

**MEMORANDUM OF UNDERSTANDING BETWEEN  
THE SOUTH COAST AIR QUALITY MANAGEMENT DISTRICT AND  
THE CITY OF LONG BEACH  
REGARDING LONG BEACH AIRPORT'S AIR QUALITY IMPROVEMENT PLAN**

This Memorandum of Understanding (“MOU”) is entered into by the South Coast Air Quality Management District (“South Coast AQMD”) and the City of Long Beach (“City”), in its capacity as the proprietor and certificated operator of the Long Beach Airport (“LGB” or “Airport”). The City and South Coast AQMD shall be referred to collectively as Parties (each a Party) to this MOU.

I. RECITALS

A. RECITALS BY SOUTH COAST AQMD

1. Air Regulatory Agencies. Air pollution remains a significant public health concern in many parts of California, and specifically in the South Coast Air Basin (Basin). The South Coast AQMD, California Air Resources Board (CARB), and the United States Environmental Protection Agency (USEPA) are the regional, state, and federal regulatory agencies, respectively, with jurisdiction over air quality in the Basin. South Coast AQMD and CARB have developed and approved the 2016 Air Quality Management Plan (AQMP) for the Basin for incorporation into the California State Implementation Plan (SIP). The 2016 AQMP has been submitted to USEPA and is pending its approval.
2. South Coast AQMD. The South Coast AQMD is the regional air pollution control agency primarily responsible for reducing air pollution in the Basin, which consists of the County of Orange, and the non-desert portions of the Counties of Los Angeles, Riverside, and San Bernardino. LGB is located within the Basin.
3. Need for Emission Reductions. The Basin is classified as an extreme non-attainment area for the 1997 and 2008 8-hour ozone national ambient air quality standards (NAAQS) with statutory deadlines to reach attainment by 2023 and 2031, respectively. Despite significant air quality improvements achieved over the last several decades, to meet these standards, emissions of oxides of nitrogen (NOx) must be reduced by 45% in 2023 and 55% in 2031 as outlined in the 2016 AQMP, adopted by the South Coast AQMD Governing Board in March 2017. The 2016 AQMP included Control Measure MOB-04 (Emission Reductions at Commercial Airports), with the goal of achieving emission reductions from commercial airports through implementation of voluntary airport strategies.

4. Emissions from Sources at Commercial Airports. Emissions associated with operations at commercial airports contribute to adverse air quality in the Basin, primarily due to airport-related mobile source activities. These sources include aircraft, cargo trucks, ground support equipment (GSE), off-road vehicles, shuttle buses, and passenger vehicles. The emissions from commercial airports are expected to increase in future years based on the latest airport growth forecasts. Therefore, NOx emission reductions from commercial airports can assist with the effort to attain the ozone standards in 2023 and 2031.

B. RECITALS BY THE CITY

1. Airport. The City is the proprietor and certificated operator of LGB.
2. Airport Obligations. The City has entered into this MOU pursuant to its proprietary and governmental powers and authority under the State Aeronautics Act (California Public Utilities Code Sections 21001, et seq.).
3. Management and Operation. The Air Quality Improvement Plan (AQIP) and this MOU reflect the experience of the City in the management and operation of the Airport including extensive experience with the federal government, commercial aviation operators, general aviation operators and suppliers, the community, local public entities, and the residents of areas in the general vicinity of LGB.
4. Responsibility to Community. The MOU supports and is made in recognition of the importance of LGB to the economic health and well-being of the community surrounding LGB and the importance of balancing the needs of the community for adequate commercial air transportation facilities with environmentally responsible air transportation operations at LGB.
5. Statement of Intent. The City's consideration of the matters and issues referred to in this MOU is not intended as a statement that such matters and issues are the only ones considered by the City in connection with the formulation of the AQIP and this MOU. Rather this MOU reflects consideration by the City of all of its state and federal obligations and responsibilities as the proprietor of the Airport and addresses only those emission sources that the Airport believes it can reasonably affect.
6. Air Quality Improvement Plan (AQIP). The City has developed its own voluntary AQIP, with technical support provided by the South Coast AQMD. The AQIP represents the Airport's best efforts to develop programs and strategies for reducing NOx emissions from airport mobile source operations based on its existing authority over airport emission sources. The AQIP

includes specific initiatives and measures for certain non-aircraft emission sources operating at the Airport.

7. Emissions Inventory - The LGB AQIP includes the 2017 base year emissions inventory and 2023 and 2031 business as usual emissions forecasts as well as the 2023 and 2031 forecasts that include the projected estimates of emissions benefits from voluntary airport AQIP measures with quantifiable emission reductions. The AQIP provides an emissions inventory only for non-aircraft airport sources for which the AQIP includes specific voluntary airport measures and initiatives (i.e., ground support equipment, fuel/delivery trucks, on-road and off-road airport fleet vehicles, shuttle buses, and passenger transportation). The City has provided the AQIP with supporting calculations to the South Coast AQMD.

C. JOINT RECITALS

1. Purpose of MOU

The purpose of this MOU is to set forth how the Parties, consistent with their respective legal authorities, intend to quantify the emission reduction benefits in the Basin through the implementation of the voluntary airport strategies developed by the City under the AQIP and MOU, and adopted by the City on [INSERT DATE]. Attachment A, "MOU Schedules" sets forth the specific voluntary airport AQIP measures that are the subject to the MOU. This MOU does not create SIP creditable reductions; rather, it identifies specific voluntary airport AQIP measures and provides the means for the South Coast AQMD to quantify the emission reductions from these voluntary airport AQIP measures to obtain SIP credits. The MOU is not intended to limit Airport growth. A central objective of the AQIP and MOU is to generate NO<sub>x</sub> reductions, and corresponding reductions of associated pollutants from non-aircraft airport mobile sources.

- a. MOU Schedule 1, specified in Attachment A, establishes metrics for quantification of emission benefits associated with implementation of voluntary airport AQIP measures for each emission source category consistent with the 2023 and 2031 dates for attainment of the ozone standards.
- b. The Parties agree the MOU does not: (1) Establish an emissions cap or any other facility-wide limit for NO<sub>x</sub>, or any other pollutant; (2) Obligate the Airport to provide a facility-wide inventory of NO<sub>x</sub> or VOC emissions; however, the parties agree to continue to work together in developing inventories of airport emission sources to support the development of future AQMPs outside of the AQIP/MOU process; or (3) Limit the City's

ability to seek incentive or grant funding through federal, State and local programs, including but not limited to the FAA Voluntary Aviation Low Emissions (VALE) program and other similar programs, which require emissions reductions achieved through such programs to be voluntary in nature and exceed existing obligations to achieve emissions reductions.

- c. The emission reduction benefits from the voluntary airport AQIP measures in Attachment A may be used by South Coast AQMD to obtain SIP credit to the extent the emission reduction benefits quantified by South Coast AQMD for these measures satisfy USEPA's integrity elements (i.e., the emission reductions are quantifiable, surplus, permanent, and enforceable). South Coast AQMD may seek SIP credit for the quantified emission reductions through a separate SIP submittal.
- d. The Parties agree that the South Coast AQMD, and not the City, will rectify any shortfall in prospective emission reductions from the voluntary airport AQIP measures specified in Attachment A.
- e. The Parties specifically disavow any desire or intention to create any third-party beneficiary under this MOU, and specifically declare that no person or entity shall have any remedy or right of enforcement.

## 2. MOU Public Process

- a. Following the adoption of the 2016 AQMP, South Coast AQMD staff held a series of public working group meetings to solicit comments on implementing Control Measure MOB-04 for commercial airports. Based on input received during the public process, South Coast AQMD staff developed a recommendation for the South Coast AQMD Governing Board for the development of an MOU with the commercial airports. In the event that the MOU approach with the airports was not successful, staff also recommended consideration of a regulatory approach for reducing emissions from commercial airports.
- b. In May 2018, the South Coast AQMD Governing Board approved staff's recommendation and directed staff to pursue an MOU approach with the commercial airports to implement 2016 AQMP Control Measure MOB-04.
- c. South Coast AQMD staff has established an MOU Working Group (WG), consisting of representatives from the South Coast AQMD, commercial airports (Los Angeles International Airport, John Wayne Airport, Ontario International Airport, Hollywood Burbank Airport, and Long Beach Airport), CARB, USEPA, environmental organizations, labor, freight industry, airlines, other stakeholders, and the public to solicit comments

on the MOU development. South Coast AQMD staff will also monitor the implementation of this MOU and provide reports to USEPA. In addition, South Coast AQMD may utilize other well-established means of communication, including the South Coast AQMD website, Subscribers lists, and Governing Board and Committee meetings, for disseminating information concerning the status of MOU implementation.

d. The MOU is developed through the public process outlined above for consideration by the South Coast AQMD Governing Board and the City Council.

3. MOU Applicability. The MOU (1) addresses only the voluntary Airport AQIP measure identified in Attachment A, and (2) does not supersede rules that are established by the USEPA or CARB, or legal, regulatory, or contractual obligations that the Airport is subject to such as U.S. Department of Transportation (USDOT) or Federal Aviation Administration (FAA) regulations; federal statutes, including the Anti-Head Tax Act (AHTA), the Federal Aviation Act, and the Airline Deregulation Act; international treaties; or the doctrines of federal preemption, the dormant Commerce Clause, and the Supremacy Clause.

a. Excluded Sources. Nothing in the AQIP or this MOU is intended or shall be interpreted to regulate or otherwise apply to (1) any source that is not specifically identified as a AQIP Source in Attachment A, including aircraft, inclusive of Auxiliary Power Units (APUs), aircraft engines or any other aircraft parts or systems, (2) the operation of any source that is not specifically identified as a AQIP Source in Attachment A, namely aircraft, inclusive of APUs, aircraft engines, or any other aircraft parts or systems, either in flight or on the ground, including while taxiing or parked at an aircraft gate, remain-overnight (RON) position, maintenance facility, or any other airport location, or (3) any and all activities associated with General Aviation (GA) operations including aircraft, GA related GSE and vehicles and equipment.

II. NOW, THEREFORE, in consideration of the mutual interests and benefits of all parties to be derived from emissions reductions of NO<sub>x</sub>, and corresponding anticipated reductions to other pollutants, including VOC and PM, resulting from the implementation of the strategies identified in the voluntary AQIP, the Parties hereto agree as follows:

A. CITY'S RESPONSIBILITIES

The City agrees to take the following actions:

1. AQIP Implementation. Implement AQIP voluntary airport measures identified in Attachment A, Schedule 1.
  2. Monitoring and Reporting. Monitor the implementation of voluntary airport AQIP measures and provide data and annual emissions inventory reports to South Coast AQMD as described in Attachment A, Schedule 1.
  3. Incentives. Provide monetary or non-monetary incentives for non-aircraft airport mobile sources to the extent possible and as included in the AQIP. Nothing in this MOU requires the Airport to provide incentives.
  4. Funding. Support grant funding efforts with potential funding sources that may provide funding for the voluntary airport AQIP measures, at the City's discretion.
- B. SOUTH COAST AQMD'S RESPONSIBILITIES
- South Coast AQMD agrees to take the following actions:
1. Technical Analyses for SIP Credit from AQIP emission reductions. The South Coast AQMD will provide the necessary documentation and technical analysis with respect to the calculation of the emission reductions benefits attributable to the voluntary airport AQIP measures identified in Attachment A. This would include, but not be limited to, an analysis of the AQMP/SIP baseline for affected airport sources, emission reductions achieved through AQIP measures in Attachment A based on the AQIP inventories, and an estimation of emissions reductions benefits and corresponding SIP credits. Factors to be considered for purposes of calculating the emission reductions benefits attributable to the voluntary airport AQIP measures in Attachment A shall include, but not be limited to: growth forecasts from the airports, implementation schedules for voluntary airport AQIP measures, the availability of funding for relevant incentives programs, and the technical and economic feasibility of specific voluntary airport AQIP measures.
  2. Federal Enforceability. To the extent necessary to obtain SIP approval, the South Coast AQMD will provide federally enforceable commitments in a SIP update document that is separate from this MOU to the USEPA after approval by the South Coast AQMD and the CARB Boards. South Coast AQMD will monitor, assess, and report emission reductions benefits from the voluntary airport AQIP measures identified in Attachment A to the USEPA.
  3. Responsibility for Shortfall. The South Coast AQMD shall be solely responsible to make up any emissions reduction shortfalls that may occur in the event that the actual voluntary airport AQIP emissions reduction benefits do not achieve the projected emissions reduction benefits resulting from implementation of

the voluntary airport AQIP measures specified in Attachment A. South Coast AQMD will also commit to adopt and submit substitute measures to USEPA to remedy any potential emission reduction shortfall associated with implementation of the AQIP measures identified in Attachment A. The City shall have no obligation(s) and/or requirement(s) to implement any substitute measures to remedy any potential emission reduction shortfall associated with implementation of the AQIP measures identified in Attachment A, unless otherwise mutually agreed on by both parties. Notwithstanding the above, the City and South Coast AQMD agree that, in the event that the actual emission reductions associated with implementation of voluntary AQIP measures in Attachment A are less than the estimated emissions reduction benefits from implementation of these voluntary AQIP measures, the City and South Coast AQMD will work together to consider potential new or enhanced programs, or better efforts to quantify existing programs, to help South Coast AQMD address any shortfalls.

4. Funding. The South Coast AQMD, at its Governing Board's discretion, will support grant funding efforts with potential funding sources that may provide funding for the voluntary airport AQIP measures.
5. Monitoring. The South Coast AQMD will monitor and assess the implementation of SIP creditable AQIP measures based on information provided by the City as outlined in Schedule 1 in Attachment A.
6. Information Sharing. The South Coast AQMD will provide the means for ensuring that emission reduction data and other pertinent information related to the implementation of SIP creditable AQIP measures are fully accessible to the public and the USEPA.

C. MOU SCHEDULES

The voluntary airport AQIP measures for which the South Coast AQMD may quantify emission reductions and seek SIP credit through a separate SIP submittal are identified in Schedule 1 in Attachment A and are incorporated as part of this MOU:

1. MOU SCHEDULE NO. 1 - GROUND SUPPORT EQUIPMENT

Schedule No. 1 focuses on the voluntary airport AQIP measure and time frame aligned with the AQMP and SIP emission reduction target dates (i.e., 2023 and 2031), and includes technical details pertinent to the equipment category such as:

- Metrics or performance targets

- Schedule for program implementation
- Annual reporting by the City to South Coast AQMD

Variations in the nature of information and data needed for each of the source measures may be addressed with focused and adaptive revisions to the individual equipment category schedules and may be revised by mutual agreement of the Parties without modifying this MOU.

- D. TERM OF MOU. This MOU shall be in full force and in effect when signed by all Parties following their respective required authorization processes. The initial term of this MOU shall expire on December 31, 2031 unless terminated earlier pursuant to Section II.E, below. Prior to expiration of this MOU, all Parties agree to meet to evaluate the need for continuing participation. If all Parties agree that continuing participation is desirable, they shall negotiate for their respective Boards' approval, a written extension of the term of this MOU, and any applicable additional MOU Schedules.
- E. WITHDRAWAL AND EARLY TERMINATION. If any Party to this MOU determines that it wishes to no longer be a party to this MOU, then the Party shall provide notice to the other Party at least ninety (90) days in advance of the specified date of termination of the MOU. The Parties commit to work together to resolve any issues and to negotiate an updated MOU at least thirty (30) days in advance of the specified date of termination of the MOU. If the Parties are unable to reach agreement, the MOU shall terminate on the date specified in the notification.
- F. ENFORCEABILITY. The Parties commit to implement the provisions in the MOU. The parties agree that implementation of the measures specified in Attachment A is not to be construed as a regulation or requirement of the South Coast AQMD. In the event that any party fails to meet its commitment(s) or anticipates an inability to meet its commitment(s), the Party shall provide notice to the other Party within sixty (60) days of such determination and seek to negotiate a mutually agreeable solution within ninety (90) days of the date of the Notice. The Parties shall continue to comply with all other commitments under this MOU during the negotiations. Nothing contained in this paragraph is intended to limit any rights or remedies that the Parties may have under law. The Parties shall attempt in good faith to resolve any controversy that may arise out of or relating to this MOU. If a controversy or claim should arise that cannot be resolved informally by the respective staffs, executive level representatives of the Parties will meet at least once in person and, in addition, at least once in person or by telephone to attempt to resolve the matter. The Representatives will make every effort to meet as soon as reasonably possible at a mutually agreed time and place.



- G. NOTICES. All notices that are required under this MOU shall be provided in the manner set forth herein, unless specified otherwise. Notice to a Party shall be delivered to the attention of the person listed below, or to such other person or persons as may hereafter be designated by that Party in writing. Notice shall be in writing sent by U.S. Certified Mail, Return Receipt Requested, or a nationally recognized overnight courier service. Notice shall be deemed to be received when delivered (written receipt of delivery).

South Coast AQMD:                      South Coast Air Quality Management District  
21865 Copley Drive  
Diamond Bar, CA 91765-4178  
Attn: Assistant Deputy Executive Officer - Planning,  
Rule Development & Area Sources

City:    Long Beach Airport  
4100 E. Donald Douglas Drive, Floor 2  
Long Beach, CA 90808  
Attn: Cynthia Guidry – Director, Long Beach Airport

- H. AVAILABLE FUNDING. Each Party shall be responsible for its respective costs associated with this MOU and acknowledges that the commitments contained herein by any other Party are subject to the availability of appropriated funds. No Party will submit a claim for compensation to any other Party, or otherwise seek reimbursement of costs from any other Party, for activities carried out pursuant to this MOU.
- I. FUTURE AGREEMENTS. This MOU does not restrict any future agreements between the Parties with respect to the subject matter stated herein or any other subject matter.
- J. JOINT WORK PRODUCT. This MOU shall not be construed against the Party preparing the same, shall be construed without regard to the identity of the person who drafted such and shall be construed as if all Parties had jointly prepared this MOU and it shall be deemed their joint work product.
- K. RECITALS. Each of the Recitals is incorporated into this MOU.
- L. ENTIRE UNDERSTANDING. This MOU, including all attachments, constitutes the entire understanding between the Parties and supersedes all other agreements, oral or written, with respect to the subject matter herein. This MOU shall not be amended except in writing, signed by the Parties which expressly refers to this MOU.

- M. VENUE. This MOU shall be construed and interpreted and the legal relations created thereby shall be determined in accordance with the laws of the State of California. Venue for resolution of any disputes under this MOU shall be Los Angeles County, California, USA.
- N. SEVERABILITY. If a court of competent jurisdiction holds any provision of this MOU to be illegal, unenforceable, or invalid in whole or in part for any reason, the validity and enforceability of the remaining provisions, or portions of those provisions, will not be affected.
- O. ATTORNEYS' FEES. In the event any action is filed in connection with the enforcement or interpretation of this MOU, each Party shall bear its own attorneys' fees and costs.
- P. AUTHORITY. Except as expressly stated herein, nothing in this MOU shall be construed as a waiver of any Party's discretionary authority or deemed to restrict authority granted to any Party under law in any way with respect to future legislative, administrative, or other actions.
- Q. VOLUNTARY AQIP. The Parties agree that the Airport's AQIP measures in Attachment A are voluntary and are not to be construed as a regulation or requirement of South Coast AQMD.
- R. MOU Modification. This MOU may be subsequently modified at any time but no modification shall be valid or binding unless made in writing and signed by authorized representatives of both Parties.
- S. COUNTERPARTS. The signature pages of this MOU are being executed in counterparts by authorized signatories of the Parties following the approvals by their respective public agency governing boards. When both Parties have signed, all executed counterparts taken together shall constitute one and the same instrument.
- T. AUTHORIZED SIGNATURES. Each signatory of this MOU represents that s/he is authorized to execute on behalf of the Party for which s/he signs. Each Party represents that it has legal authority to enter into this MOU and to perform all obligations under this MOU.
- U. NO ENFORCEMENT AGAINST THIRD PARTIES. The South Coast AQMD shall not seek to enforce the measure specified in Attachment A or any of the measures or initiatives in the AQIP or any of its terms against the Airport's tenants, concessionaires, third party licensees, vendor(s), or other relevant operators doing business at Airport or City facilities.

**IN WITNESS WHEREOF**, the Parties hereto have caused this Memorandum of Understanding to be executed by their authorized representatives.

**SOUTH COAST AIR QUALITY MANAGEMENT DISTRICT**

By \_\_\_\_\_  
Name: Dr. William Burke  
Title: Chairman, South Coast Governing Board

Date: \_\_\_\_\_, 20\_\_

Attest \_\_\_\_\_  
Name:  
Title:

APPROVED AS TO FORM:

Date: \_\_\_\_\_, 20\_\_  
BAYRON T. GILCHRIST,  
General Counsel

By \_\_\_\_\_  
Name:  
Title:

**LONG BEACH AIRPORT**

By \_\_\_\_\_  
Name: Thomas B. Modica  
Title: Acting City Manager, City of Long Beach

Date: \_\_\_\_\_, 20\_\_

Attest \_\_\_\_\_  
Name:  
Title:

APPROVED AS TO FORM:

Date: \_\_\_\_\_, 20\_\_  
MICHAEL J. MAIS,  
Assistant City Attorney, City of Long Beach

By \_\_\_\_\_  
Name:  
Title:

# ATTACHMENT A

## MOU SCHEDULE NO. 1 – GROUND SUPPORT EQUIPMENT

This MOU Schedule No. 1 is based on the City’s AQIP measure for ground support equipment<sup>1</sup>.

- I. PROGRAM DESCRIPTION – Require that all ground support equipment associated with commercial operations achieve a fleet average NO<sub>x</sub> emission factors of 0.93 and 0.44 g/bhp-hr in 2023 and 2031, respectively.
- II. PROGRAM TIMEFRAME - Upon execution through 2031.
- III. AIRPORT OBLIGATIONS – The City agrees to:
  - A. Implement the measure by working with airport tenants to achieve the above performance targets by specified dates through accelerated turnover to cleaner equipment. Airport shall have complete discretion as to mechanisms used to implement this measure. Such mechanisms may include leases, licenses, operational requirements, or other agreements.
  - B. Beginning in 2021, and every year thereafter through 2031, provide the following information to South Coast AQMD on an annual basis by June 1 for each preceding calendar year:
    1. List of ground support equipment as provided by airlines operating at LGB with the following information:
      - a. Equipment ID
      - b. Equipment type
      - c. Fuel type
      - d. Engine model year
      - e. Power rating (hp or kW)
      - f. Engine tier level (for diesel engines)
      - g. Annual activity data
    2. An annual emission inventory for all ground support equipment associated with commercial operations at LGB, including methodology and calculations.
- IV. SOUTH COAST AQMD OBLIGATIONS – South Coast AQMD agrees to:

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<sup>1</sup> Ground Support Equipment or “GSE” is any vehicle or equipment used to support aircraft operations that is subject to, or included in compliance plans to meet, the requirements of the California Air Resources Board (CARB) In-Use Off-Road Diesel (ORD) Vehicle Regulation Program, CARB Off-Road Large Spark-Ignition (LSI) Engine Fleet Requirements Regulation Program, or CARB Portable Equipment Registration Program and associated Portable Diesel Engine Airborne Toxic Control Measure. Furthermore, GSE as defined here only includes equipment that is not subject to compliance with SCAQMD Rule XX – RECLAIM, or included in a mobile source emission reduction credit program under SCAQMD Rule XVI.

- A. Verify emission reductions from the implementation of this AQIP measure in order to determine actual emission reductions.
- B. Ensure that any emission reduction data related to this AQIP measure and other pertinent information are accessible to the public and the USEPA.