



June 3, 2024

Dr. Sang-Mi Lee, Planning and Rules Manager South Coast Air Quality Management District 21865 Copley Drive Diamond Bar, CA 91765-4178

RE: Los Angeles International Airport South Coast Air Quality Management District Memorandum of Understanding Annual Report for Calendar

**Year 2023** 

LAX

Van Nuys

City of Los Angeles

Karen Bass Mayor

Board of Airport Commissioners

Karim Webb President

Matthew M. Johnson Vice President

Vanessa Aramayo Courtney La Bau Victor Narro Nicholas P. Roxborough Valeria C. Velasco

John Ackerman Chief Executive Officer Dear Dr. Lee:

Los Angeles World Airports (LAWA) has prepared the 2023 annual report (see attachments) for Los Angeles International Airport (LAX) to the South Coast Air Quality Management District (SCAQMD). This report is required by a Memorandum of Understanding (MOU) between SCAQMD and LAWA. The annual report quantifies the estimated emission reduction benefits of the three (3) voluntary LAX measures from LAX's Air Quality Improvement Measures (AQIM) in the South Coast Air Basin. This MOU does not create State Implementation Plan (SIP) creditable reductions, but it identifies specific voluntary measures and provides the means for the SCAQMD to quantify the emission reductions from the MOU Measures to obtain SIP credits.

The LAX MOU consists of three measures related to non-aircraft commercial passenger airport mobile sources. LAWA monitors the implementation of the MOU Measures and provides data and annual emissions inventory reports to SCAQMD as specified in MOU Attachment A for Measures 1 to 3. The report does not apply to any source or operation not specifically identified in the MOU Measures.

## **MOU Measure No. 1 – Ground Support Equipment Emissions Reduction Policy**

MOU Measure No. 1 is a emission reduction program for ground support equipment (GSE). This measure requires that all ground support equipment operators at LAX achieve fleet average NOx + Hydrocarbon emission factors of 1.8 and 1.0 grams per brake horsepower-hour (g/bhp-hr) by January 1, 2023 and January 1, 2031, respectively. To achieve this measure, LAWA has been working with Airport tenants to achieve the performance targets by specified dates through accelerated turnover to cleaner equipment.



The 2023 report shows the fleet average NOx emission factor for commercial GSE at LAX is 1.04 g/bhp-hr, which is lower than the 2017 AQIM baseline fleet average NOx emission factor of 2.24 g/bhp-hr and exceeded (i.e., is better than) the 2023 target. To further reduce emissions from GSE on June 15, 2023, LAWA adopted the Updated LAX Electric Ground Support Incentive Program, providing \$500,000 to accelerate the adoption of zero-emission electric GSE. This fully subscribed program will replace 32 conventional GSE units, reducing emissions at LAX. These efforts are expected to increase the number of eGSE at LAX in the upcoming years and prioritize the removal of older, dirtier GSE (e.g. pre-2010 gasoline and Tier 0 and Tier 1 diesel). LAWA is continuing to work with GSE operators to encourage the continued replacement of older GSE and will support any future electrical infrastructure changes that may be necessary. LAWA took a significant additional step towards a cleaner future on January 18, 2024, by adopting the LAX Zero-Emission Ground Support Equipment Policy. This policy outlines a phased approach to transitioning all GSE at LAX to zero-emission alternatives by 2033.

## **MOU Measure No. 2 – LAX Alternative Fuel Vehicle Incentive Program**

MOU Measure No. 2 is an incentive program to replace heavy-duty diesel vehicles with zero or near-zero emission heavy-duty vehicles at LAX. Under the MOU, LAWA will implement an incentive program that will distribute up to \$500,000 dollars in funding to applicants based on the "incremental cost" differential of the zero or near-zero emission vehicles as compared to conventionally fueled equivalents with a Gross Vehicle Weight Rating (GVWR) of 14,001 pounds or greater by December 31, 2021.

As of the end of 2023, LAWA has distributed \$325,000 for 15 vehicles. However, due to ongoing supply chain shortages, no incentive-funded vehicles were added in 2023. The remaining grant recipients for the LAX Zero and Near-Zero Emission Heavy-Duty Vehicle Incentive Program have chosen not to proceed, LAWA remains committed to cleaner air. The existing program deadline has passed, but the unutilized \$175,000 will be directed towards an updated incentive program. This updated program is currently under development and will be presented to the Board of Airport Commissioners for approval in early summer 2024. This update aims to expedite the adoption of zero and near-zero emission heavy-duty trucks at LAX.

## MOU Measure No. 3 - Zero-Emissions Bus Program

MOU Measure No. 3 focuses on transitioning LAWA-owned buses at LAX to zero-emission buses. The Measure requires LAWA to replace 20% and 100% of the LAWA-owned and operated buses with zero-emission buses by January 1, 2023 and January 1, 2031, respectively.

For 2023, LAWA is reporting a fleet of 40 buses. Of the 40 buses, 20 are electric, which represents 50 percent of the LAWA-owned bus fleet. These electric buses are typically dedicated for use on the airfield and on occasion are used on-road to transport passengers. LAWA is concluding a procurement of up to 27 (13 with an option to purchase 14 more) electric buses, and its parking lot management company is looking to add 11 electric buses in 2025.

LAWA remains actively committed to these agreements and is dedicated to achieving air quality improvements in the South Coast basin.

Sincerely,

Jacob Haik

Jacob Haik

Airport Environmental Manager II Environmental Programs Division

JH:CA:lp

## Attachments:

- LAX MOU RY2023 Summary and Data Report.pdf
- 1. 2023 LAX GSE Emission Calcs 20240531.xlsm
- 1. SCAQMD MOU RY23 M1.xlsm
- 2. LAX Clean Fleet Alt Fuel Incentive 2023.xlsx
- 2. SCAQMD MOU RY23 M2.xlsx
- 3. LAX Clean Fleet Bus 2023 AQMD (Fleet as of Dec 31).xlsb
- 3. SCAQMD MOU RY23 M3.xlsx

Cc: David Reich

**Carter Atkins** 

Genevieve Lahey

Lauren Paladino

Amylou Canonizado

Eric Praske (SCAQMD)

Ian MacMillan (SCAQMD)

Xingqiu Zhang (SCAQMD)

Mark Sospedra (SCAMD)

Rue Zhang (SCÀQMD)

John Pehrson (CDM)

Jeremy Gilbride (CDM)