

Appendix A: MOUs

Los Angeles International Airport (LAX)

John Wayne Airport (JWA)

Long Beach Airport (LGB)

Ontario Airport (ONT)

Burbank Airport (BUR)

Los Angeles International Airport (LAX)

**MEMORANDUM OF
UNDERSTANDING BETWEEN
THE SOUTH COAST AIR QUALITY MANAGEMENT
DISTRICT AND
THE CITY OF LOS ANGELES DEPARTMENT OF AIRPORTS**

This Memorandum of Understanding (MOU) is entered into this 13th day of December 2019, by and between the City of Los Angeles Department of Airports (Los Angeles World Airports or LAWA) acting by and through its Board of Airport Commissioners, and the South Coast Air Quality Management District (South Coast AQMD), acting by and through its Governing Board. LAWA 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. The Basin consists of the County of Orange, and the non-desert portions of the Counties of Los Angeles, Riverside, and San Bernardino.
2. South Coast AQMD. The South Coast AQMD is the regional air pollution control agency primarily responsible for reducing air pollution in the Basin. Los Angeles International Airport (LAX or Airport) is located within the Basin.
3. Need for Emission Reductions. The USEPA designated the Basin 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 the ozone NAAQS, emissions of oxides of nitrogen (NO_x) need to be reduced by 45% in 2023 and 55% in 2031 as outlined in the 2016 Air Quality Management Plan (AQMP). The 2016 AQMP includes Control Measure MOB-04 – Emissions Reductions at Commercial Airports, with the goal of achieving emission reductions from commercial airports. On March 3, 2017, the South Coast AQMD Governing Board adopted the 2016 Air AQMP. On March 23, 2017, CARB approved the 2016 AQMP and the 2016 State Strategy for the State Implementation Plan (SIP) for Federal Ozone and PM_{2.5} Standards. On October 1, 2019, USEPA approved the 2016 AQMP and SIP.

4. Emissions from Sources at Commercial Airports. Emissions associated with operations at commercial airports contribute to adverse air quality in the Basin; these emissions are 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. NOx emission reductions from commercial airports can assist with the effort to attain the ozone standards in 2023 and 2031.

B. RECITALS BY LAWA.

1. LAWA. LAWA is a proprietary department of the City of Los Angeles. The City of Los Angeles is a Charter City and is subject to city, county, state, and federal law. The City of Los Angeles is the proprietor and certificated operator of LAX.
2. Authority. The City of Los Angeles acting by and through its proprietary department LAWA has the authority to enter into this MOU pursuant to the City of Los Angeles Charter. Obligations hereunder, are, however, limited to the extent in conflict with any Federal Aviation Authority (FAA) rules or regulations.
3. LAWA's History of Leadership in Successfully Implementing Air Quality Improvement Programs. LAWA has a long history of leadership in successfully implementing air quality improvement programs at LAX and is committed to improving air quality in and around its airports to the extent consistent with operating an airport.
4. LAX Air Quality Improvement Measures (LAX AQIM). LAWA has identified its existing non-aircraft related air quality improvement measures and proposed new initiatives for reducing NOx emissions from non-aircraft related mobile sources at the airport and included both into the LAX AQIM, which supports the South Coast AQMD's efforts to meet its obligations under the 2016 AQMP. LAWA's LAX AQIM represents its best efforts to develop strategies for reducing NOx emissions from non-aircraft mobile source operations at LAX based on its existing authority over airport emission sources and includes specific voluntarily-created airport measures and new initiatives for certain non-aircraft emission sources operating at LAX.
5. Emissions Inventory. The LAX AQIM includes the 2017 base year emissions inventory and 2023 and 2031 business as usual emissions forecasts as well as the 2023 and 2031 emissions forecasts that include the estimated emissions benefits from LAX AQIM measures and new initiatives with quantifiable emission reductions. The LAX AQIM provides an emissions inventory only for non-aircraft airport sources (i.e., ground support equipment, on-road and off-road airport fleet vehicles, trucks, shuttle buses, and passenger transportation) for which the LAX AQIM includes specific measures and initiatives and LAWA has

provided the LAX AQIM and related LAX AQIM Emissions Inventory and Forecasts with supporting calculations to the South Coast AQMD.

C. JOINT RECITALS.

1. Purpose of MOU.

- a. The purpose of this MOU is to set forth how the Parties, consistent with their respective legal authorities, intend to quantify the anticipated emission reduction benefits in the Basin through implementation of the three (3) voluntary LAX measures from LAWA's LAX AQIM set forth in Attachment A (hereinafter the "MOU Measures"). This MOU does not create SIP creditable reductions; rather, 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.
- b. The MOU is not intended to limit Airport growth. The central objective of the LAX AQIM and this MOU is to reduce NOx emissions and achieve corresponding reductions of associated pollutants from non-aircraft airport mobile sources.
- c. The MOU Measures set forth in Attachment A, MOU Measures 1 through 3, set forth metrics for quantification of estimated emission benefits associated with implementation of those MOU Measures.
- d. The emission reduction benefits from the MOU Measures 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.
- e. The Parties agree that the South Coast AQMD, and not LAWA, will be responsible for any difference between the estimated prospective emission reductions and actual emissions reductions achieved from the MOU Measures.
- f. 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.
- g. The Parties will continue to work together in developing inventories of airport emission sources to support the development of future AQMPs outside of the MOU process.

- h. LAWA and South Coast AQMD have a long history of successfully working together on air quality emission reduction projects; and LAWA and the South Coast AQMD desire to continue this successful collaboration through this voluntary MOU.

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. On May 4, 2018, the South Coast AQMD Governing Board directed staff to pursue the approach for developing facility-based emission reduction strategies for commercial airports through voluntary measures only.
- c. South Coast AQMD staff established an MOU Working Group, consisting of representatives from the South Coast AQMD, commercial airports (LAX, 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, and to 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 has been developed through the public process, discussed above, for consideration by the South Coast AQMD Governing Board and the LAWA Board of Airport Commissioners.

3. MOU Applicability. The MOU (1) does not apply to all measures and new initiatives identified in the LAX AQIM, (2) addresses only the MOU Measures identified in Attachment A, and (3) does not supersede conflicting rules that are established by the USEPA or CARB, or legal obligations that LAWA is subject to such as U.S. Department of Transportation (USDOT) or 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 this MOU is intended or shall be interpreted to apply to: (1) any source that is not specifically identified in the MOU Measures, or (2) the operation of any source that is not specifically identified in the MOU Measures

II. NOW THEREFORE, in consideration of the mutual interests and benefits of all parties to be derived from emissions reductions of NO_x, and corresponding anticipated reductions to other pollutants, including VOC and PM, resulting from the implementation of the MOU Measures, the Parties agree as follows:

A. AGREEMENTS.

1. The Parties agree the MOU does not: (i) establish an emissions cap or any other facility-wide limit for NO_x, or any other pollutant; (ii) constitute any new regulatory authority imposed on LAWA, its operations, or its tenants; (iii) obligate LAWA to provide a comprehensive, facility-wide inventory of NO_x emissions; or (iv) limit LAWA'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.
2. The Parties agree to coordinate to identify general conformity budgets in the next AQMP for LAWA's general conformity purposes.

B. LAWA'S RESPONSIBILITIES.

LAWA agrees to take the following actions:

1. Implementation of MOU Measures. LAWA voluntarily agrees to implement the MOU Measures.
2. Monitoring and Reporting. LAWA will monitor the implementation of the MOU Measures and provide data and annual emissions inventory reports to South Coast AQMD as specified in Attachment A, MOU Measures 1 – 3.

C. SOUTH COAST AQMD'S RESPONSIBILITIES.

South Coast AQMD commits to take the following actions:

1. Technical Analysis for SIP Credit from MOU Measures emission

- reductions. The South Coast AQMD will provide the necessary documentation and technical analysis with respect to the calculation of estimated emission reductions benefits attributable to the MOU Measures. This would include, but not be limited to, an analysis of the AQMP/SIP baseline for affected airport sources, emission reductions achieved through the MOU Measures, 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 MOU Measures shall include, but not be limited to: growth forecasts from LAWA, implementation schedules for the MOU Measures, the availability of funding for relevant incentives programs, and the technical and economic feasibility of specific MOU Measures
2. Federal Enforceability. To the extent necessary to obtain SIP approval, the South Coast AQMD will provide its own federally enforceable commitments to USEPA in a SIP update document that is separate from this MOU after approval by the South Coast AQMD and CARB Boards. South Coast AQMD will monitor, assess, and report the emission reductions benefits from the voluntary MOU Measures as identified in Attachment A to the USEPA.
 3. Responsibility for Shortfall. LAWA's emissions estimates will be reliant on performance-based targets and LAWA will not provide emissions reduction guarantees. In the event of any shortfall in estimated emission reductions from the MOU Measures, the Parties agree that the South Coast AQMD shall be solely responsible to make up the shortfall, and LAWA shall not be responsible for making up the shortfall. South Coast AQMD will commit to adopt and submit substitute measures to USEPA to remedy any potential emission reduction shortfall associated with implementation of the MOU Measures. The Airport 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 MOU Measures, unless otherwise mutually agreed on by both parties. Notwithstanding the above, LAWA and South Coast AQMD agree that, in the event that the actual emission reductions associated with implementation of MOU Measures are less than the estimated emissions reduction benefits projected for implementation of these measures, LAWA 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 AQIM measures.

5. Monitoring. The South Coast AQMD will monitor and assess the implementation of the MOU Measures based on information provided by LAWA as outlined in Attachment A, MOU Measures 1 through 3.
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 the MOU Measures are accessible to the public and the USEPA.

D. MOU MEASURES (ATTACHMENT “A”).

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

- MOU MEASURE NO. 1 – GROUND SUPPORT EQUIPMENT EMISSIONS REDUCTION POLICY
- MOU MEASURE NO. 2 – LAX ALTERNATIVE FUEL VEHICLE INCENTIVE PROGRAM
- MOU MEASURE NO. 3 – ZERO-EMISSION BUS PROGRAM

Each MOU Measure focuses on the specific MOU Measure and time frame aligned with the AQMP and SIP emission reduction target dates (i.e., 2023, 2031), and includes technical details pertinent to the equipment category such as:

- Metrics or performance targets
- Schedule for program implementation
- Annual reporting by LAWA to South Coast AQMD

- E. TERM OF MOU. The term of this MOU shall be effective as of the day and year indicated on the first page of this MOU (“Effective Date”) through December 31, 2032, unless terminated earlier pursuant to subsection F, 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 Measures.
- F. WITHDRAWAL AND EARLY TERMINATION. Any Party may terminate this MOU for any reason by providing ninety (90) days written notice to the other Party. The Parties commit to work together to resolve any issues and 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. Termination of this MOU shall not terminate any grants or funds entered into prior to the termination.
- G. IMPLEMENTATION. The Parties agree to implement the provisions under their respective commitments specified in the MOU. LAWA and the South Coast

AQMD agree that LAWA's implementation of the MOU Measures is not to be construed as a regulation, rule, 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 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.

- H. 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

LAWA: Los Angeles World Airports
Attn: Tamara McCrossen-Orr
7301 World Way West, 7th Floor
Los Angeles, CA 90045

With a copy to: General Counsel
Los Angeles City Attorney Airport Division
1 World Way
Los Angeles, CA 90045

- I. COSTS. Each Party shall be responsible for its respective costs associated with this MOU. 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.

- J. 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.
- K. 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.
- 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.
- M. VENUE. Venue for resolution of any disputes under this MOU shall be Los Angeles County, California, USA.
- N. 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.
- O. 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.
- P. COUNTERPARTS. This MOU may be executed in one or more counterparts, each of which shall be deemed to be an original.
- Q. MODIFICATIONS. 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.
- R. 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.
- S. NO ENFORCEMENT AGAINST THIRD PARTIES. The South Coast AQMD shall not seek to enforce the MOU Measures or any of the measures or initiatives in the LAX AQIM or any of its terms against LAWA's tenants, concessionaries, third party licensees, vendors, or other relevant operators doing business at LAWA facilities.
- T. AMENDMENTS AND CONSULTATION. LAWA may update or modify its LAX AQIM at any time at its discretion. However, amendments to the MOU

Measures must be made by the mutual agreement of both Parties and in writing sign by the Parties.

- U. RELATIONSHIP TO LAWS. LAWA will not implement any MOU Measures or measures in the LAX AQIM or any provision or provisions thereof that would violate Federal law, federal regulations, international treaty obligations, FAA policy, or FAA instructions, or compromise the safety of the traveling public.


IN WITNESS WHEREOF, the Parties have executed this MOU as of the day and year indicated on the first page of this MOU.

APPROVED AS TO FORM:

CITY OF LOS ANGELES

MICHAEL N. FEUER, City Attorney

By:

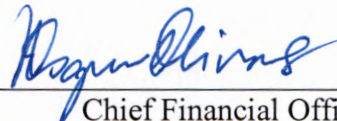

Deputy City Attorney

By



Deborah Flint
Chief Executive Officer
Department of Airports

By

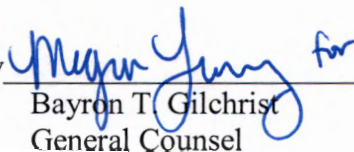


Chief Financial Officer
Department of Airports

APPROVED AS TO FORM:

**SOUTH COAST AIR QUALITY
MANAGEMENT DISTRICT**

By

 for
Bayron T. Gilchrist
General Counsel

By



Dr. William Burke
Chairman
South Coast AQMD Governing Board

ATTACHMENT A - LAX MOU Measures

MOU MEASURE NO. 1 – GROUND SUPPORT EQUIPMENT EMISSIONS REDUCTION POLICY

This MOU Measure No. 1 is based on LAWA's LAX AQIM measure, the Ground Support Emissions Reduction Policy for ground support equipment (GSE) at LAX and is attached to and a part of the MOU between LAWA and South Coast AQMD.

- I. PROGRAM DESCRIPTION – Require 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 by January 1, 2023 and January 1, 2031, respectively.
- II. PROGRAM TIMEFRAME – Upon execution through 2032.
- III. LAWA OBLIGATIONS – LAWA shall:
 - A. Airport shall implement the measure by working with airport tenants to achieve the above performance targets. Airport shall have complete discretion as to mechanisms used to implement this measure.
 - B. Beginning in 2021, and every year thereafter through 2032, 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 operating at LAX subject to this GSE measure 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 for non-zero emission equipment that is sufficient to determine emission reductions at a reasonable level of accuracy (i.e., actual operating hours from hour meter readings/maintenance records, average operating hours representative of equipment type and airport, or average operating hours by equipment/fuel type from CARB's OFFROAD model, if applicable).
 2. For non-zero emission ground support equipment subject to this GSE measure, information regarding the sale or retirement of equipment available through CARB's DOORS system and, for pre-Tier 4 diesel, pre-2010 gasoline, or pre-2010 LPG ground support equipment relocated from LAX to another airport within the South Coast Air Basin, identify: a) the airport to which equipment is relocated, b) date of relocation, and c) estimated projected usage hours.
 3. An annual emission inventory for ground support equipment operating at

LAX, following the methodology and calculations used to generate the 2017 baseline inventory report for the LAX AQIM.

IV. SOUTH COAST AQMD OBLIGATIONS – South Coast AQMD shall:

- A. Verify emission reductions from the implementation of this measure by LAWA to determine actual emission reductions.
- B. Ensure that the data set forth in Section III.B related to this measure is accessible to the public and the USEPA.

V. JOINT OBLIGATIONS – The Airport and the South Coast AQMD shall:

- A. Work to identify and demonstrate clean technologies for ground support equipment in collaboration with technology providers, airport tenants, CARB, USEPA, and stakeholders.
- B. Collaborate to identify additional sources of funding to accelerate turnover of existing ground support equipment to cleaner equipment.

MOU MEASURE NO. 2 – LAX ALTERNATIVE FUEL VEHICLE INCENTIVE PROGRAM

This MOU Measure No. 2 is based on LAWA’s LAX 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.

- I. PROGRAM DESCRIPTION – 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.
- II. PROGRAM TIMEFRAME – Upon execution through 2032.
- III. LAWA OBLIGATIONS – LAWA shall:
 - A. Ensure full subscription of incentive program funding, to the maximum extent feasible, to encourage the deployment of zero or near-zero emission vehicles at LAX.
 - B. Beginning in 2021, provide the following information to South Coast AQMD on an annual basis by June 1 for each preceding calendar year:
 - 1. Zero or near-zero vehicle VIN number
 - 2. Zero or near-zero vehicle model year
 - 3. Zero or near-zero vehicle GVWR
 - 4. Zero or near-zero vehicle engine model year
 - 5. Zero or near-zero vehicle engine power rating
 - 6. Zero or near-zero vehicle fuel type
 - 7. Executive Order Number for the zero or near-zero vehicle engine
 - 8. Zero or near-zero vehicle annual VMT (estimated)¹
 - 9. List of, and information on, replaced vehicle s (e.g., scrapped, moved out of state)
 - 10. An emission inventory for the new near-zero or zero-emission vehicles acquired by LAX operators under the Alternative Fuel Vehicle Incentive Program, following the methodology and calculations used to generate the 2017 baseline inventory report for the LAX AQIM.

¹ Vehicle miles traveled (VMT) will be estimated from EMFAC2017 VMT for applicable vehicle size and technology categories in the South Coast Air Basin portion of Los Angeles County, unless CARB updates those activity levels at a future date within the Program.

IV. SOUTH COAST AQMD OBLIGATIONS – South Coast AQMD shall:

- A. Verify emission reductions from the implementation of this measure by LAWA to determine actual emission reductions.
- B. Ensure that the data set forth in Section III.B related to this measure is accessible to the public and the USEPA.

MOU MEASURE NO. 3 – ZERO-EMISSION BUS PROGRAM

This MOU Measure No. 3 is based on LAWA's LAX 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 LAWA and South Coast AQMD.

- I. PROGRAM DESCRIPTION – Replace 20% and 100% of LAWA-owned and operated buses with zero-emission buses by January 1, 2023 and January 1, 2031, respectively.
- II. PROGRAM TIMEFRAME – Upon execution through 2032.
- III. LAWA OBLIGATIONS – LAWA shall:
 - A. Replace LAWA-owned buses to meet the specified targets.
 - B. Beginning in 2021, provide the following information to South Coast AQMD on an annual basis by June 1 for each preceding calendar year:
 1. List of buses operating at LAWA with the following information:
 - a. Vehicle Identification Number
 - b. Vehicle model year
 - c. Vehicle GVWR
 - d. Bus engine model year
 - e. Power rating (hp or kW)
 - f. Odometer reading
 - g. Vehicle miles traveled²
 2. An emission inventory for the LAWA-owned bus fleet, following the methodology and calculations used to generate the 2017 baseline inventory report for the LAX AQIM.
 3. List of buses replaced during the reported year and information specified in III.B.1 above on replaced and replacement buses (i.e., replaced buses scrapped or moved out of state).
- IV. SOUTH COAST AQMD OBLIGATIONS – South Coast AQMD shall:
 - A. Verify emission reductions from the implementation of this measure by LAWA to determine actual emission reductions.
 - B. Ensure that the data set forth in Section III.B related to this measure is accessible to the public and the USEPA.

² Vehicle miles traveled (VMT) will be based on actual annual mileage traveled by each bus in the LAWA-owned bus fleet.

John Wayne Airport (JWA)

**MEMORANDUM OF UNDERSTANDING BETWEEN
THE SOUTH COAST AIR QUALITY MANAGEMENT DISTRICT AND
JOHN WAYNE AIRPORT, ORANGE COUNTY
REGARDING JOHN WAYNE 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”), acting by and through its Governing Board, and John Wayne Airport, Orange County (SNA) (“JWA” or “Airport”), acting by and through the County of Orange, California (“County”) in its capacity as the proprietor and certificated operator of JWA. The Airport 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 USEPA approved the 2016 AQMP on October 1, 2019.
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. JWA 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. Therefore, NOx emission reductions from commercial airports can assist with the effort to attain the ozone standards in 2023 and 2031.

B. RECITALS BY JWA

1. Airport. The County of Orange is the proprietor and certificated operator of JWA.
2. Airport Obligations. JWA enters 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 JWA 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 JWA.
4. Responsibility to Community. The MOU supports and is made in recognition of the importance of JWA to the economic health and well-being of the community surrounding JWA and the importance of balancing the needs of the Orange County community for adequate commercial air transportation facilities with environmentally responsible air transportation operations at JWA.
5. Statement of Intent. JWA'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 Airport in connection with the formulation of the AQIP and this MOU. Rather this MOU reflects consideration by JWA 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). JWA 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 AQIP includes the 2017 base year emissions inventory and 2023 and 2031 business as usual emissions forecast 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). JWA 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 JWA under the AQIP and MOU, and approved by the County on November 19, 2019. Attachment A, "MOU Schedules," sets forth the specific voluntary airport AQIP measures that are 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_x reductions, and corresponding reductions of associated pollutants from non-aircraft airport mobile sources.

- a. The MOU Schedules 1 through 3, specified in Attachment A, establish metrics for quantification of emission benefits associated with implementation of voluntary airport AQIP measures for each emissions source category consistent with the 2023 and 2031 dates for attainment of the ozone standards.
- b. The Parties agree the MOU does not: i) Establish an emissions cap or any other facility-wide limit for NO_x, or any other pollutant; ii) Obligate the Airport to provide a facility-wide inventory of NO_x 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 iii) Limit the Airport'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 Airport, 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 Board of Supervisors for the County of Orange.

3. MOU Applicability

- a. The MOU (1) addresses only the voluntary airport AQIP measures 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.
- b. 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, including 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. For purposes of the AQIP and this MOU, GA is defined as all civil aviation operations *except*: operations by 14 C.F.R. Part 121 commercial carriers, and regularly scheduled air services, defined as: (i) operated in support of, advertised, or otherwise made available to members of the public by any means for commercial air transportation purposes, and members of the public may travel or ship commercial cargo on the flights; (ii) the flights are scheduled to occur, or are represented as occurring (or available) at specified times and days; and (iii) the operator conducts, or proposes to operate, departures at JWA at a frequency greater than two (2) times per week during any consecutive three (3) week period.

II. NOW, THEREFORE, in consideration of the mutual interests and benefits of all parties to be derived from emissions reductions of NO_x, and corresponding anticipated reductions of 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. AIRPORT'S RESPONSIBILITIES

The County or Airport agrees to take the following actions:

1. AQIP Implementation. Implement voluntary airport AQIP measures identified in Attachment A, Schedules 1 through 3.
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, Schedules 1 through 3.
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 JWA'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 Airport 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, JWA 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 projected for implementation of these voluntary AQIP measures, JWA 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 JWA as outlined in Schedules 1 through 3 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 the following Schedules 1 through 3 in Attachment A and are incorporated as part of this MOU:

1. MOU SCHEDULE NO. 1 - GROUND SUPPORT EQUIPMENT
2. MOU SCHEDULE NO. 2 – JET FUEL DELIVERY TRUCKS
3. MOU SCHEDULE NO. 3 – PARKING SHUTTLE BUS ELECTRIFICATION

Each Schedule focuses on the voluntary airport AQIP measure and time frame aligned with the AQMP and SIP emission reduction target dates (i.e., 2023, 2031), and includes technical details pertinent to the equipment category such as:

- Metrics or performance targets
- Schedule for program implementation
- Annual reporting by the Airport 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, 2032 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 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 agree 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

JOHN WAYNE AIRPORT: Mr. Barry Rondinella
Airport Director
3160 Airway Avenue
Costa Mesa, CA 92626
Attn: Airport Environmental Manager

- H. AVAILABLE FUNDING. Each Party shall be responsible for its respective costs associated with this MOU and acknowledges that the agreements contained herein by the Parties are subject to the availability of appropriated funds. No Party will submit a claim for compensation to the other Party, or otherwise seek reimbursement of costs from the 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 Orange 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 set forth 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 measures specified in Attachment A or any of the measures or new initiatives in the AQIP or any of its terms against JWA's tenants, concessionaries, third party licensees, vendors, or other relevant operators doing business at JWA facilities.

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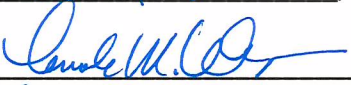
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IN WITNESS WHEREOF, the Parties hereto have caused this Memorandum of Understanding to be executed by their authorized representatives.


SOUTH COAST AIR QUALITY MANAGEMENT DISTRICT

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

Date: 12/13, 2019

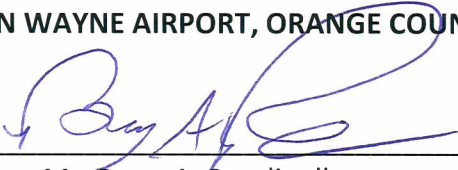
Attest 
Name: Carole M. Wayman
Title: Senior Deputy Clerk

APPROVED AS TO FORM:

By  for
BAYRON T. GILCHRIST,
General Counsel

Date: December 6, 2019

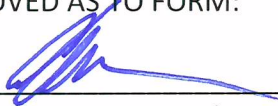
JOHN WAYNE AIRPORT, ORANGE COUNTY

By 
Name: Mr. Barry A. Rondinella
Title: Airport Director

Date: Dec 13, 2019

Attest 
Name: L.G. Serafini
Title: Deputy Airport Director

APPROVED AS TO FORM:

By 
Deputy County Counsel
County of Orange

Date: December 3, 2019

ATTACHMENT A

MOU Schedules

MOU SCHEDULE NO. 1 – GROUND SUPPORT EQUIPMENT

This MOU Schedule No. 1 is based on JWA’s AQIP measure for ground support equipment¹.

- I. PROGRAM DESCRIPTION – Require that all ground support equipment associated with commercial operations achieve a fleet average NOx emission factors of 1.7 and 0.9 grams per brake horsepower hour (g/bhp-hr) by January 1, 2023 and 2031, respectively.
- II. PROGRAM TIMEFRAME - Upon execution through 2032.
- III. AIRPORT OBLIGATIONS – JWA 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. JWA 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 2032, 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 subject to GSE measure 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 for non-zero emission equipment that is sufficient to determine emission reductions at a reasonable level of accuracy (i.e., actual operating hours from hour meter readings/maintenance records, average operating hours representative of equipment type and airport, or average operating hours by equipment/fuel type from CARB’s OFFROAD

¹ 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.

model, if applicable)

2. For non-zero emission GSE subject to this GSE measure, information regarding the sale or retirement of equipment available through CARB's DOORS system and, for pre-Tier 4 diesel, pre-2010 gasoline, or pre-2010 LPG ground support equipment relocated from JWA to another airport within the South Coast Air Basin, identify: a) the airport to which equipment is relocated, b) date of relocation, and c) estimated projected usage hours.
3. An annual emission inventory for all ground support equipment associated with commercial operations at JWA, including methodology and calculations.

IV. SOUTH COAST AQMD OBLIGATIONS – South Coast AQMD agrees to:

- 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.

MOU SCHEDULE NO. 2 – JET FUEL DELIVERY TRUCKS

This MOU Schedule No. 2 is based on JWA's AQIP measure for jet fuel delivery trucks.

- I. PROGRAM DESCRIPTION – Install a jet fuel pipeline by the end of 2019 and eliminate routine commercial passenger jet fuel delivery trucks by January 1, 2023.
- II. PROGRAM TIMEFRAME - Upon execution through 2032.
- III. AIRPORT OBLIGATIONS – JWA agrees to:
 - A. Work with third parties to complete the jet fuel pipeline installation and work with tenants to eliminate routine commercial passenger jet fuel truck deliveries.
 - B. Beginning in 2021, provide the following information to South Coast AQMD on an annual basis by June 1 for each preceding calendar year:
 1. Total number of routine and non-routine truck trips delivering jet fuel for commercial passenger aviation, and truck model years, if available.
 2. Total amount of jet fuel delivered.
 3. An estimate of total vehicle miles travelled.
 4. An emission inventory for commercial passenger jet fuel delivery trucks, including methodology and calculations.
- IV. SOUTH COAST AQMD OBLIGATIONS – South Coast AQMD agrees to:
 - A. Verify emission reductions from the implementation of this AQIP measure by JWA 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.

MOU SCHEDULE NO. 3 – PARKING SHUTTLE BUS ELECTRIFICATION

This MOU Schedule No. 3 is based on JWA’s AQIP measure for shuttle bus (off airport employee and passenger parking lots) electrification.

- I. PROGRAM DESCRIPTION Replace a minimum of 50% and 80% of Airport employee and passenger remote parking compressed natural gas (CNG) shuttle buses with battery-electric shuttle buses by January 1, 2023 and 2031, respectively. The Airport may continue to reserve non-battery-electric shuttle buses for standby and emergency use.

- II. PROGRAM TIMEFRAME - Upon execution through 2032.

- III. AIRPORT OBLIGATIONS – JWA agrees to:
 - A. Replace existing CNG shuttle buses, with zero-emission buses as described above.
 - B. Beginning in 2021, provide the following information to South Coast AQMD on an annual basis by June 1 for each preceding calendar year:
 1. List of shuttle buses operating at JWA with the following information:
 - a. Vehicle Identification Number
 - b. Vehicle model year
 - c. Vehicle GVWR
 - d. Bus engine model year
 - e. Power rating (hp or kW)
 - f. Fuel type
 - g. Odometer reading
 - h. Vehicle miles travelled
 2. An emission inventory for shuttle buses, including methodology and calculations.
 3. List of shuttle buses replaced during the reported year and information specified in III.B.1 above on replaced and replacement buses.

- IV. SOUTH COAST AQMD OBLIGATIONS – South Coast AQMD agrees to:
 - A. Verify emission reductions from the implementation of this AQIP measure by JWA 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.

Long Beach Airport (LGB)

**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”), acting by and through its Governing Board, 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 was approved by USEPA on October 1, 2019.
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 November 19, 2019. 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_x 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_x, or any other pollutant; (2) Obligate the Airport to provide a facility-wide inventory of NO_x 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_x, 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, 2032 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 agreements contained by the Parties are subject to the availability of appropriated funds. No Party will submit a claim for compensation to the other Party, or otherwise seek reimbursement of costs from the 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.

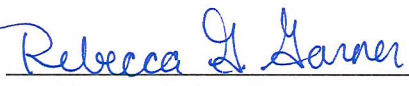
- M. VENUE. This MOU shall be construed and interpreted and the legal relations created thereby shall be determined in accordance with the laws of the State of California. Venue for resolution of any disputes under this MOU shall be Los Angeles County, California, USA.
- N. SEVERABILITY. If a court of 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

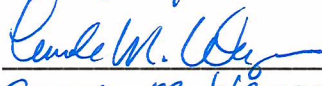
LONG BEACH AIRPORT

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

By 
Name: Thomas B. Modica
Title: Acting Mayor, City of Long Beach

Date: 12/15/19, 2019

EXECUTED PURSUANT TO SECTION 301 OF THE CITY CHARTER
Date: December 3, 2019

Attest 
Name: Carole M. Wayman
Title: Senior Deputy Clerk

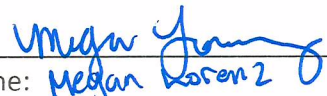
Attest _____
Name:
Title:

APPROVED AS TO FORM:


APPROVED AS TO FORM:

Date: December 6, 2019
BAYRON T. GILCHRIST,
General Counsel

Date: _____, 20____
MICHAEL J. MAIS,
Assistant City Attorney, City of Long Beach

By 
Name: Megan Lorenz
Title: Principal Deputy District Counsel

By _____
Name:
Title:

APPROVED AS TO FORM
11-26, 2019
CHARLES PARKIN, City Attorney
By 
RICHARD ANTHONY
DEPUTY CITY ATTORNEY

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 equipment¹.

- I. PROGRAM DESCRIPTION – Require that all ground support equipment associated with commercial operations achieve a fleet average NOx emission factors of 0.93 and 0.44 g/bhp-hr by January 1, 2023 and January 1, 2031, respectively.
- II. PROGRAM TIMEFRAME - Upon execution through 2032.
- 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 2032, 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 subject to this GSE measure 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 for non-zero emission equipment that is sufficient to determine emission reductions at a reasonable level of accuracy (i.e., actual operating hours from hour meter readings/maintenance records, average operating hours representative of equipment type and airport, or average operating hours by equipment/fuel type from CARB’s OFFROAD model, if applicable)

¹ 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.

2. For non-zero emission ground support equipment subject to this GSE measure, information regarding the sale or retirement of equipment available through CARB's DOORS system and, for pre-Tier 4 diesel, pre-2010 gasoline, or pre-2010 LPG ground support equipment relocated from LGB to another airport within the South Coast Air Basin, identify: a) the airport to which equipment is relocated, b) date of relocation, and c) estimated projected usage hours.
3. 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:

- 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.

Ontario Airport (ONT)

**MEMORANDUM OF UNDERSTANDING BETWEEN
THE SOUTH COAST AIR QUALITY MANAGEMENT DISTRICT AND
ONTARIO INTERNATIONAL AIRPORT
REGARDING ONTARIO INTERNATIONAL 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), acting by and through its Governing Board, and Ontario International Airport (ONT or Airport), acting by and through the Ontario International Airport Authority (OIAA) in its capacity as the proprietor and certificated operator of ONT. The Airport 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 received approval by USEPA on October 1, 2019.
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. The ONT 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 (NO_x) 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. Therefore, NOx emission reductions from commercial airports can assist with the effort to attain the ozone standards in 2023 and 2031.

B. RECITALS BY ONT

1. Airport. The Ontario International Airport Authority is the proprietor and certificated operator of ONT.
2. Airport Obligations. ONT enters 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 ONT 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 ONT.
4. Responsibility to Community. The MOU supports and is made in recognition of the importance of ONT to the economic health and well-being of the communities surrounding ONT and the importance of balancing the needs of the City of Ontario, County of San Bernardino and other surrounding communities for adequate commercial air transportation facilities with environmentally responsible air transportation operations at ONT.
5. Statement of Intent. ONT'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 Airport in connection with the formulation of the AQIP and this MOU. Rather this MOU reflects consideration by ONT 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). ONT 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 AQIP includes the 2017 base year emissions inventory and 2023 and 2031 business as usual emissions forecast 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). ONT 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 ONT under the AQIP and MOU, and adopted by the OIAA on October 29, 2019. Attachment A, "MOU Schedule," sets forth the specific voluntary airport AQIP measures that are 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_x reductions, and corresponding reductions of associated pollutants from non-aircraft airport mobile sources.

- a. The MOU Schedule 1, specified in Attachment A, establish metrics for quantification of emission benefits associated with implementation of voluntary airport AQIP measures for each emissions source category consistent with the 2023 and 2031 dates for attainment of the ozone standards.
- b. The Parties agree the MOU does not: i) Establish an emissions cap or any other facility-wide limit for NO_x, or any other pollutant; ii) Obligate the Airport to provide a facility-wide inventory of NO_x 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 iii) Limit the Airport'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 Airport, 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 Airport's Board.

3. MOU Applicability

- a. The MOU (1) addresses only the voluntary Airport AQIP measures 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.
- b. 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, including 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. For purposes of the AQIP and this MOU, GA is defined as all civil aviation operations *except*: operations by 14 C.F.R. Part 121 commercial carriers, and regularly scheduled air services, defined as: (i) operated in support of, advertised, or otherwise made available to members of the public by any means for commercial air transportation purposes, and members of the public may travel or ship commercial cargo on the flights; (ii) the flights are scheduled to occur, or are represented as occurring (or available) at specified times and days; and (iii) the operator conducts, or proposes to operate, departures at ONT at a frequency greater than two (2) times per week during any consecutive three (3) week period.

II. NOW, THEREFORE, in consideration of the mutual interests and benefits of all parties to be derived from emissions reductions of NO_x, and corresponding anticipated reductions of 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. AIRPORT'S RESPONSIBILITIES

The OIAA or Airport agrees to take the following actions:

1. AQIP Implementation. Implement voluntary airport AQIP 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 ONT'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, an implementation schedule 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 Airport 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, ONT 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 projected for implementation of these voluntary AQIP measures, ONT 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 ONT 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 SCHEDULE

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

1. MOU SCHEDULE NO. 1 - GROUND SUPPORT EQUIPMENT

The Schedule focuses on the voluntary airport AQIP measure and time frame aligned with the AQMP and SIP emission reduction target dates (i.e., 2023, 2031), and includes technical details pertinent to the equipment category such as:

- Metrics or performance targets
- Schedule for program implementation
- Annual reporting by the Airport 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 schedule 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, 2032 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 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 agree 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
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ONTARIO INTERNATIONAL AIRPORT: Mr. Mark Thorpe
Chief Executive Officer
1923 E. Avion Street
Ontario, CA 91761

- H. AVAILABLE FUNDING. Each Party shall be responsible for its respective costs associated with this MOU and acknowledges that the agreements contained herein by the Parties are subject to the availability of appropriated funds. No Party will submit a claim for compensation to the other Party, or otherwise seek reimbursement of costs from the 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 County of San Bernardino, 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 measures specified in Attachment A or any of the measures or new initiatives in the AQIP or any of its terms against JWA's tenants, concessionaries, third party licensees, vendor, or other relevant operators doing business at JWA 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 William A. Burke
 Name: Dr. William Burke
 Title: Chairman, South Coast AQMD Governing Board

Date: 12/13, 2019

Attest Carole M. Wayman
 Name: Carole Wayman
 Title: Senior Deputy Clerk

APPROVED AS TO FORM:

Date: December 6, 2019
 BAYRON T. GILCHRIST, General Counsel

By Megan Lorenz
 Name: Megan Lorenz
 Title: Principal Deputy District Counsel

ONTARIO INTERNATIONAL AIRPORT AUTHORITY

By Alan D. Wapner
 Name: Mr. Alan D. Wapner
 Title: President, OIAA

Date: 12/2/2019, 2019

Attest Claudia Y. Isbell
 Name: Claudia Y. Isbell
 Title: Board Clerk

APPROVED AS TO FORM:

Date: December 3, 2019
 Lori D. Ballance, General Counsel

By Lori D. Ballance
 Name: Lori D. Ballance
 Title: Partner / General Counsel

ATTACHMENT A

MOU Schedule

MOU SCHEDULE NO. 1 – GROUND SUPPORT EQUIPMENT

This MOU Schedule No. 1 is based on ONT's AQIP measure for ground support equipment¹.

- I. PROGRAM DESCRIPTION – Require that all ground support equipment associated with commercial operations achieve a fleet average NOx emission factors of 2.2 and 1.0 g/bhp-hr by January 1 of 2023 and 2031, respectively.
- II. PROGRAM TIMEFRAME - Upon execution through 2032.
- III. AIRPORT AGREEMENTS – ONT agrees to the following:
 - A. Implement the measure by working with airport tenants to achieve the above performance targets by specified dates through accelerated turnover to cleaner equipment. ONT 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 2032, 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 subject to GSE measure 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 for non-zero emission equipment that is sufficient to determine emission reductions at a reasonable level of accuracy (i.e., actual operating hours from hour meter readings/maintenance records, average operating hours representative of equipment type and airport, or average operating hours by equipment/fuel type from CARB's OFFROAD model, if applicable)

¹ 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.

2. For non-zero emission ground support equipment subject to this GSE measure, information regarding the sale or retirement of equipment available through CARB's DOORS system and, for pre-Tier 4 diesel, pre-2010 gasoline, or pre-2010 LPG ground support equipment relocated from ONT to another airport within the South Coast Air Basin, identify: a) the airport to which equipment is relocated, b) date of relocation, and c) estimated projected usage hours.
3. An annual emission inventory for all ground support equipment associated with commercial operations at ONT, including methodology and calculations.

IV. SOUTH COAST AQMD AGREEMENTS – South Coast AQMD agrees to the following:

- 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.

Burbank Airport (BUR)

**MEMORANDUM OF UNDERSTANDING BETWEEN
SOUTH COAST AIR QUALITY MANAGEMENT DISTRICT AND
BURBANK-GLENDALE-PASADENA AIRPORT AUTHORITY
REGARDING HOLLYWOOD BURBANK AIRPORT'S AIR QUALITY IMPROVEMENT PLAN**

This Memorandum of Understanding ("MOU") is entered into by South Coast Air Quality Management District ("South Coast AQMD"), acting by and through its Governing Board, and the Burbank-Glendale-Pasadena Airport Authority ("Authority"), a joint powers agency, in its capacity as the proprietor and certificated operator of the Bob Hope Airport, commonly known as Hollywood Burbank ("BUR" or "Airport"). The Authority 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). 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 was approved on October 1, 2019.
2. South Coast AQMD. 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. BUR 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 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. 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 AUTHORITY

1. Airport. The Authority is the proprietor and certificated operator of BUR.
2. Airport Obligations. The Authority 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 Authority 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 BUR.
4. Responsibility to Community. The MOU supports and is made in recognition of the importance of BUR to the economic health and well-being of the community surrounding BUR and the importance of balancing the needs of the community for adequate commercial air transportation facilities with environmentally responsible air transportation operations at BUR.
5. Statement of Intent. The Authority'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 Authority in connection with the formulation of the AQIP and this MOU. Rather this MOU reflects consideration by the Authority 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 Authority has developed its own voluntary AQIP, with technical support provided by South Coast AQMD. The AQIP represents the Authority'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 BUR 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 Authority has provided the AQIP with supporting calculations to 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 Authority under the AQIP and MOU, and adopted by the Authority on November 4, 2019. Attachment A, "MOU Schedules," sets forth the specific voluntary airport AQIP measures that are 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 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_x reductions, and corresponding reductions of associated pollutants from non-aircraft airport mobile sources.

- a. MOU Schedules 1 and 2, specified in Attachment A, establish 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_x, or any other pollutant; (2) Obligate the Airport to provide a facility-wide inventory of NO_x 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 Authority's ability to seek incentive or grant funding through federal, State and local programs, including but not limited to the FAA Voluntary

Airport 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 South Coast AQMD, and not the Authority, 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 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, 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 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 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 South Coast AQMD Governing Board and the Authority Commission.

3. MOU Applicability. The MOU (1) addresses only those initiatives and measures included in the BUR AQIP identified in Attachment A, and (2) does not supersede rules that are established by 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, or (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. For purposes of the AQIP and this MOU, GA is defined as all civil aviation operations *except*: operations by 14 C.F.R Part 121 commercial carriers and regularly scheduled air services.

II. NOW, THEREFORE, in consideration of the mutual interests and benefits of all Parties to be derived from emissions reductions of NOx, 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. AUTHORITY'S RESPONSIBILITIES

The Authority agrees to take the following actions:

1. AQIP Implementation. Implement AQIP voluntary airport measures identified in Attachment A, Schedules 1 and 2.
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, Schedules 1 and 2.
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 Authority'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. 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, South Coast AQMD will provide federally enforceable commitments in a SIP update document that is separate from this MOU to 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 USEPA.
3. Responsibility for Shortfall. 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 estimated emissions reduction benefits projected for 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 Authority 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 Authority 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 emissions reduction benefits projected for implementation of these voluntary AQIP measures, the Authority 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. 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. South Coast AQMD will monitor and assess the implementation of SIP creditable AQIP measures based on information provided by the Authority as outlined in Schedules 1 and 2 in Attachment A.
6. Information Sharing. 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 USEPA.

C. MOU SCHEDULES

The voluntary airport AQIP measures for which South Coast AQMD may quantify emission reductions and seek SIP credit through a separate SIP submittal are identified in Schedules 1 and 2 in Attachment A and are incorporated as part of this MOU:

1. MOU SCHEDULE NO. 1 - GROUND SUPPORT EQUIPMENT
2. MOU SCHEDULE NO. 2 – ZERO-EMISSION SHUTTLE BUS PROGRAM

Each Schedule 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 Authority 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, 2032 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 agree 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 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

Authority: Hollywood Burbank Airport
2627 N. Hollywood Way
Burbank, CA 91505
Attn: John Hatanaka, Senior Deputy Executive Director

- H. AVAILABLE FUNDING. Each Party shall be responsible for its respective costs associated with this MOU and acknowledges that the commitments contained herein by the other Party are subject to the availability of appropriated funds. No Party will submit a claim for compensation to the other Party, or otherwise seek reimbursement of costs from the 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. South Coast AQMD shall not seek to enforce the measures and new initiatives specified in Attachment A or any of the measures or new initiatives in the AQIP or any of its terms against BUR's tenants, concessionaries, third party licensees, vendor, or other relevant operators doing business at BUR 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: William Burke
Name: Dr. William Burke
Title: Chairman, South Coast AQMD Governing Board
Date: 12/13, 2019

Attest: Carole M. Wayman
Name: Carole M. Wayman
Title: Senior Deputy Clerk
Date: 12/17, 2019

APPROVED AS TO FORM:

By: Bayron T. Gilchrist for
Name: Bayron T. Gilchrist,
Title: General Counsel
Date: December 6, 2019

BURBANK_GLENDALE_PASADENA AIRPORT AUTHORITY

By: Ray Adams
Name: Ray Adams
Title: President
Date: December 3, 2019

Attest: Vartan Gharpetian
Name: Vartan Gharpetian
Title: Secretary
Date: 12/03, 2020

APPROVED AS TO FORM:

By: Terence R. Boga
Name: Terence R. Boga
Title: General Counsel
Date: December 3, 2019

ATTACHMENT A

MOU SCHEDULE NO. 1 – GROUND SUPPORT EQUIPMENT

This MOU Schedule No. 1 is based on the Authority's AQIP measure for ground support equipment¹.

- I. PROGRAM DESCRIPTION – Require that all ground support equipment associated with commercial operations achieve fleet average of NOx combined emission factors of 1.66 and 0.74 g/bhp-hr by January 1 of 2023 and 2031, respectively.
- II. PROGRAM TIMEFRAME - Upon execution through 2032.
- III. AIRPORT OBLIGATIONS – The Authority agrees to:
 - A. Implement the measure by working with airport tenants to achieve the above performance targets by the 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 2032, 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 BUR 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 for non-zero emission equipment that is sufficient to determine emission reductions at a reasonable level of accuracy (i.e., actual operating hours from hour meter readings/maintenance records, average operating hours representative of equipment type and airport, or average operating hours by equipment/fuel type from CARB's OFFROAD model, if applicable)
 2. For non-zero emission ground support equipment subject to this GSE measure, information regarding the sale or retirement of equipment available through CARB's DOORS system and, for pre-Tier 4 diesel, pre-2010 gasoline, or pre-2010 LPG ground support equipment relocated from BUR to another airport within the South Coast Air Basin, identify:

- a) the airport to which equipment is relocated, b) date of relocation, and c) estimated projected usage hours.
3. An annual emission inventory for all ground support equipment associated with commercial operations at BUR, including methodology and calculations.

OBLIGATIONS – South Coast AQMD agrees to:

- 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 USEPA.

¹Ground 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.

MOU SCHEDULE NO. 2 –ZERO-EMISSION SHUTTLE BUS PROGRAM

This MOU Schedule No. 2 is based on the Authority's AQIP SIP creditable measure for zero-emission buses at BUR.

- I. PROGRAM DESCRIPTION –Replace 50% and 100% of BUR-owned and operated or BUR airport contracted buses with electric buses by January 1 of 2023 and 2031, respectively.
- II. PROGRAM TIMEFRAME - Upon execution through 2032.
- III. AIRPORT OBLIGATIONS – The Authority agrees to:
 - A. Replace or require shuttle buses to meet the specified targets.
 - B. Beginning in 2021, provide the following information to South Coast AQMD on an annual basis by June 1 for each preceding calendar year:
 1. List of shuttle buses operating at BUR with the following information:
 - a. Vehicle Identification Number
 - b. Vehicle model year
 - c. Gross Vehicle Weight Rating
 - d. Fuel type
 - e. Odometer reading
 - f. Annual vehicle miles travelled
 2. An emission inventory for shuttle buses, including methodology and calculations.
- IV. SOUTH COAST AQMD OBLIGATIONS – South Coast AQMD agrees to:
 - A. Verify emission reductions from the implementation of this SIP creditable AQIP measure by the Authority 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 USEPA.