RUNWAY 6L-24R AND 6R-24L RUNWAY SAFETY AREA (RSA) AND ASSOCIATED IMPROVEMENTS PROJECT

MITIGATION MONITORING AND REPORTING PROGRAM 2017 PROGRESS REPORT



LOS ANGELES INTERNATIONAL AIRPORT

RUNWAY 6L-24R AND 6R-24L RUNWAY SAFETY AREA (RSA) AND ASSOCIATED IMPROVEMENTS PROJECT

MITIGATION MONITORING AND REPORTING PROGRAM (MMRP)

2017 PROGRESS REPORT

Prepared by

Los Angeles World of Airports Environmental Programs Group and Planning and Development Group



Table of Contents

1 Project Background1-
2 Project Mitigation Measures for Reporting Period2-
List of Tables
Table 2-1 Summary of Mitigation Measures In Progress in the 2017 Monitoring Period2-
Appendices

Appendix A Mitigation Monitoring and Reporting Program Summary Table



1 Project Background

The Board of Airport Commissioners (BOAC) certified the Los Angeles International Airport (LAX) Runway 6L-24R and Runway 6R-24L Runway Safety Area (RSA) and Associated Improvements Project Final Environmental Impact Report (FEIR) on July 14, 2014. An item included in the FEIR and adopted by the BOAC was the project Mitigation Monitoring and Reporting Program (MMRP). Subsequently, BOAC adopted a Mitigated Negative Declaration and Initial Study (IS/MND) for the Runway 6R-24L Runway Safety Area Improvements Project in June 2015. The Final IS/MND included an MMRP (Final MND Appendix C).

The June 2014 MMRP for the LAX Runway 6L-24R and Runway 6R-24L RSA and Associated Improvements Project is available online at https://www.lawa.org/en/lawa-our-lax/environmental-documents/documents-certified/runway-6l24r-unway-org/en/lawa-our-lax/environmental-documents/documents-certified/runway-6r24l-runway-safety-area-improvements-project.

Key provisions of the Runway 6L-24R and Runway 6R-24L RSA Project included modifications to the service road, covering a segment of the Argo Drainage Channel, and runway and taxiway pavement rehabilitation. Key provisions of the Runway 6R-24L RSA Project included removal and relocation of existing taxiways, construction/rehabilitation of runway and taxiway pavement and connectors, and modifications to service roads. LAWA completed construction of the Runway 6L-24R improvements in December 2015, and Runway 6R-24L improvements in December 2016. However, warranty repairs on Runway 6L-24R were conducted in 2017. Only the warranty repairs associated with Runway 6L-24R are addressed in the MMRP Report for 2017.

This report provides a status update on applicable mitigation activities, policies, and programs LAWA implemented to ensure compliance with mitigation measures identified in the Final EIR and Final IS/MND. This report covers the period January 1, 2017 through December 31, 2017. A tabular summary is provided for mitigation measures that were in progress during the reporting period. Measures included in the Runway 6L-24R and Runway 6R-24L RSA Project MMRP (June 2014) are identified as "2014 MMRP," and measures included in the Runway 6R-24L RSA Project MMRP (May 2015) are identified as "2015 MMRP." A compiled summary of all the mitigation measures and the status of each can be found in Appendix A.

LAWA completed necessary warranty repair work in 2017. There is no further construction associated with the Runway 6L-24R and Runway 6R-24L RSA Project or with the Runway 6R-24L RSA Project. However, two of the mitigation measures (MM-BC [6R24L]-1 and MM-BC-2) require maintenance and monitoring for a 5-year period, which began in 2017. Future MMRP reports will only address these two measures.



2 Project Mitigation Measures for Reporting Period

In 2017, LAWA conducted warranty repairs on Runway 6L-24R. This section addresses the mitigation measures that were implemented in 2017 in association with these activities. Measures are shown by resource and mitigation measure as presented in the MMRPs. These measures are identified as "ongoing" or "completed this period." Measures that are identified as ongoing will apply in future reporting periods; no further updates will be provided for the mitigation measures that were completed during the 2017 reporting period.

Table 2-1 Summary of Mitigation Measures In Progress in the 2017 Monitoring Period				
	Mitigation Measure Status			
AIR QUALITY,	GREENHOUSE GASES, HUMAN HE	ALTH		
LAX-AQ-1: Ger	neral Air Quality Control Measures (20	14 MMRP)		
LAX-AQ-1a	Water twice daily	Completed this Period: Watering (by water trucks) for dust control occurred at least twice daily during grading activities in accordance with SCAQMD Rule 403.		
LAX-AQ-1b	Ultra-low sulfur diesel in construction equipment	Completed this Period: ULSD is the only fuel commercially available and is used in all construction equipment. No shortage of ULSD was experienced within Southern California during the 2017 reporting period, and no substitution of ULSD occurred on the LAX Runway 6L/24R warranty work.		
LAX-AQ-1d	Cover or treat all ground surfaces	Completed this Period: Any exposed areas on the airfield were hydro-seeded and/or watered for dust control.		
LAX-AQ-1e	Complete Paved Surfaces as soon as possible	Completed this Period: The entrances and exits to the construction staging areas were armored with rubble to reduce dust emissions.		
LAX-AQ-1f	Prohibit idling or queuing of diesel- fueled vehicles in excess of 5 minutes	Completed this Period: This requirement is included in the project construction specifications. LAWA monitors and inspectors monitored for compliance with this requirement. No excessive vehicle or equipment idling was observed by the Third Party Monitor. There were no written violations in the 2017 reporting period.		
LAX-AQ-1g	Maintain on-site construction equipment	Completed this Period: This requirement is included in the project construction specifications. LAWA inspectors and monitors oversee for compliance with this requirement. No construction equipment was observed emitting excessive smoke that would indicate an engine maintenance issue. There were no written violations in the 2017 reporting period.		



Table 2-1 Summary of Mitigation Measures In Progress in the 2017 Monitoring Period

	Mitigation Measure	Status		
LAX-AQ-2: Cor	-AX-AQ-2: Construction-Related Control Measures (2014 MMRP)			
LAX-AQ-2a	Outfit construction diesel-fueled equipment with the best available emission control devices	Completed this Period: The Third Party Monitor reviewed the Contractor's equipment list in 2017 for warranty repair work on the LAX Runway 6L-24R RSA project component. For the reporting period, a total of 27 vehicles and pieces of construction equipment were reviewed. Three (3) pieces of equipment were disapproved by LAWA. Of the 24 vehicles and pieces of equipment approved for use on RSA 6L-24R construction: Four (4) are considered on-road vehicles; 20 are considered offroad equipment. For the on-road vehicles, four were equipped with VDECS and met the MMRP requirements. For the off-road vehicles, 13 out of 20 vehicles were Tier 4 and thus equipped with a factory-installed VDECS in conformance with MMRP requirements. The seven (7) remaining off-road vehicles were granted an exemption. See also the responses to 2n through 2p, below.		
LAX-AQ-2b	Water three time daily	Completed this Period: Watering for dust control occurred in accordance with Rule 403, a minimum of three times daily during grading activities.		
LAX-AQ-2c	Pave Construction Access Roads	Completed this Period: The entrances and exits to the construction staging areas associated with the runway warranty repair work were treated with water and gravel to control dust.		
LAX-AQ-2d	Have construction employees' work/commute during the off-peak hours to the extent feasible	Completed this Period: Employee shift hours for the runway warranty repair work did not coincide with the heaviest commuter traffic periods during the 2017 reporting period.		
LAX-AQ-2e	Make on-site lunch trucks available during construction	Completed this Period: Lunch trucks visited areas available to construction workers on a regular basis, including areas within the Airport Operations Area (AOA).		
LAX-AQ-2g	Provide electricity from power poles and portable generators using clean-burning diesel	Completed this Period: Electrical power used at the construction trailers/offices was provided via grid power. Small portable generators were used at night to power portable lights.		
LAX-AQ-2i	Use construction equipment having the minimum practical engine size	Completed this Period: This requirement is included in the project construction specifications.		
LAX-AQ-2j	Prohibit construction equipment engine tampering	Completed this Period: This requirement is included in the project construction specifications. No vehicle or equipment was observed to have been tampered with or to have defeated emission control devices. There were no written violations in the 2017 reporting period.		
LAX-AQ-2k	Designate a person(s) to ensure implementation of construction-related measures	Completed this Period: Both LAWA personnel and construction contractor personnel implement construction-related mitigation measures. Compliance with these measures is discussed at pre-construction meetings and at weekly project meetings. Monitoring included direct inspections, reviews of monthly reports, and investigation of complaints.		



Table 2-1
Summary of Mitigation Measures In Progress in the 2017 Monitoring Period

	Mitigation Measure	Status			
MM-AQ (RSA-N	MM-AQ (RSA-N)-1: Project Specific Air Quality Measures (2014 MMRP)				
2n	On-road trucks 19,500 lbs or more must comply with USEPA 2010 on- road standards for PM10 and NOx	Completed this Period: For the 2017 reporting period, a total of four (4) on-road vehicles were proposed for airfield use. All four on-road vehicles were equipped with a VDECS.			
20	Off-road diesel-powered construction equipment greater than 50 horsepower shall meet minimum USEPA Tier 3 off- road emission standards	Completed this Period: For the 2017 warranty repair work on the LAX Runway 6L-24R RSA project, 20 pieces of off-road equipment were reviewed. Of this number, 13 pieces were certified at either Tier 4 interim of Tier 4 (final). The remaining seven off-road vehicles were granted an exemption. Six (6) pieces of off-road construction equipment were granted a 20-day exemption; one piece of construction equipment was equipped with a small displacement engine and deemed incompatible with available CARB or EPA-verified VDECS.			
2р	Measures 2n and 2o above shall apply unless exemptions are granted	Completed this Period: Exemptions granted during 2017 are identified in item 20 above.			
BIOLOGICAL	RESOURCES				
MM-BC (6R24L)-1 (2015 MMRP)	Conservation of Sensitive Habitat	Ongoing: The improvements made to Runway 6R-24L in 2016 resulted in the loss of a small number of south coast branching phacelia (<i>Phacelia ramosissima var. austrolitoralis</i>). In 2016, the disturbed area was revegetated prior to construction. The MMRP requires that the revegetated area be monitored and maintained for a 5-year period or until the number of plants established equals those that LAWA removed. LAWA monitored the area in 2017 in compliance with this requirement. Also see response to MM-BC-2, below.			
MM-BC-2 (2014 MMRP, 2015 MMRP)	Conservation of Floral Resources: Lewis' Evening Primrose and South Coast Branching Phacelia	Ongoing: The improvements made to Runway 6R-24L in 2016 impacted a very small area of south coast branching phacelia. LAWA revegetated the disturbed area prior to construction. The MMRP requires that the revegetated area be monitored and maintained for a 5-year period. For details see response to MM-BC (6R24L)-1, above.			
NOISE					
N-1 (2014 MMRP)	Maintenance of Applicable Elements of Existing Aircraft Noise Abatement Program	Completed (for this project): LAWA continually maintains the existing Aircraft Noise Abatement Program at LAX. Summary reports are submitted to the County of Los Angeles with each Quarterly Report to the County, per the Variance requirement. This measure was identified in the Runway 6L-24R and Runway 6R-24L Runway Safety Area and Associated Improvements Project EIR as an applicable LAX Master Plan commitment. However, the measure was not identified in the EIR as a required measure to mitigate project-related noise impacts. Therefore, this measure will not be included in future progress reports for the Runway 6L-24R and Runway 6R-24L Runway Safety Area and Associated Improvements Project.			

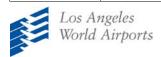


Table 2-1
Summary of Mitigation Measures In Progress in the 2017 Monitoring Period

	Mitigation Measure	Status	
MM-N-9 (2014 MMRP)	Equipment Replacement	Completed this Period: Where possible, construction equipment has rubber tires to reduce noise. Construction equipment is well maintained, which also reduces noise.	
MM-N-10 (2014 MMRP)	Construction Scheduling	Completed this Period: Construction activities conducted in 2017 were not located within 600 feet of any noise sensitive uses.	
SURFACE TRA	ANSPORTATION		
C-1 (2014 MMRP)	Establishment of a Ground Transportation/Construction Coordination Office	Completed this Period: LAWA established the Coordination and Logistic Management (CALM) team to, among other responsibilities, coordinate logistics relating to ongoing construction projects, including construction-related traffic. In addition, LAWA monitors oversee construction activities. In 2017, the CALM team and LAWA monitors worked with the project staff and contractors to coordinate deliveries, monitor traffic conditions, and monitor and enforce delivery times and routes during the reporting period.	
ST-9 (2014 MMRP)	Construction Deliveries	Completed this Period: There were no deliveries for the LAX Runway 6L/24R RSA warranty repair work that required lane closures during the 2017 reporting period.	
ST-12 (2014 MMRP)	Designated Truck Delivery Hours	Completed this Period: LAWA monitors truck deliveries and such deliveries are strictly enforced by LAWA inspectors and mitigation monitors. On occasion, waivers are granted for deliveries during peak periods when required for engineering/construction reasons, such as for large-scale concrete pours or other unique hauling needs that must be completed on a continuous basis over the course of many hours. During the 2017 reporting period, no truck waivers were granted for the LAX Runway 6L/24L RSA warranty repair work.	
ST-14 (2014 MMRP)	Construction Employee Shift Hours	Completed this Period: The standard shift for the LAX Runway 6L/24R RSA warranty repair work in the 2017 reporting period conformed to the provisions of this measure.	
ST-17 (2014 MMRP)	Maintenance of Haul Routes	Completed this Period: No maintenance of off-airport roadways by construction contractors was required during the 2017 reporting period.	
ST-18 (2014 MMRP)	Construction Traffic Management Plan	Completed this Period: Prior to the initiation of construction, the contractor developed a Construction Traffic Management Plan, which was reviewed by LAWA. Construction traffic was monitored by LAWA inspectors and construction monitors, including haul routes, delivery hours, construction employee shift hours, construction employee parking locations, and other considerations. Construction employees parked in the northwest corner of the airport (south of Westchester Parkway near Falmouth Avenue) and at Continental City (northeast corner of Imperial Highway and Aviation Boulevard).	

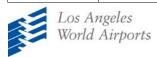


Table 2-1		
Summary of Mitigation Measures In Progress in the 2017 Monitoring Period		
Mitigation Measure	Status	

	Mitigation Measure	Status
ST-19 (2014 MMRP)	Closure Restrictions of Existing Roadways	Completed this Period: The LAX Runway 6L/24R RSA warranty repair work did not require closure of any public roadways during the 2017 reporting period.
ST-21 (2014 MMRP)	Construction Employee Parking Locations	Completed this Period: See item ST-18 above. Worker parking at these locations caused no disruption to adjacent streets.



Appendix A Mitigation Monitoring and Reporting Program Summary Table



Mitigation Measure Table Legend

PC =Previously Completed or NA = No Longer Applicable
CTP = Completed This Period
O = Ongoing in Current and Future Reporting Periods

	Mitigation Measure	Status
DA-1	Provide and Maintain Airport Buffer Areas	PC
MM-DA-1	Construction Fencing	PC
LAX-AQ-1a	Water twice daily	CTP
LAX-AQ-1b	Ultra-low sulfur diesel in construction equipment	CTP
LAX-AQ-1c	Post Signage for Dust Complaints	PC
LAX-AQ-1d	Cover or treat all ground surfaces	CTP
LAX-AQ-1e	Complete Paved Surfaces as soon as possible	CTP
LAX-AQ-1f	Prohibit idling or queuing of diesel-fueled vehicles in excess of 5 minutes	СТР
LAX-AQ-1g	Maintain on-site construction equipment	CTP
LAX-AQ-2a	Outfit construction diesel-fueled equipment with the best available emission control devices	СТР
LAX-AQ-2b	Watering three time daily	CTP
LAX-AQ-2c	Pave Construction Access Roads	CTP
LAX-AQ-2d	Have construction employees' work/commute during the off- peak hours to the extent feasible	СТР
LAX-AQ-2e	Make on-site lunch trucks available during construction	CTP
LAX-AQ-2f	Utilize on-site rock crushing facility, when feasible	NA
LAX-AQ-2g	Provide electricity from power poles and portable generators using clean-burning diesel	СТР
LAX-AQ-2h	Suspend construction equipment during second stage smog alert	NA
LAX-AQ-2i	Use construction equipment having the minimum practical engine size	СТР
LAX-AQ-2j	Prohibit construction equipment engine tampering	СТР
LAX-AQ-2k	Designate a person(s) to ensure implementation of all construction-related measures	СТР
LAX-AQ-2I	Locate rock-crushing operations away from LAX-adjacent residents, to the extent possible	NA
LAX-AQ-2m	LAWA will ensure on-site infrastructure is available, to the extent feasible, to provide fuel to alternative-fueled vehicles	NA



MM-AQ	On-road trucks 19,500 lbs or more must comply with USEPA	СТР
(RSA-N)-1, 2n	2010 on-road standards for PM10 and NOx	
MM-AQ (RSA-N)-1, 20	Off-road diesel-powered construction equipment greater than 50 horsepower shall meet minimum USEPA Tier 3 off-road emission standards	СТР
MM-AQ (RSA-N)-1, 2p	Measures 2n and 2o above shall apply unless exemptions are granted	СТР
MM-BC (RSA-N)-1	Conservation of Floral Resources: Lewis' Evening Primrose	PC
MM-BC (6R24L)-1	Conservation of Sensitive Habitat	0
MM-BC (BWP)-4	Conservation of Faunal Resources: Burrowing Owls	PC
MM-BC (BWP)-8	Conservation of Faunal Resources: Nesting Birds/Raptors	PC
MM-BIO (SPAS)-10	Conservation of Faunal Resources: Burrowing Owls	PC
MM-BC-1	Conservation of State-Designated Sensitive Habitat Within and Adjacent to the El Segundo Blue Butterfly Habitat Restoration Area	PC
MM-BC-2	Conservation of Floral Resources: Lewis' Evening Primrose and South Coast Branching Phacelia	0
MM-ET-3	El Segundo Blue Butterfly Conservation: Dust Control	PC
MM-HA (6R24L)-1 MM-HA	Conformance with LAX Master Plan Archaeological Treatment Plan Archaeological Resource Construction Personnel Briefing	PC PC
(6R24L)-2		
MM-HA-4	Discovery	PC
MM-HA-5	Archeological Monitoring	PC
MM-HA-6	Excavation and Recovery	PC
MM-HA-7	Administration	PC
MM-HA-8	Archaeological/Cultural Monitor Report	PC
MM-HA-9	Artifact Curation	PC
MM-HA-10	Archaeological Notification	PC
MM-PA (6R24L)-1	Conformance with LAX Master Plan Paleontological Management Treatment Plan	PC
MM-PA (6R24L)-2	Construction Personnel Briefing	PC
MM-PA-1	Paleontological Qualification and Treatment Plan	PC
MM-HWQ (RSA-N)-1	Argo Ditch Mitigation	PC
HWQ-1	Develop Detailed Drainage Plan	PC



MM-N (RSA-N)-1	Northeast Construction Staging/Parking Area (Construction Staging Area B)	PC
MM-N (RSA-N)-2	Residential Sound Insulation	PC
MM-N-7	Construction Noise Control Plan	PC
MM-N-8	Construction Staging	PC
MM-N-9	Equipment Replacement	CTP
MM-N-10	Construction Scheduling	CTP
N-1	Maintenance of Applicable elements of Existing Aircraft Noise Abatement Program	СТР
C-1	Establishment of a Ground Transportation/Construction Coordination Office	СТР
C-2	Construction Personnel Airport Orientation	PC
ST-9	Construction Deliveries	СТР
ST-12	Designated Truck Delivery Hours	CTP
ST-14	Construction employee shift hours	CTP
ST-16	Designated Haul Routes	PC
ST-17	Maintenance of Haul Routes	СТР
ST-18	Construction Traffic Management Plan	CTP
ST-19	Closure Restrictions of Existing Roadways	CTP
ST-21	Construction Employee Parking Locations	CTP
ST-22	Designated Truck Routes	PC
W-1	Maximize Use of Reclaimed Water	PC
W-2	Enhance existing Water Conservation Program	PC
SW-1	Implement an Enhanced Recycling Program	PC
SW-2	Requirements for the Use of recycled Materials During Construction	PC
SW-3	Requirements for the Recycling of Construction and Demolition Waste	PC

