

June 1, 2023

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 2022

LAX

Van Nuys

City of Los Angeles

Karen Bass
Mayor

Board of Airport
Commissioners

Beatrice C. Hsu
President

Valeria C. Velasco
Vice President

Sean O. Burton
Matthew M. Johnson
Nicholas P. Roxborough
Belinda M. Vega
Karim Webb

Justin Erbacci
Chief Executive Officer

Dear Dr. Lee:

Los Angeles World Airports (LAWA) has prepared the annual report as requested by the South Coast Air Quality Management District ("SCAQMD") for Los Angeles International Airport ("LAX" or Airport). On December 13, 2019, a Memorandum of Understanding ("MOU") was entered into by the SCAQMD and LAWA. The purpose of this annual report is to quantify the estimated emission reduction benefits in the Basin through implementation of the three (3) voluntary LAX measures from LAX's Air Quality Improvement Measures (AQIM). This MOU does not create State Implementation Plan (SIP) creditable reductions, but it identifies specific voluntary measures and provides the means for the South Coast AQMD to quantify the emission reductions from the MOU Measures to obtain SIP credits.

There are three measures in the LAX MOU, as 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 South Coast AQMD as specified in MOU Attachment A for Measures 1 to 3. The report does not apply to any source or operation of any source that is not specifically identified in the MOU Measures.

MOU Measure No. 1 – Ground Support Equipment (GSE)

MOU Measure No. 1 is a measure for ground support equipment. This measure requires that all ground support equipment operators at LAX achieve fleet average NO_x + 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 2022 report shows the fleet average NO_x emission factor for commercial GSE at LAX is 1.16 g/bhp-hr, which is lower than the 2017 AQIM baseline fleet average NO_x emission factor of 2.24 g/bhp-hr and exceeded (i.e., is better than) the 2023 target. In June of 2023, LAWA plans to adopt a GSE incentive program to accelerate the deployment of zero-emission electric GSE (eGSE) to achieve further emission reductions. 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 is also drafting a Request for Proposals for a GSE pooling program. The intention of the program is to consolidate GSE facilities and expand the use of eGSE at LAX common use terminals.



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

MOU Measure No. 2 is a measure based on LAWA's LAX's AQIM measure, the LAX Zero and Near-Zero Emission Heavy-Duty Vehicle Incentive Program and is attached to and a part of the MOU between LAWA and South Coast AQMD. 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 2022, LAWA has distributed \$325,000 for 15 vehicles. However, due to ongoing supply chain shortages, no incentive-funded vehicles were added in 2022. One awardee ordered three near zero-emission trucks on November 29, 2021, which were expected to be delivered six months from the date of order but were not delivered in 2022. One of the three trucks was delivered on February 21, 2023. The remaining two trucks are now expected to be delivered in the 4th quarter of 2023. The incentive recipient has indicated that truck delivery delays are a result of longer than expected lead times to obtain parts and equipment from manufacturers and suppliers. An additional awardee is actively searching for two incentive funded vehicles.

MOU Measure No. 3 – LAX Zero-Emissions Bus Program

MOU Measure No. 3 is a measure based on LAWA's LAX's AQIM measure, the LAWA Zero- Emission Bus Program to convert LAWA-owned buses at LAX to zero-emission buses and is attached to and a part of the MOU between the Airport and South Coast AQMD. 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 2022, LAWA is reporting a fleet of 122 buses. However, by the end of the 2022, that number had decreased to 50. Of the 72 buses (all CNG) no longer in service, 36 were retired, and an "affidavit of non-use" was submitted for the other 36. Of the 50 buses that remain, 20 are electric, which represents 40% of the LAWA owned bus fleet. The electric buses are dedicated airfield buses and have short routes used to transport passengers between terminals on the airfield. Currently, LAWA has released a Request for Bid to purchase 13 electric buses, and its parking lot management company is looking to add 11 electric buses in the summer of 2023.

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

Sincerely,



Jacob Haik
Airport Environmental Manager II
Environmental Programs Division

JH:CA:LP:eb

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Attachments:

- LAX MOU 2022 Data Report.pdf
- 1. 2022 LAX GSE Emissions Calcs_AQMD.xlsm
- 1. SCAQMD MOU R22 M1_20230601.xlsx
- 2. LAX Clean Fleet Alt Fuel Incentive 2022_AQMD.xlsx
- 2. SCAQMD MOU RY22 M2_20230601.xlsx
- 3. LAX Clean Fleet Bus 2022_AQMD (2022 Total Operating Fleet).xlsb
- 3. LAX Clean Fleet Bus 2022_AQMD (Fleet as of Dec 31).xlsb
- 3. SCAQMD MOU RY22 M3_20230601.xlsx

cc: Samantha Bricker
Carter Atkins
Lauren Paladino
Amylou Canonizado
Ian MacMillan (SCAQMD)
Eric Praske (SCAQMD)
Xingqiu Zhang (SCAQMD)
Mark Sospedra (SCAMD)
Rue Zhang (SCAQMD)
John Pehrson (CDM)
Jeremy Gilbride (CDM)