HOLLYWOOD BURBANK AIRPORT AIR QUALITY IMPROVEMENT PLAN

SEPTEMBER 2019



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I. INTRODUCTION AND OVERVIEW

Hollywood Burbank Airport (BUR or Airport) has developed this voluntary Air Quality Improvement Plan (AQIP or Plan) as part of a collaborative effort with the South Coast Air Quality Management District (SCAQMD) and other airports in the South Coast Air Basin (SCAB or Basin) (i.e., Long Beach Airport, Ontario International Airport, John Wayne International Airport, and Los Angeles International Airport, collectively Basin airports) to minimize and reduce air emissions related to mobile source activities at the Airport. This AQIP was developed specifically as it relates to SCAQMD Measure MOB-04 from the 2016 Air Quality Management Plan (2016 AQMP). MOB-04 is a measure in the 2016 AQMP to address mobile emissions from airports.

A. 2016 AQMP Background

The 2016 AQMP is the SCAQMD's regional blueprint for achieving federal air quality standards in the Basin. The 2016 AQMP provides an analysis of existing and potential regulatory control options for the Basin and seeks to achieve multiple goals in partnership with other entities to reduce greenhouse gases and toxic risk, as well as provide efficiencies in energy use, transportation, and goods movement in a cost-effective manner. The 2016 AQMP demonstrates how and when the Basin will attain the ozone and particulate matter smaller than 2.5 microns in diameter (PM_{2.5}) standards within the latest statutory attainment date.¹ The 1997 8-hour ozone attainment date is 2023 and the 2008 8-hour ozone attainment date is 2031.

The 2016 AQMP specifically identifies various measures to reduce nitrogen oxides (NOx) and reactive organic gases (ROG; also referred to as volatile organic compound (VOC)) emissions to achieve regional attainment. One of those measures requires Basin airports to reduce non- aircraft emission sources at their facilities (i.e., *Facility-Based Measure for Mobile Sources Measure (MOB-04) for the Emissions Reductions at Commercial Airports*). The SCAQMD adopted the 2016 AQMP on March 3, 2017.² The California Air Resources Board ("CARB") adopted the 2016 AQMP on March 23, 2017,³ and as stated in the staff report, the 2016 AQMP addressed the facility based mobile source control measures including MOB-04.⁴ As further described below, the workshops and public outreach resulted in the SCAQMD shifting to a voluntary Memorandum of Understanding (MOU) approach to address the emission reduction objective of MOB-04.

¹SCAQMD, 2016. Available at: <u>https://www.aqmd.gov/docs/default-source/clean-air-plans/air-quality-management-plans/2016-air-quality-management-plan/final-2016-aqmp/executive-summary.pdf?sfvrsn=4</u>. Accessed: June 2019.

²SCAQMD, 2017. Governing Board Hearing. March 3. Available at: <u>http://www.aqmd.gov/docs/default-source/Agendas/Governing-Board/2017/2017-apr7-001.pdf?sfvrsn=4</u>. Accessed: June 2019.

³CARB, 2017. Available at: <u>https://www.arb.ca.gov/planning/sip/planarea/scabsip/res17-8.pdf</u>. Accessed: June 2019.

⁴CARB, 2017. Available at: <u>https://www.arb.ca.gov/planning/sip/planarea/scabsip/2016AQMP_ARBstaffreport.pdf</u>. Accessed: June 2019.

B. SCAQMD Workshops and Public Outreach

In response to the Governing Board approval and direction of the facility based mobile source control measures (notably MOB-04), the SCAQMD held a series of working group meetings. The meetings were noticed and open to the public. The first introductory meeting for all facility based mobile source control measures occurred on May 8, 2017. More than 100 stakeholders, including representatives from industry, government, environmental, and community groups participated in the first working group meeting. The first MOB-04 working group meeting was held on May 31, 2017, where the SCAQMD presented MOB-04, including the background, working group process, metrics used to evaluate progress, measure development framework, emission sources, existing and future regulations, State Implementation Plan (SIP) credit requirements, example emission reduction opportunities, technologies currently available, and stakeholder input. There were a total of five open public meetings during the evaluation of MOB-04 culminating on February 1, 2018.⁵

In the fifth MOB-04 working group meeting, the SCAQMD presented staff's recommendation that the Governing Board pursue a voluntary MOU approach with the Basin airports to implement MOB-04. The Governing Board approved this approach in June 2018. ⁶ Specifically, the Governing Board moved to "direct staff to pursue the approach for developing facility-based emission reduction strategies for commercial airports through voluntary measures only." BUR participated in the public meetings and working group meetings in this initial MOB-04 process.

Consistent with MOB-04, BUR has engaged in a collaborative process with the SCAQMD, Airlines for America ("A4A"), airlines not part of A4A, and Basin airports to develop an AQIP and an MOU with the SCAQMD for implementation of the AQIP. As part of this process, BUR has been involved in discussions with the SCAQMD and Basin airports in order to evaluate and identity possible initiatives and measures to achieve emission reductions consistent with the requirements of MOB-04. The SCAQMD has scheduled four working group meetings as part of the public outreach process in the development of the MOU and AQIP. On February 28, 2019, the first Airport MOU working group meeting was held. At this meeting, the SCAQMD presented an update on the MOU approach and the Basin airports provided a brief summary of the framework they would follow to implement MOB-04, including the development of an AQIP for each Basin airport with initiatives and measures to reduce emissions from non-aircraft mobile sources related to the airport.

The Burbank-Glendale-Pasadena Airport Authority Commission (Commission) will review and approve the AQIP for BUR during a public meeting after notice is given in accordance with the

⁵SCAQMD, 2019. Available at: <u>https://www.aqmd.gov/home/air-quality/clean-air-plans/air-quality-mgt-plan/facility-based-mobile-source-measures/fbmsm-mtngs</u>. Accessed: June 2019.

⁶SCAQMD, 2019. Available at: <u>http://www.aqmd.gov/docs/default-source/Agendas/Governing-Board/2018/2018-jun1-001.pdf?sfvrsn=8</u>. Accessed: June 2019.

Brown Act. The public notice will specify the date of the Commission meeting and will include the AQIP and other relevant documents. BUR will take into account the discussions with the

SCAQMD, Basin airports, A4A and airlines, and other stakeholders in preparing the final draft AQIP for consideration and approval. Staff will prepare a final agenda staff report for Commission consideration with final recommendations based on recommendations and input received from the Commission and other stakeholders, and the Commission will make a final determination regarding approval of the AQIP.

C. Memorandum of Understanding and AQIP

To be completed as MOU framework is worked out with AQMD.

II. REGULATORY BACKGROUND

A. Existing Mobile Source Regulations

There are both existing and proposed rules and regulations that could impact mobile sources related to airport activities. The following provides the regulatory background of the existing and proposed rules and regulations that were evaluated to assist in the development of the baseline and forecast emission inventories for the AQIP.

1. SCAQMD Light-, Medium-, and Heavy-Duty Fleet Rules

The SCAQMD has various rules that are applicable to vehicle emission sources at airports. For example, Rule 1191, *Clean On-Road Light- and Medium-Duty Public Fleet Vehicles,* controls vehicle emissions by requiring certain fleets operating in the SCAB to utilize lower emitting vehicles. ⁷ This rule applies to fleets operated by government agencies (including special districts like water, air, sanitation, school, etc.) with 15 or more non-exempt light- and medium- duty on-road gasoline, diesel, and alternative fueled vehicles. It requires applicable fleets operating within the SCAB (including those owned by or servicing BUR) to acquire low- emitting gasoline or alternative fuel vehicles beginning in July 1, 2001. Similarly, Rule 1196, *Clean On-Road Heavy-Duty Public Fleet Vehicles*, is a regulation with the same requirements that applies to fleets of on-road heavy-duty gasoline, diesel, and alternative fueled vehicles.⁸ Both rules include similar exemptions for certain fleets, such as-those used for emergency response or law enforcement.

Airport vendors must also comply with Rule 1194, *Commercial Airport Ground Access*, which requires all public and private fleets providing passenger transportation services out of commercial airports operating in the SCAB to acquire cleaner burning or alternative-fueled

²SCAQMD. 2000. Rule 1191 – Clean On-Road Light- and Medium-Duty Public Fleet Vehicles. Available at: <u>https://www.aqmd.gov/docs/default-source/rule-book/reg-xi/rule-1191.pdf?sfvrsn=4</u>. Accessed: May 2019.

<u>8</u>SCAQMD. 2008. Rule 1196 – Clean On-Road Heavy-Duty Public Fleet Vehicles. Available at: <u>https://www.aqmd.gov/docs/default-source/rule-book/reg-xi/rule-1196.pdf?sfvrsn=6</u>. Accessed: May 2019.

vehicles.⁹ This rule applies to passenger cars, light-duty trucks, and medium- and heavy-duty transit vehicle fleets of 15 or more vehicles. Contracted passenger shuttle buses and taxi cabs serving airports must comply with this rule, as well as shuttles and other fleet operations not contracted by airports.

2. CARB In-Use Off-Road Diesel-Fueled Fleets Regulation

The CARB currently requires emission reductions for certain classes and ages of off-road diesel fueled fleet vehicles via the statewide In-Use Off-Road Diesel-Fueled Fleets Regulation.¹⁰ It applies to all off-road diesel vehicles 25 horsepower or greater and most two-engine vehicles, with exemptions for certain vehicles such as those used solely for agriculture and those for personal use. The regulation requires applicable vehicles to register with the CARB and restricts certain practices like idling and adding older vehicles to fleets. The regulation also requires fleets to reduce emissions by retiring, replacing, or repowering older engines or installing Verified Diesel Emission Control Strategies (VDECS).

2a. CARB On-Road Heavy-Duty Diesel Vehicles (In-Use) Regulation

The CARB currently requires emission controls for diesel trucks and buses via the statewide On-Road Heavy-Duty Diesel Vehicles (In-Use) Regulation. ¹¹ It requires applicable heavy-duty vehicles to be upgraded to meet emissions standards for criteria pollutants. These upgrades involve the installation of more efficient particulate filters or complete replacement of the vehicle or engine. This replacement has been occurring on a tiered schedule that started in 2015. By 2023, nearly all trucks and buses will be required to have model year 2010 engines (or equivalent) or newer. The compliance schedule for vehicle replacement is based on factors like the existing engine model year, type of vehicle (e.g., school bus, drayage truck), and gross vehicle weight. Thus, depending on these factors, certain heavy-duty vehicles operating at BUR may already be subject to the regulation, with the remaining requiring compliance by 2023. Exemptions to this regulation include emergency response vehicles, low-weight trucks for personal use, and vehicles subject to certain other sections of the California Code of Regulations.

2b. CARB Large Spark-Ignition Engine Fleet Requirements Regulation

The CARB currently regulates emissions from certain vehicle types having large spark-ignition (LSI) engines via the LSI Engine Fleet Requirements Regulation.¹² This regulation applies to off-

⁹SCAQMD. 2000. Rule 1194 – Commercial Airport Ground Access. Available at: <u>https://www.aqmd.gov/docs/default-source/rule-book/reg-xi/rule-1194.pdf?sfvrsn=4</u>. Accessed: May 2019.

¹⁰CARB. 2019. In-Use Off-Road Diesel-Fueled Fleets Regulation. Available at: <u>https://www.arb.ca.gov/msprog/ordiesel/ordiesel.htm</u>. Accessed: May 2019.

¹¹California Code of Regulations. 2014. Regulation to Reduce Emissions of Diesel Particulate Matter, Oxides of Nitrogen and Other Criteria Pollutants from In-Use Heavy-Duty Diesel-Fueled Vehicles. Available at: <u>https://www.arb.ca.gov/msprog/onrdiesel/onrdiesel.htm</u>. Accessed: May 2019.

¹² California Code of Regulations. 2016. Large Spark-Ignition (LSI) Engine Fleet Requirements Regulation. <u>Available at:</u> <u>https://ww3.arb.ca.gov/msprog/offroad/orspark/largesparkappa-clean.pdf</u>. Accessed: May 2019.

road LSI engine forklifts, sweepers/scrubbers, industrial tow tractors, and airport ground support equipment (GSE) operated for business purposes within the State of California. Additionally, it applies only to vehicles with engines of at least 25 horsepower (hp) and 1.0 liter displacement that are part of fleets of four vehicles or more. The regulation requires that applicable fleets achieve specific fleet average emission levels (FAELs) for hydrocarbons and NO_X. These standards became more stringent over time until reaching the lowest regulated FAEL in 2013.

3. Future Mobile Source Regulations 3a. CARB Zero-Emission Airport Shuttle

The CARB is currently in the process of developing a statewide zero-emission airport shuttle initiative that will promote the development and use of zero-emission ground transportation to and from airports around California.¹³ This will help the CARB achieve the emission reduction strategies included in the State's Mobile Source Strategy, SIP, and Sustainable Freight Action Plan. The CARB determined that vehicles like airport shuttles, which operate on fixed routes, travel at low average speeds, and are centrally maintained and fueled, are ideal targets for implementing zero-emission technologies. According to information from the CARB, this initiative will take the form of a regulation that will either supersede or work in combination with the existing SCAQMD airport commercial transportation rules for shuttles. Specific requirements and anticipated dates of implementation have not yet been determined, but the rule is expected to be published before the first AQMP target year of 2023.

3b. CARB Zero-Emission Airport Ground Support Equipment

The CARB is currently in the process of developing a zero-emission initiative for GSE at airports around California.¹⁴ GSE is utilized for various functions at airports such as refueling aircraft, transporting cargo and passengers to and from aircraft, and providing maintenance. This new regulation would help the CARB achieve the emission reduction strategies included in the State's Mobile Source Strategy, SIP, and Sustainable Freight Action Plan. This rule is intended to advance GSE conversion to zero-emission (i.e., electric) technologies while accelerating the goals and requirements provided in the LSI Engine Fleet Requirements Regulation.¹⁵ The rule will apply to the tenant airlines at BUR and their contractors of GSE.

¹³ CARB. Zero-Emission Airport Shuttle. Available at: <u>https://ww2.arb.ca.gov/index.php/our-work/programs/zero-emission-airport-shuttle/about</u>. Accessed: May 2019.

¹⁴ CARB. Zero-Emission Airport Ground Support Equipment. Available at: <u>https://ww2.arb.ca.gov/our-work/programs/zero-emission-airport-ground-support-equipment/about</u>. Accessed: May 2019.

<u>15</u>CARB. 2016. Final Regulation Order – Large Spark-Ignition (LSI) Engine Fleet Requirements Regulation. Available at: <u>https://ww3.arb.ca.gov/msprog/offroad/orspark/largesparkappa-clean.pdf</u>. Accessed: May 2019.

III. AQIP MEASURES AND INITIATIVES

CLEAN FLEET PROGRAMS

1. Ground Support Equipment Emissions Policy

Airlines and other entities own and operate GSE¹⁶ to support arriving, departing, and parked aircraft at BUR. BUR will enact a GSE Policy to ensure that BUR achieves the airport wide GSE Emissions Targets. BUR will achieve an airport average composite emissions factor for its GSE fleet which is equal to or less than 1.66 horsepower-hour of nitrogen oxides (g/hp-h of HC plus NOx) by January 1, 2023, and 0.74 g/hp-h of NOx by January 1, 2031. Upon achieving the 2023 and 2031 Emissions Targets, each GSE operator shall be required to ensure its fleet average continues to meet the BUR Emissions Targets. A GSE operator's "Burbank Airport GSE fleet" is comprised solely of GSE operated at BUR. Emissions performance of GSE operating at BUR cannot be averaged with emissions performance of GSE operating at other airports to demonstrate compliance with the BUR <u>GSE Emissions Targets</u>.

BUR GSE Emissions Targets:

• 1.66 g/hp-h of NOx by January 1, 2023.

• 0.74 g/hp-h of NOx by January 1, 2031.

Airlines and other entities own and operate GSE⁴⁶ to support arriving, departing, and parked aircraft at BUR. BUR will enact a GSE Policy to ensure that BUR achieves the airportwide GSE Emissions Targets. BUR will achieve an airport average composite emissions factor for its GSE fleet which is equal to or less than 1.92 horsepower-hour of hydrocarbons plusnitrogen oxides (g/hp-h of HC plus NOx) by January 1, 2023, and 0.82 g/hp-h of HC plus NOx by January 1, 2031. Upon achieving the 2023 and 2031 Emissions Targets, each GSE operator shall be required to ensure its fleet average continues to meet the BUR Emissions-Targets. A GSE operator's "Burbank Airport GSE fleet" is comprised solely of GSE operatedat BUR. Emissions performance of GSE operating at BUR cannot be averaged with emissionsperformance of GSE operating at other airports to demonstrate compliance with the BUR GSE-Emissions Targets.

BUR GSE Emissions Targets:

- 1.92 g/hp-h of HC plus NOx by January 1, 2023.
- 0.82 g/hp-h of HC plus NOx by January 1, 2031.

Implementation Plan

The GSE operators are to maintain In-Use Off-Road Diesel (ORD), LSI, and Portable Engine Airborne Toxic Control Measure (ATCM) data as required by CARB regulations. "Low-Use" GSE may be excluded from GSE fleet average emission calculation. The criteria defining Low-Use GSE shall be based on the applicable program (i.e. ORD, LSI, ATCM). The CARB ORD compliance requirements set forth specific emissions targets and allow, in the event that an annual emissions target is not achieved by a fleet owner, alternative compliance strategies such as application of Best Available Control Technology (BACT) and vehicle "turnover" (i.e., vehicle retirement, conversion to "low- use," repowering, or rebuilding engines to comply with

more stringent emission limits). BUR may adopt CARB alternative compliance strategies when evaluating a GSE operator's status and efforts towards achieving the 2023 and 2031 Emissions Targets.

To encourage and support the conversion to and/or use of alternative fuel low emissions GSE technology, BUR staff, in consultation with GSE operators, will analyze the extent to which

¹⁶ 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 CARB In-Use ORD Vehicle Regulation Program, CARB Off-Road LSI Engine Fleet Requirements Regulation Program, or CARB Portable Equipment Registration Program and associated Portable Diesel Engine ATCM. At BUR, the Airport, airlines and other entities own and operate GSE to support arriving, departing, and parked aircraft.

additional infrastructure to support the use of alternative fuel low-emission GSE technology is needed. Where appropriate and in consultation with GSE operators, BUR may make available such additional infrastructure. BUR acknowledges that some of the GSE operators have already installed electricity infrastructure and charging stations on their own and that some GSE operators may desire to use their own electricity infrastructure and charging stations or may be required as part of lease renewals to help upgrade such infrastructure.

Reporting/Monitoring and Enforcement

BUR, in consultation with the GSE operators, shall develop an agreed upon reporting approach, related rules and regulations, and lease and license agreements to carry out this policy.

2. Clean Construction Policy

For all Capital Improvement Projects (CIP) Projects, BUR will ensure contractor follow clean construction policies to reduce emissions of NOx such as using low-emission vehicles and equipment, recycling construction and demolition debris, and minimizing non- essential trips through better schedule coordination. By 2020, BUR will require all CIP contractors submit clean construction plans and comply with the following requirements:

- On-road medium-duty and larger diesel-powered trucks with a gross vehicle weight rating of at least 14,001 pounds shall comply with USEPA 2010 on-road emissions standards for PM10 and NOx. Contractor shall be required to utilize such on-road haul trucks or the next cleanest vehicle.
- All off-road diesel-powered construction equipment greater than 50 horsepower shall meet, at a minimum, USEPA Tier 4 (final) off-road emissions standards. Contractor shall be required to utilize Tier 4 (final) equipment or next cleanest equipment available.
- The on-road haul truck and off-road construction equipment requirements shall apply unless certain deemed infeasible by BUR, and contractor provides a written finding consistent with project contract requirements.
- All diesel-fueled equipment will be outfitted with best available emissions control devices where technologically feasible; applies to off-road equipment (such as construction machinery), diesel-fueled on-road vehicles (such as trucks), and stationary diesel-fueled engines (such as electric generators).
- Contractor shall utilize grid-based electric power at the construction site where feasible. If diesel- or gasoline-fueled generators are necessary, generators using "clean burning diesel" fuel and exhaust emission controls shall be utilized.
- Rock-crushing operations and construction material stockpiles shall be located away from airport adjacent residents.
- Contractor shall designate a person or persons to monitor construction-related measure through direct inspections, record reviews, and investigations of complaints.

Clean Construction Policy Targets:

- 100% compliance with Clean Construction Policy and each contractor's fleet of construction vehicles and equipment achieving 90% Tier 4 Final and 10% Tier 4 Interim by 2023.
- 100% compliance with Clean Construction Policy and each contractor's fleet of construction vehicles and equipment achieving 100 % Tier 4 Final by 2031.

Reporting/Monitoring and Enforcement

Procurement documents will require compliance with BUR Clean Construction Policy. Each construction company shall submit a compliance plan for all above policies. Project manager will be required to monitor compliance during construction, and report compliance annually.

3. <u>Airport-Owned/Contracted Clean Fleet</u> Airport-Operated Clean Fleet

BUR is committed to operate and contract a clean vehicle fleet, and to secure emission reductions. The Clean Fleet Program Policy covers BUR-operated/contracted vehicles, except those used for safety purposes, such as police and fire vehicles.

The Clean Fleet Program Policy will require BUR to purchase new sedans powered by electricity. As vehicles are replaced with the new electric sedans, the percent of electric vehicles in BUR's light-duty vehicle fleet will increase with the objective being a 100% conversion by 2031. While there are no available all electric options for light duty trucks or mini-vans, BUR will explore zero-emission options for other light-duty vehicles, such as trucks and mini-vans.

BUR will convert all airport-owned/contracted medium or heavy-fleet to vehicles to be certified at SULEV or cleaner standards by January 1, 2023. Beginning in Fall 2019, the Airport will purchase commercially available passenger car, light-duty truck, or medium-duty vehicles that are certified at ultra-low-emission standards (SULEV) or cleaner when adding or replacing a vehicle in its fleet.

The Clean Fleet Program Policy will also require that BUR, when purchasing or contracting for new buses providing transportation for guests traveling off airport and between airport parking and the passenger terminal, only purchases or contracts for buses powered by electricity. As the existing buses are replaced with the new electric buses, the percent of electric vehicles in BUR's bus fleet will increase with the objective being a 100% conversion.

Targets:

- BUR will voluntarily increase purchase of EV Sedans, Medium and Heavy-Duty Vehicles, and commit that all new sedan purchases to be EV starting in 2021 and convert all sedan fleets to be EV by 2023. BUR will voluntarily also increase the medium and heavy-duty fleets with the goal of achieving 50% EV by 2031.
- BUR will convert Airport Shuttle Bus Fleets to achieve 50% electric fleet by 2023, and 100% by 2031.

Reporting/Monitoring and Enforcement

<u>BUR procurement specifications shall be consistent with the Clean Fleet Targets. BUR</u> will identify new infrastructure and equipment needs to support the fleet conversion as part of the implementation of the Clean Fleet Program Policy. BUR will annually audit vehicle purchases and the recycling program to determine compliance with the policy. BUR will report compliance with this policy annually.BUR is committed to operate a clean vehicle fleet, and to secure emission reductions. The Clean Fleet Program Policy covers BUR operated vehicles, except those used for safety purposes, such as police and fire vehicles.

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The Clean Fleet Program Policy will also require that BUR, when purchasing new buses providing transportation for guests traveling off airport and between airport parking and the passenger terminal, only purchases buses powered by electricity. As the existing buses are replaced with the new electric buses, the percent of electric vehicles in BUR's bus fleet will increase with the objective being a 100% conversion.

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• BUR will voluntarily increase purchase of EV Sedans, Medium and Heavy-Duty Vehicles, and commit that all new sedan purchases to be EV starting in 2021 and convert all sedan fleets to be EV by 2023. BUR will voluntarily also increase the medium and heavyduty fleets with the goal of achieving 50% EV by 2031.

• BUR will convert Airport Shuttle Bus Fleets to achieve 50% electric fleet by 2023, and 100% by 2031.

Reporting/Monitoring and Enforcement

BUR procurement specifications shall be consistent with the Clean Fleet Targets. BUR will identify new infrastructure and equipment needs to support the fleet conversion as part of the implementation of the Clean Fleet Program Policy. BUR will annually audit vehicle purchases and the recycling program to determine compliance with the policy. BUR will report compliance with this policy annually.

4. Electrical Charging Infrastructure

BUR will increase electric vehicle chargers in its existing and future parking structures and parking areas. This policy is designed to increase the electric vehicle trips by increasing the electrical vehicle charging operations.

Targets

- For all new parking structures constructed at BUR, BUR will voluntarily increase electrical charging infrastructure to achieve 5% of total parking inventory equipped with EV Charging infrastructure based on regulatory ability and available power capacity from the City of Burbank.
- BUR will voluntarily increase EV charging infrastructure for 5% of total parking inventory by 2031.

Reporting/Monitoring and Enforcement

BUR will monitor electrical vehicle use of the charging operations and determine an average daily number of vehicles that utilize the facilities. BUR will develop an Electric Vehicle Supply Equipment (EVSE) master plan including a building electrical capacity assessment and identify roles and responsibilities related to purchasing, installing, maintaining and replacing EV charging stations. BUR will analyze the utilization of the existing electrical charging facilities and estimate future needs by taking into consideration the increase in commercialization of electric vehicles and future visit times and lengths of stays and develop a policy for increasing electrical charging opportunities. BUR will determine the number of electrical charging parking spaces that need to be available, type and level of charging-equipment that needs to be offered, optimum location(s) of the charging stations, anticipated charging hours necessary, control of charging times to avoid adding load during high-peak periods (i.e., congestion charging, etc.), and future expansion.

BUR will explore grant funding to support EV infrastructure. BUR will collaborate with external stakeholders in a regional response to EV infrastructure challenges, and will program supporting infrastructure for subsequent development.

TRIP REDUCTION PROGRAMS

4. The Regional Intermodal Transportation Center

BUR recently developed the Regional Intermodal Transportation Center (RITC) to provide a consolidated rental car facility, create a direct rail connection, include ground level bus station and a new parking structure. Metro Bus and Burbank Bus stop in the bus turn- around area on the ground level of the RITC. Additionally, Amtrak and Metrolink passengers stopping at the Burbank Airport-South Train Station are able to access the RITC via an Empire Avenue street crossing that leads straight to elevator and escalator access to the elevated walkway. The RITC eliminates the need for rental car shuttles and promotes transit by linking all these transportation networks into a centralized public transportation hub. It is estimated that the RITC saves rental car companies 700,000 annual trips within the Airport environs.

5. Burbank Airport Employee Ride Share Policy

BUR will join the Burbank Transportation Management Organization (BTMO), which will serve all Airport employees and all Airport tenant employers, including employers with less than 250 employees. BUR will also encourage Airport tenant employers to actively participate and join the BTMO as individual members as well.

Employee Trip Reduction Target

• BUR will continue to participate and join the BTMO and work to reduce employee trips through increased employee rideshare, transit use and alternative mode share, with the goal of increasing employee rideshare.

Reporting/Monitoring and Enforcement

In 2019, BUR will join the BTMO and encourage Airport tenant employers to join. BUR will work with the BTMO to determine existing average vehicle ridership (AVR) of Airport employees and participating Airport tenant employees to annually monitor the change in AVR for employees. BTMO will conduct annual reviews and help tailor employee trip reduction strategies, which may include 1) Metro's Guaranteed Ride Home, Employer Transit Pass, Vanpool and Online Ride-matching programs, 2) development of start-up subsidies for vanpools and vanpool riders, 3) participation in regional events such as Bike & Walk to Work Day and Rideshare Week, 4) custom on-site events, 5) bike commuting skills/ safety course taught by certified instructor, 6) Multi-modal Transportation Resource Fair, 7) 'Try Transit' Outings, 8) assistance with the League of American Bicyclists Bicycle Friendly Business application, 9) fully-stocked display of transit, bike and carpool resources for worksite, and 10) bi-weekly electronic updates on relevant construction, transit route and fare changes.

The BTMO will produce an annual report that summarizes BUR's employee travel behavior, and BUR will consider additional tailored services by the BTMO to achieve BUR Employee Trip Reduction Targets.

6. Burbank-Metrolink Shuttle Connection Program

BUR encourages employees and air passengers to take the Metrolink train to and from the Airport. BUR is committed to continuing the BUR-Metrolink Shuttle Program, which includes the continuation of a pilot shuttle service to nearby Metrolink stations and on-demand shuttle services from the passenger terminal to Metrolink Stations. BUR will continue the marketing and public information dissemination to encourage increased train ridership, including the utilization of paid media, digital billboards, social and paid media, transit ads and direct mail. BUR will also work with Metrolink communications and support marketing of such services through airline partnerships, city business associations, visitor and convention bureaus.

Target:

BUR will continue to provide Metrolink Shuttle Connections Programs to achieve increased transit ridership through 2023 and 2031.

Reporting/Monitoring and Enforcement

BUR will work with Los Angeles Metropolitan Transportation Authority and Metrolink to determine ridership to the Airport for applicable lines on an annual basis. BUR will continue its on-demand shuttle service program from the passenger terminal to Metrolink stations, utilize media to encourage increased train ridership to the Airport, and evaluate whether additional shuttle services will increase train ridership. BUR will report compliance with this policy annually.

SUSTAINABLE DESIGN PROGRAMS

7. BUR Sustainable Design Program & Renewable Energy Projects

a. BUR Replacement Terminal Project

To reduce overall airport operational emissions, BUR will design, build, and deliver the Replacement Terminal Project in an environmentally responsible and resource-efficient manner throughout the project's life cycle, from the initial design, construction, operation, and maintenance phases.

Target:

BUR will develop a Sustainable Design Standard Policy for the Airport's Replacement Terminal Project, requiring the project to achieve LEED Silver certification or better, or the CalGreen equivalent of LEED Silver or better.

Reporting/Monitoring and Enforcement

BUR will include the Sustainable Design Policy requirements as part of its procurement for Replacement Terminal Project construction contracts. BUR will develop a LEED monitoring checklist and assessment tool to ensure Replacement Terminal Project is constructed in accordance with LEED Silver standards at a minimum. At key construction phases the project manager shall be required to submit the monitoring forms to BUR for review and comment, and to ensure the project is constructed in accordance with LEED Silver standards. BUR will provide compliance reports upon completion of Replacement Terminal Project.

b. BUR Sustainable Hangar Project

BUR is home to the world's first solar powered, LEED Platinum rated airplane hangar. Hangar 25 received LEED Platinum certification, making it the most sustainable airline hangar in the world. Its solar powered roof system provides 110% of Hangar 25's energy needs for the maintenance of the aircraft and for electricity in the building's office areas. All hangar equipment including tow tractors, ground power units, boom and scissor lifts, forklifts, golf carts, boarding stairs, lavatory servicing units and ground air conditioning units are electrically powered. To avoid jet fuel consumption and to improve air quality, solar charging carts power the airplane. Several components in Hangar 25's structure reduce the demand for light fixture use during the day. Panels and windows absorb natural lighting, and the concrete floor, polished by diamonds instead of sealed by toxic epoxy finish, reflects the light. To meet water efficiency LEED standards, Hangar 25 operates with low-water plumbing fixtures, and its native desert landscaping demands little water. Other sustainable features include recycled building products, a Hi-Fog fire suppression system that uses water instead of chemicals to terminate fires, and seven enormous fans that cool the building during the day and circulate warm airflow at night.

Target:

Hangar 25 is designed to generate 225kW of photovoltaic energy, generating 110 % of the hangar's energy needs.

Reporting/Monitoring and Enforcement

Since the hangar produces more energy than it uses, excess energy is sent to the Burbank power grid, providing clean energy for an estimated 50 homes. BUR will work with the Hangar 25 tenant to provide energy assessment reports, estimating the amount of clean energy produced annually.

8. RITC Solar Facility

The RITC's approximate 4-acre roof structure can accommodate an array of solar panels with peak capacity of 2,200 MWh. The RITC roof will integrate a mounted 2.0 million-watt photovoltaic system that will help achieve the LEED Gold certification and significantly reduces the burden on local utility companies. Burbank Water and Power (BWP) is responsible and permitted to install and operate these panels.

Target:

Upon BWP's implementation of the solar panels at RITC, BUR will support BWP to operate at the greatest capacity accommodated for at the RITC to the extent feasible.

Reporting/Monitoring and Enforcement

Once BWP implements solar panels at the RITC, BUR will provide assessment reports estimating the amount of clean energy produced annually.

IV. AQIP IMPLEMENTATION AND ASSESSMENT

BUR will lead the implementation of the initiatives and measures through its Planning & Development, and Environmental Affairs Department. The Airport Environmental Manager within that department will be responsible for coordinating the Airport's efforts for the initiatives and measures as described in this AQIP. The approach will be developed and refined on a case-by-case basis given the variety of Airport operations, tenants, and third parties that may be involved for each initiative and measure.

BUR will assess the progress of each initiative and measure on an annual basis. Information relative to each initiative and measure will be collected routinely to provide an annual assessment of progress towards the initiative or measure targets.

Summary of AQIP Benefits

	AQIP Targets		AOID	NOx Emission Reductions (tpy)		
AQIP Element	2023	2031	AQIP Metrics	2023	2031	Notes
Ground Support Equipment (GSE) Emissions Reduction Policy	1. <u>66</u> 90	0. <u>74</u> 82	Airport-wide HP-weighted g/bhp-hr NOx +HC emission factor	0.7 tpy as compared to Business- As-Usual	8.7 tpy as compared to Business- As-Usual	N/A
Clean Construction	100%	100%	Percent of construction equipment meeting at least Tier 4 Interim	1.55 tpy	N/A	A total of 5.53 tons of NOx is reduced throughout the Burbank AP Terminal Replacement project
Airport- Owned <u>/Contracted</u> Clean Fleet	94%	N/A	Percent of non- emergency airport-owned fleet vehicles to meet or exceed SULEV standards	0.04 tpy	N/A	N/A
Burbank- Metrolink Shuttle Connection Program	3%	6%	Percent shuttle ridership	0.33 tpy	0.21 tpy	N/A
Burbank Airport Employee Ride Share Policy	3%	6%	Reduced employee trips	0.04 tpy	0.05 tpy	N/A
Electric Bus Policy	N/A	100%	Percent of bus fleet to be powered by electricity	N/A	0.09 tpy	N/A
AQIP Total Emission Benefits	-	-	-	2.66 tpy	9.05 tpy	N/A

(NOx)