment – 84in Roller – 791670	Tier 3
roller	HE5N86	Fine Grade Equipment – 84in Roller – 792037	Tier 3
Forklift	HR6D74	King Equipment – Forklift – 13125502	Tier 4i
Truck Super 10	15692P1	CPR – Super 10 – CA-15692P1	2014
Truck Super 10		Super 10 – CA-86N18K1	2011
Truck Super 10		Super 10 – CA-15563L1	2012

Vehicle	EIN	Manufacturer	Model Year/Tier
Scraper	RT8A74	Coffman Specialties – Scraper – CT1162	Tier 3
grader	FE9A99	Coffman Specialties – Motor Grader – CT1183	Tier 2
grader	DD7F38	Fine Grade Equipment – GRADER – 16-21	Tier 3
Truck Super 10		On Road Truck – CPR – Super 10 – CA-48873G1	2007
Truck Super 10		On Road Truck – CPR – Super 10 – CA-48873G1	2007
grader	VR9K95	Fine Grade Equipment – GRADER – 16-22	Tier 3
grader	LW7M96	Fine Grade Equipment – GRADER – 16-24	Tier 3
paver	XC6Y68	Coffman Specialties – Asphalt Paver – AP 414	Tier 3
Roller	MJ6S65	Quinn Rental – Roller - 110322	Tier 4i
Screen	TV4R53	Reliable Screening – Screen - 8630	Tier 3
Forklift	TL3X84	Kings Equipment – Rough Terrain Forklift – 130642013	Tier 4i
backhoe	TR8E46	Royal – Backhoe – TR057	Tier 4i
Forklift	RB6B78	King Equipment – Rough Terrain Forklift – 140642016	Tier 4i
compressor		Royal – Air Compressor– AC-033	under 50 hp
compressor		Royal – Air Compressor– AC-034	under 50 hp
dozer	XE6V64	LaLonde- Dozer-845	Tier 3
skidsteer	JJ9G58	Bobcat skidsteer #146	Tier 4i
Truck Super 10	CA-225863	Cal Earth Transport	2010
Truck Super 10	CA-218486	Cal Earth Transport	2009
Grader	ED9H58	Fine Grade Equipment Grader- 16-28	Tier 3
Dozer	NE5U99	Geerlings – D8-Dozer– 1	Tier 3
Loader		Nold's – Skip loader – 01	Tier 3
roller	YX3F79	Fine Grade Equipment – Roller – C-26	Tier 3
excavator	HJ8V95	Royal – Excavator– TR-055	Tier 4F
excavator	TN7E89	Royal – Vacuum Excavator– TL-106	under 50 hp
bore machine	AV4W78	Royal – Bore Machine – BU-024	Tier 4i
backhoe	XT3N59	Nold's – Backhoe – 2	Tier 4i
backhoe	HM6K54	Nold's – Backhoe – 3	Tier 4i
Water Truck	116069	Sun State – Water Truck – 116069	2013
excavator	MX6F64	LaLonde – Excavator – B007	Tier 4i
excavator	YW7C93	Western Rental-Excavator-W1288	Tier 4i
dozer	MME01677	Coffman-Dozer-1202	Tier 4i
Roller	DUPE of 424	Fine Grade – Roller – C-26	
Truck Super 10	OZZYSTK	Cal Earth Transport – Super 10 – CA-0197873	2009
Truck Super 10	85552R1	Cal Earth Transport – Super 10 – CA-0229745	2015
skidsteer	JJ9G58	Sterndahl-Skid Steer 145	Tier 4i
skidsteer	RB4U38	Sterndahl-Skid Steer 119	Tier 3
skidsteer		Sterndahl-Skid Steer 118	Tier 3

Vehicle	EIN	Manufacturer	Model Year/Tier
Sweeper		Sterndahl – Sweeper – CA-7CNW752	2012
Truck Super 10	CA-0317697	Cal Earth Transport	2012
Truck Super 10	CA-225863	Cal Earth Transport	2010
Truck Super 10		Cal Earth Transport – Super 10 – CA-0445666	2007
Bottom Dump Truck	CA-0312135	Cal Earth Transport – Rhino 2055	2007
Bottom Dump Truck		Cal Earth Transport – Rhino 2038	2008
Bottom Dump Truck		Cal Earth Transport – Rhino 2039	2008
Bottom Dump Truck		Cal Earth Transport – Rhino 2040	2007
Bottom Dump Truck		Cal Earth Transport – Rhino 2041	2006
Bottom Dump Truck		Cal Earth Transport – Rhino 2042	2008
Paving machine	BV5E98	Papich Paving Machine - #PV2005	Tier 4i
Paving machine	FU9U65	Papich Paving Machine - #PV2004	Tier 4i
Truck Super 10	CA-0293690	Cal Earth Transport Lic 85823R1	2013
Truck Super 10	CA-225863	Cal Earth Transport CA-225863	2010
Truck Super 10	CA-294182	Cal Earth Transport CA-294182	2008
Truck Super 10	CA-225863	Cal Earth Transport CA-225863	2007
Truck Super 10	OZZYSTK	Cal Earth Transport – Super 10 – CA-0197873	2009
Truck Super 10	CA-338444	Cal Earth Super 10 CA-338444	2007
Loader	WL9J68	Fine Grade/Heavy Equipment Rental – Loader-L707	Tier 4i
Truck		Cal Earth Transport – Bottom Dump – 2043	2006
Truck		Cal Earth Transport – Bottom Dump – 2044	2008
Truck		Cal Earth Transport – Bottom Dump – 2045	2007
Truck	9F08172	Cal Earth Transport – Bottom Dump – 2046	2006
Truck	9E99424	Cal Earth Transport – Bottom Dump – 2047	2008
Truck		Cal Earth Transport – Bottom Dump – 2048	2008
Truck		Cal Earth Transport – Bottom Dump – 2049	2009
Truck		Cal Earth Transport – Bottom Dump – 2050	2009
Truck		Cal Earth Transport – Bottom Dump – 2051	2008
Truck		Cal Earth Transport – Bottom Dump – 2052	2008

Vehicle	EIN	Manufacturer	Model Year/Tier
Truck		Cal Earth Transport – Bottom Dump – 2059	1999
Truck		Cal Earth Transport – Bottom Dump – Mateo	2007
Roller	FT4X85	Herrmann Equipment Inc, Bomag Roller #101921121007	Tier 4
Roller	WJ4F7	Herrmann Equipment Inc, Bomag Roller #901A22911045	Tier 3
Paver	RG4P55	MJA Consulting Terex/Cedarapids Paver - #60130	Tier 2
Shuttle Buggy	YB8F38	Papich Shuttle Buggy - #PV4005	Tier 1
Backhoe	AG9M85	Royal – Backhoe – TR058	Tier 4
skidsteer	LN7D46	Royal – Skid Steer – TR051	Tier 3
Paving Equipment		CP-4052 John Deere	
Paving Equipment		CP-4053 - RTP 500 Placer	
Paving Equipment		CP-4063 RTP 500 Placer	
Paving Equipment		CP-4065 CAT	
Paving Equipment		CP-4076 CAT	
Paving Equipment		CP-413 CAT	
Paving Equipment		CP-414 CAT	
Paving Equipment		CP-417 - GP 4000 Paver	
Paving Equipment		CP-424 Cure Rig	
Paving Equipment		CP-424 ???	
Paving Equipment		CP-411 Gomaco Paver 2500	
Dump Truck	01438M1	Coffman Specialties – Dump Truck – HT555	2011
Dump Truck		Coffman Specialties – Dump Truck – HT560	2008
Dump Truck		Coffman Specialties – Dump Truck – HT561	2008
Dump Truck		Coffman Specialties – Dump Truck – HT562	2008
Dump Truck		Coffman Specialties – Dump Truck – HT563	2008
Dump Truck		Coffman Specialties – Dump Truck – HT568	2015
Dump Truck		Coffman Specialties – Dump Truck – HT569	2015
Dump Truck		Coffman Specialties – Dump Truck – HT570	2015
Dump Truck		Coffman Specialties – Dump Truck – HT571	2015
Dump Truck		Coffman Specialties – Dump Truck – HT572	2015
Dump Truck		Coffman Specialties - Dump Truck - HT559 w/ DPF 3+	2000
Dump Truck		Coffman Specialties - Dump Truck - HT558 w/ DPF 3+	2003
Dump Truck		Coffman Specialties - Dump Truck - HT608 w/ DPF 3+	2005
Dump Truck		Coffman Specialties - Dump Truck - HT607	2005

Vehicle	EIN	Manufacturer	Model Year/Tier
Dump Truck		Coffman Specialties - Dump Truck - HT567 w/ DPF 3+	2006
Dump Truck		Coffman Specialties - Dump Truck - HT582 w/ DPF 3+	2000
Dump Truck		Coffman Specialties - Dump Truck - HT580 w/ DPF 3+	2000
Dump Truck	556	Coffman Specialties - Dump Truck - HT564 w/ DPF 3+	2006
Dump Truck	557	Coffman Specialties - Dump Truck - HT565 w/ DPF 3+	2006
Dump Truck	558	Coffman Specialties - Dump Truck - HT566 w/ DPF 3+	2006
skidsteer	RB4U38	Sterndahl-Skid Steer 119	Tier 3
skidsteer		Sterndahl-Skid Steer 118	Tier 3
Truck Super 10		On Road Truck – CPR – Super 10 – CA-48873G1	2007
Roller	YG5H33	Trinity – Roller – 614	Tier 3
Paver		Coffman Specialties - Paver - CP411	
Truck	79668M1	Coffman Specialties - Support Truck - BT548	2012
Water Truck		Ahern Rentals - Water Truck - 147015	2014
Rock Truck	JS5N48	ECCO- Rock Truck - 2538	Tier 4i
Rock Truck	NG9J49	ECCO- Rock Truck - 2539	Tier 4i
Truck Super 10		Cal Earth Transport – Super 10 – CA-0218486	2009
Truck Super 10		Cal Earth Transport – Super 10 – CA-0364161	2008
Truck Super 10		Cal Earth Transport – Super 10 – CA-454422	2007
Truck Super 10		Cal Earth Transport – Super 10 – CA-354841	2011
Saw Cutter	RJ5C57	Royal - Rockwheel Saw Cutter- TN-018	Tier 4i
Paver	ND5H85	Blaw-Knox PF3200 Wheeled Paver 10'	Tier 3
Roller	WN6F83	Cat CB24 DD Smooth 47" Asphalt Vibratory Roller - 545	Tier 4i
Roller	CR9U97	Cat CB24 DD Smooth 47" Asphalt Vibratory Roller - 546	Tier 4i
Loader	RY7E87	John Deere 210 LJ 4WD Skiploader - 443	Tier 3
Paver	XG9L98	Griffith – Paver – 3573	Tier 4i
Paver	JX9H86	Griffith – Paver – 3605	Tier 3
Vacuum Truck	216004	ARB – Vacuum Truck – 216004	2012
Vacuum Truck	216006	ARB – Vacuum Truck – 216006	2012
Vacuum Truck	216007	ARB – Vacuum Truck – 216007	2012
Vacuum Truck	216008	ARB – Vacuum Truck – 216008	2012
Vacuum Truck	216009	ARB – Vacuum Truck – 216009	2012
Roller Screed	0001	Coffman – Roller Screed – 0001	18 hp
Tracked Drilling		Royal – Barney Drilling – 0007 - Texoma 900	Tier 4
Skidsteer	no EIN	Alcorn – Skidsteer – 3L7	Tier 2

The equipment shown in the above Table is summarized as follows:

Table 1.2.2-2: WAMA Equipment Summary

Total Vehicles & Equipment Evaluated*	360
Total On-Road Vehicles Assessed	142
Total Off-Road Equipment Assessed	218
Vehicles & Equipment Disapproved by LAWA	**62**

With respect to off-road equipment, a total of 218 pieces of construction equipment underwent independent monitoring. A breakdown of WAMA off-road equipment is shown below in Table 1.2.2-3:

Table 1.2.2-3: WAMA Off-Road Equipment Summary

Equipment Disapproved for Airfield Use	50
Number of Approved Equipment Certified to…	
Tier 4 or Tier 4i	100
Tier 3	63
Tier 2	4
Tier 1	1
Off-Road Equipment Exemptions…	
20-Day Exemption	7
Line of Sight - OSHA	11
Small Displacement (< 50 hp)	3
VDECS Incompatibility or Limited Equipment Availability	46

As shown above, 50 pieces of off-road construction equipment was disapproved for airfield use. The reasons for disapproval vary on a case-by-case basis; however, most often disapproval was due to the lack of a VDECS device. The majority of off-road equipment – one hundred (100) pieces - were certified by the US EPA as compliant with Tier 4 or Tier 4-Interim Emissions Standards – this equipment is configured with a factory-installed diesel emission control system.

Figure 1.2.2-4: Example of Tier 4 Equipment Used on WAMA

Relative to on-road vehicles, 142 vehicles underwent independent assessment. The vehicle types are shown below in Table 1.2.2-4:

Table 1.2.2-4: WAMA On-Road Vehicles Summary

Vehicles Disapproved for Airfield Use	12
Vehicles Approved for Airfield Use…	
CNG-Fueled Street Sweepers	3
Water Trucks	5
Vacuum Trucks	6
Support/Other Trucks	5
Concrete & Aggregate Haul Trucks	111
On-Road Vehicle Exemptions…	
Identified as Not Compatible with BACT Device or Limited Vehicle Availability	32

As shown above, the majority of on-road vehicles used on WAMA are concrete and aggregate haul trucks. An evaluation of this vehicle type was performed to determine vehicle model years and the emission control systems utilized during WAMA construction. The following is a breakdown of concrete and aggregate haul trucks used on WAMA by model year:

Figure 1.2.2-5: Haul Truck Makeup on WAMA

Model Year	Number	Percent
1998	4	4%
1999	10	9%
2001	2	2%
2003	1	1%
2005	1	1%
2006	7	6%
2007	20	18%
2008	23	21%
2009	14	13%
2010	8	7%
2011	4	4%
2012	4	4%
2013	6	5%
2014	1	1%
2015	6	5%
Totals	111	100%

- Pre-2007 Trucks Granted Exemption
- 25 Trucks / 23%
- 2007 or Newer: 86 / 77%
- 2010 or Newer: 29 / 26%

As shown, approximately 77% of haul trucks approved for use on WAMA are model year 2007 or newer – these vehicles are equipped with a factory-installed VDECS, in this case a level 3 diesel particulate filter. Approximately 26% of vehicles are model year 2010 or newer and utilize selective catalytic reduction (SCR) in addition to the particulate filter – SCR is a VDECS that reduces emissions of oxides of nitrogen (NOx), an ozone precursor pollutant whose reduction is of high importance to the South Coast region.

1.2.3 Qantas Hangar - The Qantas Hangar project is being implemented coincident with the WAMA project; as such, the construction equipment utilized on WAMA is applicable to the Qantas Hangar. The photo, below, shows the foundation excavation work being performed at the Qantas Hangar site:

Figure 1.2.3-1: Qantas Hangar Construction Site

Task 2: Demonstration Projects

Section X.F.2 of the CBA states that LAWA may allow construction-related diesel equipment to be outfitted with new emission control systems that are not CARB verified or EPA certified for use for on-road or off-road vehicles or engines. Such projects will be designated by LAWA as "Demonstration Projects". The roles and responsibilities of the Independent Third Party Monitor as they relate to Demonstration Projects is set forth in Task 2 of the contract and includes the following two primary subtasks:

- Task 2.1 – The Third Party Monitor shall perform a technical evaluation of the proposed demonstration technology and provide written findings to the Coalition Representative and LAWA. The Third Party Monitor shall also assist with the implementation of a Demonstration Project, including identifying suitable emission control devices and Demonstration Project funding sources;

- Task 2.2 – Upon acceptance by LAWA, the Third Party Monitor shall monitor, document, and report independently from LAWA, compliance of the demonstration equipment with all defined Demonstration Project requirements, including but not limited to the pollution reduction requirements specified in Section X.F.3 of the CBA.

No demonstration projects were conducted during the six-month period of July 1st through December 31st 2015.

Task 3: Emission Reduction Standard

Section X.F.1 of the Community Benefits Agreement (CBA) for the LAX Master Plan Program requires that all diesel equipment used for construction be outfitted with the best available emission control devices, primarily to reduce diesel particulate matter which is on the order of 10 microns[3] in diameter (PM_{10}), and fine particulate, which is on the order of 2.5 microns in diameter ($PM_{2.5}$). A secondary objective of this requirement is to reduce oxides of nitrogen emissions (NO_x), which are ozone precursors. This section also states that under no circumstance shall an emission reduction device or strategy used on the LAX Master Plan Program construction site increase the emission of any pollutant above that which is the standard for that engine.

The role and responsibilities of the Independent Third Party Monitor as it relates to Section X.F.1 of the CBA is delineated in the following contract Task statements:

- Task 3.1 - Contractor shall monitor, document, and report independently from LAWA, compliance of each piece of diesel construction equipment used pursuant to CBA X.F.1. as it relates to meeting or exceeding Level 2 diesel emission reductions for a similar sized engine;
- Task 3.2 – Contractor shall monitor, document, and report independently from LAWA, compliance of each piece of diesel construction equipment used pursuant to CBA X.F.1 to ensure its emission reduction device or strategy does not result in an increase of any pollutant above that which is standard for that engine;
- Task 3.3 – Contractor shall monitor, document and report on emission reductions of NO_x, ROG, PM and CO achieved through the use of best available control technology.

[3] One micron equals $1x10^{-6}$ meter or 0.000001 meter.

Task 3.1 - Monitor, document, and report equipment compliance with Level 2 requirement.

As summarized above in Task 1, the Third Party Monitor compiled a database of LAX Master Plan project equipment. This database is continually updated with new information collected from LAWA's environmental monitor staff on behalf of the construction contractors or visual inspection by CFCI. As part of this inventory, the Task 1 effort included an equipment-by-equipment review for applicability of approved Best Available Control Technologies (BACT). Specifically, the equipment listed in this master database was compared against all available Verified Diesel Emission Control Systems (VDECS), with first priority given to Level 3 diesel emission reductions.

Not all equipment proposed for operation on the Tom Bradley Terminal Project is necessarily used – contractors provide a list of potential needs prior to the start of construction activities. Typically, a subset of this proposed equipment is actually used in construction activities. This was illustrated in Table 1.2.2-1, above. Also, not all equipment resides on the airfield during the entire project duration; equipment is moved on and off the airfield as construction demands dictate.

Task 3.2 – Ensure emission reduction devices/strategy does not result in an increase of any pollutant above that which is standard for that engine.

The U.S. EPA and ARB verification procedures are designed to ensure that no measurable increase on other pollutant emissions results from installation of the approved VDECS. One issue that should be noted is that the ARB verification procedures include a NO_2 limit requirement. Specifically, NO_2 may not increase more than 20 percent as a result of the installation and operation of the device[4]. All VDECS assessed under Task 1 for the Tom Bradley International Terminal Renovation – East Aprons comply with the CARB NO_2 limit requirements.

Task 3.3 –Contractor shall monitor, document and report on emission reductions of NO_x, ROG, PM and CO achieved through the use of best available control technology.

The following Table provides an estimate of air quality benefits attributable to adherence to CBA obligations. Note that these estimates are conservative – equipment operating on the airfield in support of LAX Master Plan Projects that is equipped with engines certified at the Tier 4 and Tier 4 interim levels have particulate matter (PM) that comply with CBA obligations. These vehicles also emit oxides of nitrogen (NOx) emission levels that exceed obligations under the CBA.

[4] Title 13 CCR section 2706(a)

However, because these vehicles are designed manufactured to meet more stringent emission standards, they are not "retrofitted" per se with Best Available Control Technologies (BACT) in compliance with CBA provisions – these vehicles in their baseline configuration meet CBA requirements. Thus, because Tier 4 vehicles achieve CBA-mandated emission levels in their baseline configuration, there is no other vehicle configuration to compare them to. As a result, Tier 4 diesel equipment is not shown as offering an emissions benefit as a result of imposition of CBA requires the equipment is inherently low emitting. Tier 4 vehicles represent the "state of the art" for reduced off-road equipment emissions.

Air quality benefits corresponding to vehicles and equipment retrofitted with diesel particulate filters or other emission reduction technology are quantified as in past evaluations and are included in the Table.

In addition, emission reduction benefits attributable to onsite recycling of paving material on TBIT – East Aprons and the onsite concrete batch plant operation on WAMA are quantified. The TBIT- East Apron ramps are constructed using recycled concrete. The original surface area concrete that is demolished is moved to a crusher, where it is crushed into aggregate and used as a component of the new concrete pavement for the TBIT ramps. The crusher is Title 5 compliant under the California Code of Regulations and is powered by electric motors utilizing grid electricity as opposed to electricity produced by diesel generators. The new concrete is mixed in an onsite concrete batch plant that is also powered by grid electricity as opposed to diesel generators.

On WAMA, stockpiled recycled concrete is reused to perform a portion of the paving. Additional concrete is manufactured onsite using the concrete batch plant, powered by grid electricity.

Air quality benefits are achieved through onsite concrete recycling and mixing as a result of not having to transport the demolished concrete to a landfill as well as not importing new concrete from an offsite concrete mixing plant. According to LAWA's Environmental monitor, approximately 76,732 yards of waste concrete were recycled on TBIT – East Aprons. The amount of diesel fuel not consumed as result of onsite recycling is estimated at 93,924 gallons of diesel fuel.

On WAMA, the amount of concrete that was recycled equates to approximately 185,500 cubic yards. The amount of diesel fuel that was not consumed is estimated at 212,611 gallons of diesel fuel.

Table 3.3-1 shows the quantified air quality benefits attributable to adherence to CBA provisions for the TBIT – East Aprons projects. *It is important to note that a percentage of the benefits shown are*

attributable to the previous Taxilane T Phase 1 project. The crushed aggregate was comingled between both Master Plan projects; as a result it is not possible to apportion their relative benefits.

Table 3.3-1: Quantified Air Quality Benefits Attributable to TBIT – East Apron Pollution Mitigation Measures

Emission Control Technology & Onsite Material Recycling (Includes Taxilane T – Phase 1)*							
Performance Measure (Pounds of Pollution Reduced)	**PM_{10}**	**$PM_{2.5}$**	**CO**	**CO_2**	**ROG**	**NO_x**	**SO_2**
	17.4	**15.93**	**5,740**	**2,145,922**	**249**	**7,021**	**20.0**

As mentioned above, the air quality benefits associated with onsite concrete recycling are derived from not having to haul debris to a landfill using heavy-duty diesel dump trucks. During data assessment, it was noted that because the average age of the haul trucks are newer on the current LAX Master Plan projects as compared to earlier projects, the criteria pollutant air quality benefits attributable to onsite recycling are lower than in past project assessments. This is because the newer haul trucks are certified at significantly lower exhaust emission standards for NOx and particulate matter. The positive air quality benefits of onsite concrete recycling are still substantial, however, especially when reductions in greenhouse gas emissions are taken into consideration – over 2,145,922 pounds of greenhouse gas emissions, primarily carbon dioxide (CO_2), were eliminated.

Table 3.3-2 shows the air quality benefits attributable to CBA environmental measures implemented on the WAMA project:

Table 3.3-2: Air Quality Benefits Resulting from CBA Provisions on WAMA

Pollutant	Emissions Reduced (pounds)	Emissions Reduced (tons)
Greenhouse Gases (CO_2)	5,176,540	2,588
Oxides of Nitrogen (NO_x)	16,763	8.0
Reactive Organic Gases (ROG)	561	0.28
Carbon Monoxide (CO)	13,875	6.94
Sulfur Oxides	49	0.02
PM_{10} from Exhaust	33	0.02
PM_{10} from Tire Wear	98	0.05
PM_{10} from Brake Wear	77	0.04
$PM_{2.5}$ from Exhaust (92% of the PM_{10} above is $PM_{2.5}$)	30	0.02
Re-Entrained Road Dust	502	0.25

Figure 3.3-1: Batch Plant Operations on WAMA

Task 4: Exemptions

4.1 TBIT – East Aprons

Exemptions Granted Due to Unavailability of a Compatible VDECS

Approximately 42 pieces of diesel equipment evaluated by the Third Party Monitor were determined to not be compatible with a CARB or EPA-verified diesel emission control device. These are listed below in Table 4.1-1:

Table 4.1-1: Equipment granted an Exemption Due to Incompatibility with VDECS

408	Truck 349928	No DPF verified
409	Truck 386317	No DPF verified
410	Truck 308125	No DPF verified
911	Truck 286036	No DPF verified
912	Truck 292757	No DPF verified
913	Truck 328460	No DPF verified
914	Truck 329435	No DPF verified
917	Truck 333145	No DPF verified
919	Truck 346134(2)	No DPF verified
921	Truck 421068(1)	No DPF verified
922	Truck 421068(2)	No DPF verified
923	Truck 421068(3)	No DPF verified
924	Truck 421068(4)	No DPF verified
925	Truck 426846(1)	No DPF verified
928	Truck 447420(1)	No DPF verified
418	Truck CHIEF 9B36608	No DPF verified
419	Truck CHIEF 9D67585	No DPF verified
353	Cal Earth Truck CA-22739	No DPF verified
426	US Demolition Truck 9B37639	No DPF verified
428	US Demolition Truck 9D48927	No DPF verified
429	US Demolition Truck 9D41082	No DPF verified
430	US Demolition Truck 9E43458	No DPF verified
431	US Demolition Truck 9D57074	No DPF verified
432	US Demolition Truck 9B51306	No DPF verified
446	CHIEF Trucking 7Y16739	No DPF verified
447	CHIEF Trucking - 8L49983	No DPF verified
448	CHIEF Trucking - 8X07256	No DPF verified
449	CHIEF Trucking - 55456F1	No DPF verified
450	CHIEF Trucking - 7T38386	No DPF verified
451	CHIEF Trucking - 7S40880	No DPF verified
452	CHIEF Trucking - 08896N1	No DPF verified
453	CHIEF Trucking - 8C15432	No DPF verified
1234	OC Vacuum Truck CA 0000519	No DPF verified
1235	OC Vacuum Truck CA 9E94436	No DPF verified

1236	OC Vacuum Truck CA 9E98758	No DPF verified
1237	OC Vacuum Truck CA 9E98756	No DPF verified
1238	OC Vacuum Truck CA 9E98757	No DPF verified
1239	OC Vacuum Truck CA 47648H1	No DPF verified
1240	OC Vacuum Truck CA 9D17857	No DPF verified
1241	OC Vacuum Truck CA 9E24129	No DPF verified
1242	OC Vacuum Truck CA 9E24127	No DPF verified
1243	OC Vacuum Truck CA 9E24128	No DPF verified

It is important to note that equipment granted an exemption by LAWA will not necessarily operate on the TBIT- East Aprons project – only a relatively small fraction of the total equipment submitted for project use is actually utilized on the airfield.

20-Day Exemptions

LAWA is currently not allowing any "20-day" exemptions on the TBIT – East Aprons Master Plan project. Equipment seeking a 20-day exemption must comply with CBA requirements or not be utilized on the airfield.

Safety Exemptions

Nineteen (19) pieces of construction equipment were granted a safety exemption during the reporting period. In all cases this safety exemption was a "line of sight" exemption, meaning that installation of a VDECS could potentially restrict the view of the equipment operator and thus pose a safety hazard.

Table 4.1-2: Equipment Granted a Line of Sight Exemption

370	John Deere 444K Loader	Has line of sight letter
372	John Deere 644K Loader	Has line of sight letter
373	John Deere 710J Backhoe	Has line of sight letter
374	John Deere 410J Backhoe	Has line of sight letter
375	John Deere 544J Loader	Has line of sight letter
483	Murray Drilling Rig TM22D EIN CV9R93	Line of Sight waiver
1349	Coffman Concrete Pavers (5 units)	Line of Sight waiver
1189	Coffman Paver - Duplicate of 1349	Line of Sight waiver
1190	Coffman Paver - Duplicate of 1349	Line of Sight waiver
1191	Coffman Paver - Duplicate of 1349	Line of Sight waiver
1192	Coffman Paver - Duplicate of 1349	Line of Sight waiver
1193	Coffman Paver - Duplicate of 1349	Line of Sight waiver
1169	JD 410J Backhoe Number 1721	Line of Sight waiver
1211	JD 710 J BACKHOE Number 1722	Line of Sight waiver
1213	JD 644 J LOADER Number 1642	Line of Sight waiver

1214	JD 710J BACKHOE Number 1650	Line of Sight waiver
498	Maxim Crane	Line of Sight waiver
1396	ABI TM22 Drill Rig	Has line of sight letter
1419	Liebherr Crane LTM 1220	Has line of sight letter

4.2 WAMA & Qantas Hangar

As of the end of the reporting period, December 31, 2015, the following exemptions were granted by LAWA on the WAMA and Qantas Hangar Master Plan projects.

20-Day Exemptions

Seven (7) pieces of equipment were granted a "20-Day" exemption as shown in Table 4.3-1, below:

Table 4.2-1: Equipment Granted "20-Day" Exemption on WAMA

RT8A74	Coffman Specialties – Scraper – CT1162
FE9A99	Coffman Specialties – Motor Grader – CT1183
XC6Y68	Coffman Specialties – Asphalt Paver – AP 414
RG4P55	MJA Consulting Terex/Cedarapids Paver - #60130
1049	Pavement Surfacer
1048	Pavement Surfacer
TV4R53	Reliable Screening – Screen - 8630

Safety Exemptions

Additionally, eleven (11) pieces of construction equipment were granted a "line of sight" waiver; this exemption applies to construction equipment in which installation of an aftermarket diesel emission control device could obstruct operator visibility and thus pose a safety hazard. Exemptions in this category require one of the following: 1) documentation from CARB that the equipment is not compatible with a VDECS retrofit device due to a potential visibility restriction; 2) documentation from CAL OSHA that the equipment is not compatible with a VDECS retrofit device due to a potential visibility restriction, or 3) documentation from the VDECS vendor or installer corroborating that installation of a VDECS could pose visibility restrictions that could compromise safety.

Table 4.2-2: Equipment Granted a Driver Visibility Safety Exemption

CP-4052 John Deere
CP-4053 - RTP 500 Placer
CP-4063 RTP 500 Placer
CP-4065 CAT
CP-4076 CAT
CP-413 CAT
CP-414 CAT
CP-417 - GP 4000 Paver
CP-424 Cure Rig
CP-411 Gomaco Paver 2500
Coffman Specialties - Paver - CP411

Small Displacement Engine Exemptions

Verified diesel emission control systems currently do not exist for equipment that has a small engine displacement. This equipment is typically less than 50 hp and includes portable air compressors, light towers, welders, etc. On WAMA, three (3) pieces of equipment were granted a "small engine displacement" exemption, as follows:

Table 4.2-3: Equipment Granted a Small Displacement Engine Exemption

Royal – Vacuum Excavator– TL-106
Royal – Air Compressor– AC-033
Royal – Air Compressor– AC-034

Task 5: Ultra Low Sulfur Diesel and Other Fuels

Section X.F.5 of the Community Benefits Agreement requires that all diesel equipment used for construction on LAX Master Plan Projects use only Ultra-Low Sulfur Diesel (ULSD) fuel containing 15 parts per million (ppm) of sulfur by weight or less. This requirement is in effect as long as adequate supplies are available in the Southern California region.

There are three tasks in the Scope of Work for the Third Party Monitor related Ultra Low Sulfur Diesel.

- Task 5.1 - Contractor shall monitor, document, and independently report on construction equipment related to LAX Master Plan Program construction as it relates to the use of ultra-low

sulfur diesel fuel. Contractor will be provided all available fuel procurement records for construction equipment related to the LAX Master Plan Program;

- Task 5.2 – Contractor shall independently verify and report to LAWA and the Coalition Representative that adequate supplies of ULSD are or are not available in Southern California. For the purpose of this Task, "Southern California" is defined as the geographic region comprising Los Angeles, Orange, Riverside, San Bernardino, San Diego, and Ventura Counties;
- Task 5.3 – Contactor shall independently verify and report to LAWA and the Coalition Representative that fuels substituted in lieu of ULSD do not result in greater emissions of fine PM or NO_x than that which would be produced by the use of ULSD at 15-ppm or lower. Verification will be based on CARB certification or equivalent.

South Coast AQMD Rule 431.2, which took effect on June 1, 2006, requires diesel fuel refined and sold for on-road and off-road use within the jurisdiction of the AQMD to contain no more than 15-ppm sulfur by weight. The California Air Resources Board subsequently adopted this requirement on a statewide basis on September 1, 2006. Thus, ULSD is the only diesel fuel legally available for purchase within California.

To independently verify the sulfur content of the diesel fuel used by equipment operating on LAX Master Plan projects, CFCI has requested fuel purchase records from the contractor and has examined the fuel receipts to ensure that only ULSD is being used. Fuel purchase records are clearly marked "ULSD"; thus, there is no ambiguity as to whether or not the fuel has the ultra-low sulfur content.

Task 6: Operational Requirements

Section X.F.6 of the CBA requires that Operational Requirements be issued and enforced by LAWA as it pertains to: a) limitations of equipment engine idling; and, b) maintenance of equipment engines.

The environmental requirements mandated by LAWA state that *"Contractor shall prohibit construction diesel vehicles or equipment from idling in excess of the idling restrictions as defined in the CARB Vehicle Idling Rule. The contractor shall advise drivers and operators of these requirements at the pre-construction orientation meeting, remind them on a daily basis, and post signs in appropriate places indicating the CARB Vehicle Idling Rule. Exemptions may be granted for safety and operational reasons, as defined in CARB or as approved by the Engineer. The contractor and subcontractors shall have policies*

and procedures in place for compliance with the Vehicle Idling Rule and a copy of such shall be submitted within 30 days of Notice to Proceed to the Engineer for approval".

In CFCI's capacity as Third Party Monitor, monitoring, documentation, and reporting of operational requirements was conducted in accordance with the following two Tasks:

- Task 6.1 – The Independent Third Party Monitor shall establish processes and procedures for determining whether a construction firm is complying with the operational requirements specified by LAWA. For the purpose of this Task, Operational Requirements include, but are not limited to, engine idling and engine maintenance requirements;
- Task 6.2 – The Independent Third Party Monitor shall monitor, document, and independently report to LAWA and the Coalition Representative on operational requirements issued and enforced by LAWA as they relate to limitations on idling and engine maintenance, at a minimum. Idling and engine maintenance records for construction equipment related to the LAX Master Plan Program will be provided to the Contractor by LAWA.

The following sections describe the process developed and implemented to track adherence to the operational requirements delineated in the CBA, as well as the independent findings of the Interim Third Party Monitor.

Process for Determining Compliance with Operational Requirements

The process to determine construction contractor compliance with the Operational Requirements set forth in the CBA has two distinct components:

1. Review by the Independent Third Party Monitor of applicable written procedures, monthly logs, and records documenting construction contractor compliance with Operational Requirements;
2. Onsite inspections conducted independently by the Third Party Monitor to confirm Operational Requirements are being implemented in accordance with CBA requirements.

In conducting reviews of construction contractor records, logs, and written procedures, requests for specific information and/or documents were submitted by the Third Party Monitor to LAWA's construction manager's staff. Requests for documentation were in turn submitted to the construction contractor by LAWA. This protocol was established and adhered to by all parties to ensure the reporting relationships between LAWA's environmental monitor and the construction contractor were maintained

and to prevent requests from the Third Party Monitor being construed by the construction contractor as contractual direction.

Once obtained by LAWA construction manager staff, the requested records, logs, and written procedures are provided to the Third Party Monitor for review. In most cases, photocopies are provided. In certain cases, such as equipment maintenance records, however, documents are retained at a location other than the on-site construction trailers; this requires that the documents be inspected at the offsite location. This is discussed further under Task 6.2, below.

Vehicle and Equipment Idling – The Environmental Requirements for the Tom Bradley International Terminal Renovation – East Aprons, WAMA, and Qantas Hangar projects prohibit construction vehicles and equipment from excessive idling in accordance with the restrictions defined in the CARB Vehicle Idling Rule[5]. This Rule, more formally referred to as the *Airborne Toxic Control Measure (ATCM) to Limit Diesel-Fueled Commercial Motor Vehicle Idling*, is codified in Title 13 Section 2485 of the California Code of Regulations and took affect on February 1, 2005.

The law states that operators of diesel fueled commercial vehicles with a gross vehicle weight rating (GVWR) of 10,000 pounds or greater shall not idle their vehicle's primary diesel engine for greater than five (5) minutes at any location. The law only applies to commercial vehicles that are or must be licensed for operation on the highway.

The "five minute rule" is waived under the following circumstances:

- Idling when the vehicle must remain motionless due to traffic conditions;
- Idling when the vehicle is queuing that at all times is beyond 100 feet from any restricted area (i.e., homes and schools);
- Idling to verify safe operating condition;
- Idling mandatory for testing, servicing, repairing, or diagnostic purposes (cleaning of commercial vehicles is not considered servicing);
- Idling when positioning or providing power for equipment that is performing work;

[5] www.arb.ca.gov/toxics/idling/regtext.htm

- Idling when operating defrosters, heaters, air conditioners, or other equipment to prevent a safety or health emergency.

While the CARB Rule pertains only to "on-road" vehicles, it is important to note that LAWA extends the CARB idling restrictions to off-road vehicles and equipment operating in conjunction with the Tom Bradley International Terminal Renovation – East Aprons, WAMA, and Qantas Hangar projects. In practice, LAWA's enforcement of idling restrictions exceeds those mandated under the CARB Rule for both on-road and off-road vehicles and equipment.

The Third Party Monitor reviewed and independently verified the following documentation pertaining to notice of idling restriction requirements:

- Posted Signs – large signs are posted at the construction site entrance in clear view of trucks entering the air operations area. These signs clearly state the restrictions on vehicle idling, as shown in Figure 6-1;
- Written Policies – LAWA construction manager staff provided the Third Party Monitor with copies of the written idle restriction policies and procedures provided to the construction contractor;
- Notes from LAWA's construction contractor/ environmental monitor Status Meetings – in which reiteration of LAWA idling restrictions were reviewed.

Figure 6-1: Posted Notices Remind Drivers of Delivery Curfew Hours

It was the observation of the Third Party Monitor, and confirmed by LAWA's environmental monitor, that excessive idling was on par with recently implemented LAX Master Plan projects, but had a much lower incidence rate when compared to early LAX Master Plan projects such as the South Airfield Improvement Project (SAIP). The CARB anti-idling rule has been in place long enough that most vehicle and equipment operators are aware of its existence.

The limited amount of necessary enforcement of excessive idling restrictions continues to be performed on a "catch and release" basis; LAWA's environmental monitor staff detect an idling vehicle and inform the driver of the idling restrictions and ask them to turn their engine off. LAWA does not cite or fine the driver for a first offense. In discussion with LAWA's environmental monitor, the policy of issuing a warning has worked successfully and there were no documented repeat offenders. According to LAWA's environmental monitor, during the period of July 1st through December 31st 2015 the average occurrence rate for excessive idling was on the order of a few times per month.

Equipment Maintenance Records – The CBA requires that the construction contractor properly maintain all equipment in accordance with the manufacturers' specifications and schedules. Further, that all maintenance and repair records shall be made available upon request. The Third party Monitor made this request and was awaiting receipt of vehicle maintenance records.

LAWA's environmental monitor and the Third Party Monitor also conduct regular visual inspections of diesel equipment operating on LAX Master Plan projects, looking for excessive exhaust soot or other indications that the equipment is in a state of disrepair. During the reporting period, no vehicles or equipment were determined by LAWA to be emitting excessive smoke.

Task 7: Enforcement by LAWA

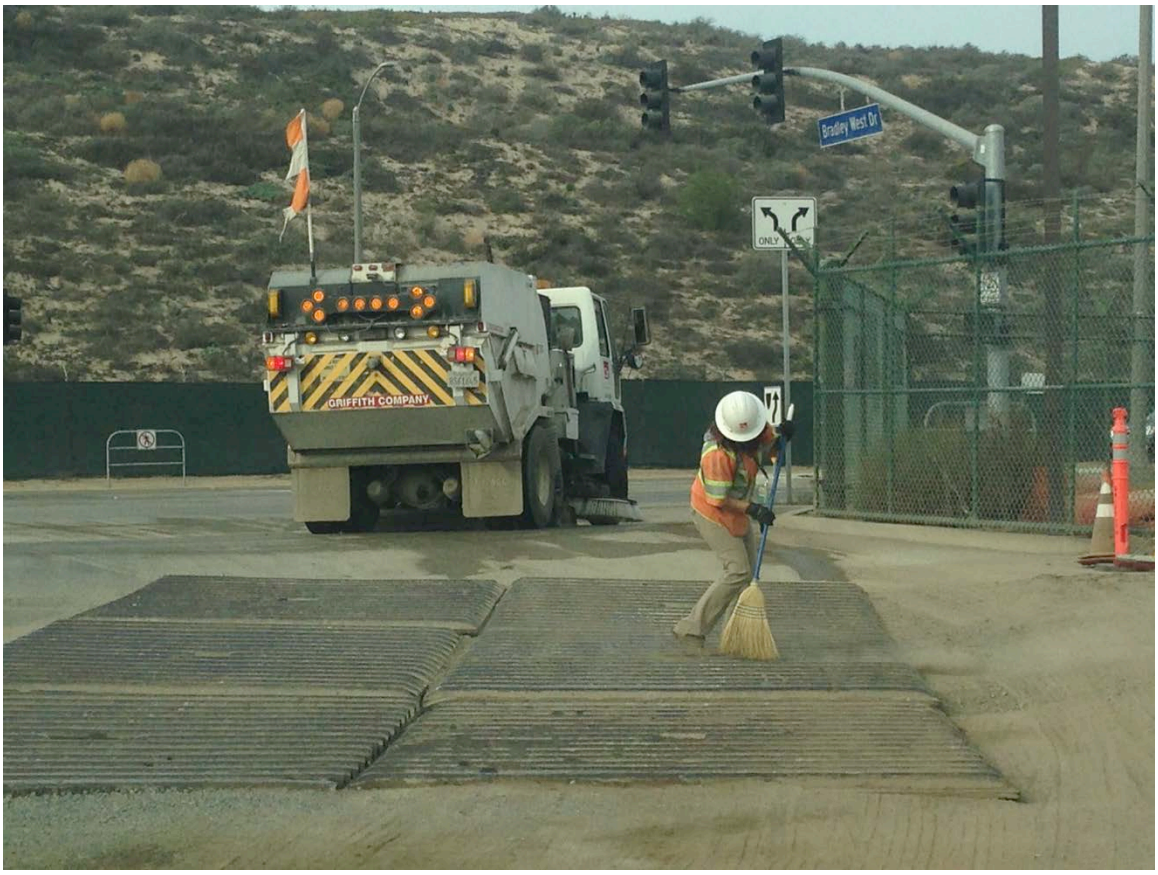
Section 7 of the Independent Third Party Monitor Scope of Work states that: "The Contractor shall monitor, document and independently report to the Coalition Representative on enforcement actions by LAWA".

During the period of July 1, 2015 through December 31, 2015, LAWA's environmental monitor and LAWA management took enforcement actions for violations of the delivery curfew restrictions. On more than one occasion LAWA levied a fine against the company cited for the curfew violation. The amount of the fine(s) was not disclosed.

Additionally, LAWA's environmental monitor and/or other LAWA construction managers took informal actions to correct excessive vehicle idling. In all cases, the driver was instructed to turn off the vehicle engine, and was made aware of the idling restrictions enforced on LAX construction projects. Individuals were also instructed that a repeat offense might result in a fine. No idling violation was deemed sufficiently serious to warrant formal enforcement or fines.

No enforcement actions were required for fugitive dust emissions or excessive noise.

Figure 7-1: Fugitive Dust Track-out Control Being Conducted on WAMA



Task 8: Reassessments of Emission Control Devices

The Community Benefits Agreement Section X.F.9 requires that a reassessment of best available emission control devices be conducted on an annual basis, or more frequently if warranted. The purpose is to ensure that bid documents take into account advances in emission control devices prior to bidding new construction phases of the LAX Master Plan Program. This reassessment was conducted for all verified devices as of for the annual period commencing January 1, 2015 to December 31, 2015.

Section X.F.9 further requires that the emission control technology review process include any new and relevant requirements or regulations promulgated by CARB or the U.S. EPA, with the understanding that the results from any reassessment of diesel emission control systems cannot be applied retroactively. Specifically, Section X.F.9.b. states "any new designations of emission control devices as best available shall apply only to projects that start after the devices are verified or certified for use by CARB or the EPA... "

During the period of January 1, 2015 through December 31, 2015, the US EPA or CARB verified no additional diesel emission control systems. Given that new on-road and off-road vehicles and equipment are now manufactured with factory installed emissions control systems, including Tier 4 off-road equipment, there is a limited market for new VDECS for vehicle retrofits. Currently, VDECS are commercially available for most on-and off-road retrofit applications; thus, the market is not in need of additional devices. The last applicable diesel emission control system verified by CARB was the ESW CleanTech Skyline off-road diesel particulate filter – this device earned CARB verification in April 2014.

Task 9: Implementation of Public Complaint Registration Process

Task 9 of the Third Party Monitor Scope of Work requires the contractor to develop and implement a public complaint registration process. The components of the task are:

- Task 9.1 – Contractor shall develop and implement a process allowing any member of the public to register a complaint alleging any entity's noncompliance with the requirements of CBA Section X.F.
- Task 9.2 – Contractor shall investigate all complaints registered by a member of the public and determine if, when, and where a violation occurred. Contractor shall notify LAWA and the LAX Coalition Representative each time a complaint is registered.
- Task 9.3 – Contractor shall provide records or summaries of public complaints registered with Contractor, including actions, findings, and determinations, to the public upon request. Contractor shall provide LAWA and the LAX Coalition Representative copies of all actions, finding, and determinations requested by the public.

As LAWA already has a widely publicized hotline for complaints, it was decided to utilize the existing number instead of establishing a new one in order to avoid duplication and potential confusion in the community.

- No fugitive dust complaints were recorded, and LAWA, the South Coast AQMD, or any other environmental regulatory authority took no enforcement actions during that period;
- No excessive noise complaints were lodged during the reporting period.

Factors that most likely contribute to the absence of public complaints include:

- Dissemination and strict enforcement of the environmental requirements of the CBA by LAWA's environmental monitor and inspectors;
- Construction activities associated with the Tom Bradley Terminal project primarily take place largely in the geographic center of the LAX airfield. Sensitive receptors, such as the communities of El Segundo, are to a large extent buffered by the South Airfield runways. A similar situation exists on the Northern area, where the North Airfield runways provide a buffer. This serves as a barrier to common construction nuisances such as noise curfew violations.
- On WAMA, a barrier wall was constructed along Pershing Drive to buffer construction activity from the adjacent arterial roadway. During construction, traffic control was in place that at times reduced Northbound Pershing Drive to one lane. On most occasions, lane closures were conducted after the peak morning rush hours and prior to the afternoon peak traffic periods. This helped mitigate traffic disruptions during peak periods.

SECTION 3 - RESULTS AND CONCLUSIONS

The following is a summary of Third Party Monitor independent monitoring results and findings for the six-month period commencing July 1, 2015 and ending December 31, 2015:

- Monitoring and documentation of diesel equipment utilized or proposed for utilization on three (3) LAX Master Plan projects. A total of approximately 703 pieces of diesel equipment were independently assessed to determine compatibility with a commercially available CARB/EPA-verified diesel emission control system. The equipment specified for use on the WAMA project was also used on the Qantas Hangar project. Thus, while separate Master Plan projects, the monitoring, documentation, and reporting conducted for WAMA also applied to the Qantas Hangar project;
- Monitoring of diesel emission control devices installed on construction equipment. As documented in the above Sections of this report, many of the diesel emission control devices are factory installed (Tier 4i and Tier 4). All devices currently in use on LAX construction projects were deemed functional;
- A review and documentation of all exemptions granted by LAWA that allow a piece of diesel construction equipment to operate on LAX construction projects without a best available control technology retrofit. This includes equipment that was deemed incompatible with a verified VDECS, granted an exemption on the basis of safety, or granted a "20-day" exemption on the basis of infrequent equipment use;
- During the reporting period, no Notice of Violation (NOV) were levied by the South Coast Air Quality Management District for fugitive dust emissions associated with either earth moving operations or recycled concrete aggregate crushing. No dust complaints were received by LAWA from the public;
- No excessive noise complaints were received during the reporting period from the public.
- On multiple occasions, LAWA enforced delivery curfew violations. In certain cases, violations did result in a fine levied by LAWA.
- In accordance with CBA requirements, CFCI conducted a reassessment of available CARB and EPA-verified diesel emission control systems. This reassessment is conducted on an annual

basis. The intent is that LAWA use these findings to designate newly verified devices as best available control devices and incorporate the requirement to use these devices into construction bid documents for new construction phases of the LAX Master Plan Program. These findings, however, are not to be applied retroactively to Master Plan Projects already in the construction phase. As a result of this reassessment, it was determined that no new verified diesel emission control systems have been verified for either on-road vehicles or off-road equipment during the reporting period. The last applicable CARB verification was the EWS CleanTech Skyline diesel particulate filter that earned CARB verification in April 2014.

Overall, diesel equipment used on construction activities during the specified time period was found to be in substantial compliance with all provisions of the CBA Section X.F. As discussed in previous sections, a high percentage of equipment supporting current LAX Master Plan projects is Tier 4i or Tier 4 and equipped with a factory-installed diesel emission control system. This equipment already meets the most stringent EPA and CARB emissions standards; as such, no additional emissions control retrofits are required.

The next Semiannual Report will cover the period commencing January 1, 2016 and ending June 30, 2016. The Report will cover final construction activities for the Tom Bradley International Terminal – East Aprons, West Aircraft Maintenance Area, and Qantas Hangar projects.