

**Mitigation Monitoring and Reporting
Program for
Final Environmental Impact Report No. 617
John Wayne Airport
Settlement Agreement Amendment**

SCH No. 2001111135

COUNTY OF ORANGE
John Wayne Airport
3160 Airway Avenue
Costa Mesa, California 92626
Contact: Lea Choum

August 2014



**Mitigation Monitoring and Reporting Program for
Final Environmental Impact Report No. 617
John Wayne Airport
Settlement Agreement Amendment
SCH No. 2001111135**

August 2014

Prepared for:

**COUNTY OF ORANGE
John Wayne Airport
3160 Airway Avenue
Costa Mesa, California 92626**

Contact: Lea Choum

Prepared by:

**BonTerra Psomas
AECOM
ENVIRON
Fehr & Peers
Landrum & Brown**

TABLE OF CONTENTS

<u>Section</u>	<u>Page</u>
Mitigation Monitoring and Reporting Program.....	1
1.1 Introduction.....	1
1.2 Mitigation Monitoring Procedures	1
1.3 Mitigation Monitoring and Reporting Plan.....	1

MITIGATION MONITORING AND REPORTING PROGRAM

1.1 INTRODUCTION

In accordance with the requirements of Public Resources Code section 21081.6, and as part of its certification of the adequacy of Final Environmental Impact Report No. 617 (“Final EIR 617”) for the John Wayne Airport Settlement Agreement Amendment, the Board of Supervisors (“Board”) of the County of Orange (“County”) adopts the following “Mitigation Monitoring and Reporting Plan” (“MMRP” or “Plan”). The Board adopts this MMRP in its capacity as the lead agency for Final EIR 617 in accordance with the provisions of the California Environmental Quality Act (“CEQA”) (*California Public Resources Code* §21000 et seq.) and the State CEQA Guidelines (14 California Code of Regulations § 15000 et seq.).

The principal purpose of the MMRP is to ensure that the Board-approved mitigation measures for the adopted Project are reported and monitored so as to ensure compliance with the measures’ requirements. In general, John Wayne Airport (“JWA”) is responsible for overseeing implementation and completion of the adopted mitigation measures. This includes the review of all monitoring reports, enforcement actions, and document disposition, unless otherwise noted in the attached MMRP Table. However, the Board retains overall responsibility for verifying implementation of all adopted mitigation measures.

1.2 MITIGATION MONITORING PROCEDURES

The County is the designated lead agency for the MMRP. JWA is the department responsible for review of all monitoring reports, enforcement actions, and document disposition, unless otherwise noted in the MMRP Table.

1.3 MITIGATION MONITORING AND REPORTING PLAN

The MMRP is provided in tabular format to facilitate effective tracking and documentation of the status of mitigation measures. The attached MMRP Table provides the following monitoring information:

- **Mitigation Measure.** The text of all adopted mitigation measures for the Project from Final EIR 617.
- **Approving or Verifying Authority.** The County Department(s) or other public agency(ies) responsible for overseeing the implementation and completion of each mitigation measure.
- **Date of Completion.** The date the mitigation measure is completed. (This column of the MMRP Table is to be filled in by the approving/verifying authority at a later date.)

ACRONYM LIST

The following are acronyms used in the Mitigation Monitoring Matrix:

A

AB	Assembly Bill
ACI-NA	Airports Council International – North America
ADDs	Average Daily Departures
AIP	Santa Ana Heights Acoustical Insulation Program
AQ	Air Quality

B

Board	County of Orange Board of Supervisors
-------	---------------------------------------

C

CAPCOA	California Air Pollution Control Officer's Association
CEQA	California Environmental Quality Act
CNEL	Community Noise Equivalent Level
CNG	Clean natural gas
County	County of Orange
CUPPS	Common Use Passenger Processing System

D

dB	decibel
----	---------

E

EIR	Environmental Impact Report
EIR 617	<i>2014 Final Environmental Impact Report No. 617, John Wayne Airport Settlement Agreement Amendment</i>

F

FAA	Federal Aviation Administration
-----	---------------------------------

G

GHG	Greenhouse gas
-----	----------------

I

ISWMP	Integrated Solid Waste Management Plan
-------	--

J

JWA	John Wayne Airport, Orange County
-----	-----------------------------------

L

LED	Light-emitting diode
LNG	Liquefied natural gas

M

MAP	Million Annual Passengers
MMRP	Mitigation Monitoring and Reporting Plan

N

N	Noise
NMS	Noise Monitoring Station

O

OCSD	Orange County Sanitation District
OCTA	Orange County Transportation Authority

P

PARCS JWA Parking Program
Plan Mitigation Monitoring and Reporting Plan

R

RWQCB Regional Water Quality Control Board
Rx Reduction Exchange

S

SCAQMD South Coast Air Quality Management District
SET Single engine taxiing
SIP Sound Insulation Program

T

T Traffic

Mitigation Measure	Timing of Mitigation	County Department or Other Agency for Review/Approval	Completion Date
AIR QUALITY			
AQ/GHG-1 Upon Project approval, the County of Orange shall support single/reduced engine taxiing procedures authorized by the Federal Aviation Administration (“FAA”) that achieve corresponding benefits in air quality and/or greenhouse gas (“GHG”) emission reductions and do not result in adverse noise impacts.	Upon approval of Project	JWA Deputy Airport Director, Facilities or designee	
AQ/GHG-2 Upon Project approval, the County of Orange shall support the efforts of the airport industry—including those of the FAA, commercial air carriers, and aircraft manufacturers—to develop air quality and Greenhouse Gas (“GHG”) emission benchmarking databases that improve the understanding of the relative efficiencies of aviation operations by actively participating in aviation community networks and participating in the biannual Airports Council International – North America (“ACI-NA”) Environmental Benchmark Survey.	Upon approval of Project	JWA Deputy Airport Director, Facilities or designee	
AQ/GHG-3 Upon Project approval, the County of Orange shall continue to evaluate the effects of future Airport-related improvement projects cognizant of and informed by the resulting air quality and GHG emissions in accordance with the requirements of the California Environmental Quality Act (“CEQA”).	Upon approval of Project	JWA Deputy Airport Director, Facilities or designee	
<p>AQ/GHG-4 By January 1, 2018, the County of Orange shall develop and adopt a Climate Action Plan for greenhouse gas emissions sources at the Airport under the County’s control. The Climate Action Plan shall be consistent with the requirements of the Global Warming Solutions Act of 2006 (“AB 32”) and the goals of Executive Order S-3-05.</p> <p>In order to secure greenhouse gas emission reductions from sources under the County’s control, the Climate Action Plan shall identify one or more of the following greenhouse gas reduction strategies, or combination thereof.</p> <ul style="list-style-type: none"> i. Maximizing the energy efficiency of existing Airport structures and facilities through retrofitting and redevelopment at the conclusion and/or expiration of their useful life; ii. Tracking energy use at intervals no less than every 12 months in order to allow for the efficient optimization of energy use; iii. Utilizing energy-efficient (light-emitting diode [“LED”] or equivalent) lighting on the airfield, within terminal buildings, and in connection with surface and parking lot security lighting; iv. Installing window awnings, sunshades, or window tinting in 	Completion by January 1, 2018	JWA Deputy Airport Director, Facilities or designee	

Mitigation Measure	Timing of Mitigation	County Department or Other Agency for Review/Approval	Completion Date
<p>appropriate areas;</p> <ul style="list-style-type: none"> v. Providing a minimum of 60 electric car charging stations consistent with AQ/GHG-11 below; vi. Increasing the purchase and use of renewable energy; vii. Requiring third parties, concurrent with the execution of new, renewed or amended lease or contractual agreements, to meet the more stringent energy efficiency requirements required in AQ/GHG-5 below; viii. Continuing to maximize use of hybrid or alternatively fueled on-site equipment, including equipment fueled by Clean Natural Gas (“CNG”), Liquefied Natural Gas (“LNG”), or Biodiesel; ix. Installing light colored “cool” roofs and cool pavements in any new development subsequently proposed at the Airport; x. Purchasing carbon offset credits through an adopted program such as the California Air Pollution Control Officer’s Association (“CAPCOA’s”) Greenhouse Gas Reduction Exchange (“Rx”) Registry, of which the South Coast Air Quality Management District (“SCAQMD”) is a participating air district (www.ghgrx.org); xi. Increasing solid waste reduction and recycling in accordance with AQ/GHG-10 below; and/or xii. Collaborating with commercial air carriers to reduce ground-based aircraft engine greenhouse gas emissions through single engine taxiing (“SET”) for purposes of taxi-in and taxi-out between the runway ends and terminal areas to the extent feasible and without compromising passenger safety and aircraft engine operational considerations. <p>The above list of greenhouse gas reduction strategies is non-exclusive and can be supplemented by any additional strategies subsequently identified by the County of Orange.</p> <p>In order to ensure progress in implementation of the Climate Action Plan and its reduction objectives, the County of Orange shall conduct annual greenhouse gas emission inventories for all stationary sources and other sources over which JWA has control.</p>			

Mitigation Measure	Timing of Mitigation	County Department or Other Agency for Review/Approval	Completion Date
<p>AQ/GHG-5 Upon Project approval, the County of Orange shall specify energy efficiency requirements and goals for equipment and appliances in contractual agreements, as applicable. At a minimum:</p> <ul style="list-style-type: none"> i. Concurrent with the execution of lease agreements, amendments, and/or renewals with commercial air carriers, the County of Orange shall set a Ground Support Equipment electrification requirement of a 15 percent increase above baseline by 2016, 35 percent above baseline by 2021, and 50 percent increase above baseline by 2026. (The baseline electrification conditions are established by reference to calendar year 2013.) ii. Concurrent with the execution of lease agreements, amendments, and/or renewals with all applicable Airport tenants, the County of Orange shall require that any new equipment or appliances purchased by the tenant for the provision of services under its contract with JWA shall be ENERGY STAR rated or equivalent, to the extent such equipment and appliances are commercially and technologically available. iii. Concurrent with the execution of lease agreements, amendments, and/or renewals with all applicable Airport tenants, the County of Orange shall require that all tenants develop, implement and submit to the Airport—within six months of lease execution—a fleet-wide, anti-idling policy. At a minimum, the anti-idling policy shall include the requirement that vehicle engines shall be turned off when vehicles are not occupied, and that occupied vehicles be turned off after no more than a five-minute idling period. 	Upon approval of Project	JWA Deputy Airport Director, Facilities or designee	
<p>AQ/GHG-6 Upon Project approval, the County of Orange shall install energy efficient equipment and controls for equipment being replaced as technologically available.</p>	Upon approval of Project and ongoing as technologically available	JWA Deputy Airport Director, Facilities or designee	
<p>AQ/GHG-7 Upon Project approval, the County of Orange shall install variable speed drives and optimize the control of air handling unit pumps for equipment being replaced as technologically available.</p>	Upon approval of Project and ongoing as technologically available	JWA Deputy Airport Director, Facilities or designee	

Mitigation Measure	Timing of Mitigation	County Department or Other Agency for Review/Approval	Completion Date
AQ/GHG-8 Upon Project approval, and as technologically available, the County of Orange shall install energy efficient elevators and escalators as the existing ones require replacement.	Upon approval of Project and ongoing as technologically available	JWA Deputy Airport Director, Facilities or designee	
AQ/GHG-9 By 2016, the County of Orange shall optimize the energy efficiency and control of the conveyor motors in the baggage handling system by adding more “photo eyes” to track bags and reduce the time that the system runs after a bag has gone through from 20 minutes to 10 minutes. The County of Orange also will replace the older electric conveyor drive motors in Terminals A and B with new, more efficient ones capable of variable frequency by 2016.	Completion by 2016	JWA Deputy Airport Director, Facilities or designee	
AQ/GHG-10 By 2016, the County of Orange shall develop an Integrated Solid Waste Management Plan (“ISWMP”) that strives to achieve the policy goal of the State of California—set forth in Section 41780.01 of the <i>California Public Resources Code</i> —that not less than 75 percent of solid waste generated be source reduced, recycled, or composted by the year 2020, and annually thereafter. In furtherance of the State’s policy goal, the ISWMP shall evaluate further improvements to the Airport’s existing solid waste diversion rate through enhanced recycling and composting opportunities.	Plan completion by 2016. Implementation ongoing with goal met by 2020 and maintained annually thereafter	JWA Deputy Airport Director, Facilities or designee	
AQ/GHG-11 By 2016, the County of Orange shall install electric vehicle chargers in public parking structures A1, A2, B2 and C, the Main Street parking lot, and the employee parking lots. Chargers will be located close to the terminals to give preference to the electric vehicle users. By 2021, the County of Orange shall also provide preferential parking for vehicles powered by compressed natural gas and other low emission sources. JWA’s parking program (“PARCS”) will be used to track the demand/use of the low emission vehicle spaces/chargers, and the County of Orange will re-evaluate the percentage/quantity of spaces required every two years. The County of Orange will optimize the efficiency of the parking program and adjust it according to future demands for electric chargers and the other types of low-emission vehicles driven by the public.	Upon approval of Project and ongoing with installation of electric vehicle chargers in parking structures A1, A2, B2 and C, the Main Street parking lot and the employee parking lots installed by 2016; provision of preferential parking for compressed natural gas and other low emission source vehicles by 2021.	JWA Deputy Airport Director, Facilities or designee	

Mitigation Measure	Timing of Mitigation	County Department or Other Agency for Review/Approval	Completion Date
AQ/GHG-12 Upon Project approval, the County of Orange shall support the expansion of public transit opportunities to the Airport by coordinating with the Orange County Transportation Authority (“OCTA”), Irvine iShuttle, and MetroLink upon the request of the transit providers. Additionally, the County of Orange will continue to make available—on the Airport’s website—current information about public transit options that can be utilized to access the Airport.	Upon approval of Project	JWA Deputy Airport Director, Facilities or designee	
AQ/GHG-13 Upon Project approval, the County of Orange shall support bicycle use by Airport employees and the air traveling public by providing convenient, secure bicycle racks for use on the Airport’s premises.	Upon approval of Project	JWA Deputy Airport Director, Facilities or designee	
AQ/GHG-14 Upon Project approval, the County of Orange shall continue to support the use of alternatively fueled taxis and shuttles through the Request for Proposal process and in the contractual agreements (most taxis are currently CNG). JWA also shall support the use of alternatively fueled rental vehicles by providing electricity for chargers where practicable by 2020.	Upon approval of Project	JWA Deputy Airport Director, Facilities or designee	
AQ/GHG-15 Upon Project approval, the County of Orange shall support the efforts of commercial air carriers to utilize paperless ticket technology by upgrading the current kiosks and Common Use Passenger Processing System (“CUPPS”) system with new, more efficient technology as it becomes commercially available.	Upon approval of Project and ongoing as technologically available	JWA Deputy Airport Director, Facilities or designee	
GREENHOUSE GAS EMISSIONS			
See Air Quality, above, for mitigation measures.			
LAND USE AND PLANNING			
LU-1 Starting with the 2015 Annual Noise Report, the annual noise contours presented in the report will be used by the County of Orange/JWA to identify parcels with noise sensitive uses (i.e., residences, schools, or churches) that are newly located either partially or completely within the 65 CNEL contour as compared to their location relative to the 65 CNEL contour in the 2013 Annual Contours, which will serve as the baseline condition. All uses that were established before 1985 and have not been insulated under the previous AIP will be eligible for evaluation under the SIP described in Mitigation Measure N-3. Those uses with an average interior noise levels exceeding 45 CNEL will be eligible for insulation under the SIP described in Mitigation Measure N-3. For those uses with interior noise levels less than 45 CNEL, the amount of outdoor-to-	Starting with the 2015 Annual Noise Report	JWA Deputy Airport Director, Facilities or designee	

Mitigation Measure	Timing of Mitigation	County Department or Other Agency for Review/Approval	Completion Date
<p>indoor noise reduction for each habitable room will be recorded. In each subsequent Annual Noise Report, the noise level impacting these uses and the measured noise reduction will be used to estimate the interior noise level. If the estimated interior noise level exceeds 45 CNEL, then the use will be eligible for re-evaluation in the form of new interior noise level measurements. If the interior noise level in any habitable room exceeds 45 CNEL, then the use will be eligible for the SIP described in Mitigation Measure N-3.</p>			
<p>LU-2 Prior to authorizing the allowed Phase 3 increases for the Proposed Project, the 2025 Annual Noise Report shall be evaluated by the County of Orange/JWA to determine if increased operations would result in a change in the annual 65 CNEL contour as compared to their location relative to the 65 CNEL contour in the 2013 annual contours. If the increase would result in a greater than a 1 CNEL change at NMS 1S or 2S, the allowed increases in MAP and/or ADD shall be restricted to ensure the increase would be less than 1 CNEL difference at these locations. This shall be done annually to ensure the increase in CNEL as compared to the 2013 annual contours, do not exceed the City of Newport Beach threshold provided for in General Plan Policy N 1.8.</p>	<p>Prior to authorizing the allowed Phase 3 increases for the Proposed Project (2026)</p>	<p>JWA Deputy Airport Director, Facilities or designee</p>	
<p>NOISE</p>			
<p>N-1 Starting with the 2015 Fourth Quarter Noise Report, the annual noise levels at NMS 1S, 2S, and 3S will be compared by the County of Orange to the 2013 annual noise levels. If the noise levels have increased by 1.5 dB or more at any of these NMS, all noise sensitive uses represented by that NMS (i.e., that is the closest NMS to the parcel) that have not been previously insulated under the 1985 AIP will be eligible for evaluation for participation in the Sound Insulation Program (“SIP”) as described in Mitigation Measure N-3. Those uses with interior noise levels exceeding an average of 45 CNEL will be eligible for insulation under the SIP as described in the mitigation measure.</p> <p>For those uses with interior noise levels less than 45 CNEL, the amount of outdoor-to-indoor noise reduction for each habitable room will be recorded. In each subsequent Fourth Quarter Noise Report, the noise level impacting these uses and the measured noise reduction will be used to estimate the interior noise level. If the estimated interior noise level exceeds an average of 45 CNEL, then the use will be eligible for re-evaluation in the form of new interior noise level measurements. If the interior noise level in any habitable room exceeds an average of 45 CNEL, then the use will be eligible for the SIP described in Mitigation Measure N-3.</p>	<p>Starting with the 2015 Fourth Quarter Noise Report</p>	<p>JWA Deputy Airport Director, Facilities or designee</p>	

Mitigation Measure	Timing of Mitigation	County Department or Other Agency for Review/Approval	Completion Date
<p>N-2 Starting with the 2015 Fourth Quarter Noise Report, the annual noise levels at NMS 1S, 2S, and 3S will be compared by JWA to the 2013 annual noise levels. If the noise levels have increased by 1.0 dB or more at any of these NMS, all noise sensitive uses represented by that NMS (i.e., that is the closest NMS to the parcel) exposed to noise levels of 65 CNEL or greater that have not been previously insulated under the 1985 AIP will be eligible for evaluation for participation in the Sound Insulation Program (“SIP”) as described in Mitigation Measure N-3. Those uses with interior noise levels exceeding 45 CNEL will be eligible for insulation under the SIP as described in the mitigation measure.</p> <p>For those uses with interior noise levels less than 45 CNEL, the amount of outdoor-to-indoor noise reduction for each habitable room will be recorded. In each subsequent Fourth Quarter Noise Report, the noise level impacting these uses and the measured noise reduction will be used to estimate the interior noise level. If the estimated interior noise level exceeds an average of 45 CNEL then the use will be eligible for re-evaluation in the form of new interior noise level measurements. If the interior noise level in any habitable room exceeds an average of 45 CNEL then the use will be eligible for the SIP described in Mitigation Measure N-3.</p>	Starting with the 2015 Fourth Quarter Noise Report	JWA Deputy Airport Director, Facilities or designee	
<p>N-3 The only practical way to mitigate indoor noise levels is through a Sound Insulation Program (“SIP”). Mitigation Measure LU-1, as described in the Section 4.5, Land Use, and Mitigation Measures N-1 and N-2, described above, will determine the sensitive land uses that will be eligible for participation in the SIP described below as Mitigation Measure N-3. FAA regulations require that residences be exposed to an outdoor noise level of 65 CNEL or greater and interior noise levels greater than 45 CNEL for FAA or Airport funds to be used for sound insulation. The referring Mitigation Measures, LU-1, N-1, and N-2, will ensure the outdoor noise criterion is met. The interior noise level criterion will be determined in the evaluation phase of Mitigation Measure N-3. Sensitive uses with interior noise levels greater than 45 CNEL will be eligible for sound insulation.</p> <p>The FAA guidance for implementing sound insulation programs specifically states that the average noise level in all habitable rooms of a residence or all educational spaces in school must be greater than 45 CNEL for the use to be eligible for sound insulation funded by the Airport or FAA. However, the County’s noise standards specifically require that the noise level in <u>any</u> habitable room or educational space must be less than 45 CNEL. This is implied in the City of Newport Beach’s noise standards, as well. Under CEQA, the lead agency’s noise standard is used to determine impacts. Therefore,</p>	Completion of measures LU-1, N-1 and N-2	JWA Deputy Airport Director, Facilities or designee	

Mitigation Measure	Timing of Mitigation	County Department or Other Agency for Review/Approval	Completion Date
<p>a noise sensitive use is considered significantly impact if the noise level in any habitable room or educational space exceeds 45 CNEL.</p> <p>As discussed below, the Airport will request that the FAA waive its requirement that the average noise level in all habitable rooms or educational spaces exceed 45 CNEL in order for sound insulation to be funded by the FAA or Airport in order that all noise related impacts are mitigated to a less than significant level in a timely manner. If the FAA does not agree to waive this requirement, then uses with one or more habitable rooms or educational spaces exceeding 45 CNEL but with the average noise level in all habitable rooms or educational spaces less than 45 CNEL would be significantly and unavoidably impacted as there is no other funding source for a SIP. However, these uses would be eligible for insulation when and if the average noise level exceeded 45 CNEL. As discussed in Mitigation Measures, LU-1, N-1, and N-2, if an individual land use is not eligible for insulation because the interior noise level does not exceed 45 CNEL, there are criteria for re-evaluation. If the annual report noise levels and previous evaluation measurements indicate that the use may meet the interior noise requirement it will be re-evaluated for insulation eligibility.</p> <p>Part 1, Evaluation: When Mitigation Measures LU-1, N-1, or N-2 determines that a noise sensitive use is significantly impacted based on measured noise levels and the relevant significance thresholds, that use will be evaluated by the County of Orange for eligibility for sound insulation. The evaluation will be performed by measuring the indoor noise levels for each habitable room or educational space. If the average noise level in all habitable rooms or education spaces of a use is greater than an average of 45 CNEL then the use will be eligible for sound insulation. Additionally, if the average noise level is less than 45 CNEL, any use with a noise level greater than an average of 45 CNEL in any habitable room or educational space also will be eligible for sound insulation if the FAA waives its requirement that noise levels be averaged across all habitable rooms or education spaces.</p> <p>Per FAA guidance, noise levels will be measured with all windows and doors closed. Uses with measured interior noise levels less than 45 CNEL that do not have an existing central ventilation system, but rely on keeping windows open for air circulation will be eligible for a Continuous Positive Ventilation System. Implementation of such a system will be dependent on meeting the FAA requirements for implementation of such a system.</p> <p>Part 2, Sound Insulation Program: Schools or residences that have interior noise levels exceeding 45 CNEL as determined by the evaluation measurements will be</p>			

Mitigation Measure	Timing of Mitigation	County Department or Other Agency for Review/Approval	Completion Date
<p>eligible for sound insulation. The implementation of sound insulation will depend on satisfying the FAA criteria described in Chapter 812 of Order 5100.38C Airport Improvement Program Handbook.</p> <p>Note that as an alternative to providing sound insulation, an impacted property may also be mitigated by converting an incompatible use to a compatible use or removing the incompatible use.</p>			
TRANSPORTATION/TRAFFIC			
<p>T-2 The County of Orange/JWA shall coordinate with the City of Newport Beach and construct a third southbound right-turn lane at the intersection of Campus Drive and Bristol Street North that is fully operational prior to JWA serving 10.8 MAP.</p>	<p>The improvement will be completed by 2016.</p>	<p>JWA Deputy Airport Director, Facilities or designee in coordination with the City of Newport Beach</p>	