

MITIGATION MONITORING AND REPORTING PROGRAM

SCH # 2010071044

Owens Dry Lake Phase 8 Dust Control Measures Project Initial Study / Mitigated Negative Declaration

No.	Impact	Mitigation Measure	Time Frame for Implementation	Responsible Monitoring Agency	Verification of Compliance		
					Initials	Date	Remarks
Air-1	Installation of project facilities will temporarily increase fugitive dust emissions.	Fugitive Dust Emissions Control and Minimization In compliance with GBUAPCD Rule 401, LADWP shall take reasonable precautions to prevent visible particulate matter from being airborne, under normal wind conditions, beyond the property from which the emission originates. Best available control measures shall be implemented during construction and maintenance activities to minimize emission of fugitive dust from earthwork and travel on unpaved roads and other areas. Best available control measures may include, but would not be limited to, the use of windbreaks, water trucks, and water sprays twice a day, or comparable measures that prevent visible dust from occurring. At a minimum, active operations shall utilize one or more of the applicable best available control measures to minimize fugitive dust emissions from each fugitive dust source type that is part of the active operation. The maximum area of soil disturbance at any one time will be 40 acres; where applicable, geotextile will be installed within 10 working days with constructible conditions (i.e., no rain events). Monitoring reports will be prepared during construction activity and made available to GBUAPCD and CSLC as requested.	During construction	LADWP	(Monitoring Reports provided to GBUAPCD and CSLC as requested)		

EXHIBIT C

PRC 8079.9

ATTACHMENT 3

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Air-2	Installation of project facilities will result in emissions of air pollutants from construction vehicles and equipment.	Low Emissions Tune-ups Schedule A schedule of low emissions tune-ups shall be prepared for all equipment operating on site for more than 10 working days. A log shall be maintained and made available to GBUAPCD and CSLC as requested.	During construction	LADWP (Tune-up Log provided to GBUAPCD and CSLC as requested)	
Air-3	Installation of project facilities will result in emissions of air pollutants from construction vehicles and equipment.	Low-emission Equipment Utilization Low-emission equipment/mobile construction equipment shall be used for project construction to the maximum extent practical, feasible, and available.	During construction	LADWP	
Air-4	Installation of project facilities will result in emissions of air pollutants from construction vehicles and equipment.	Low-emission Mobile Vehicle Utilization during Construction Low-emission or alternative-fueled mobile vehicles shall be used during project construction to the maximum extent practical, feasible, and available. In addition, carpooling of construction workers shall be encouraged.	During construction	LADWP	
Air-5	Operation of project facilities will result in emissions of air pollutants from vehicles and equipment.	Low-emission Mobile Vehicle Utilization during Operation Hybrid, low-emission (CA LEV II; PZEV, SULEV, or ULEV) or alternative-fueled mobile vehicles, such as electric or fuel cells, shall be used for the proposed project site to the maximum extent practical, feasible, and available. In addition,	During operation	LADWP	

ATTACHMENT 3

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Bio-1	Installation of project facilities could result in disturbance of Western Snowy Plover.	carpooling of operations and maintenance workers shall be encouraged. Lakebed Worker Education Program To minimize potential direct impacts to western snowy plover from construction activities, LADWP shall continue the lakebed worker education program consistent with the previous approach and per CDFG recommendations. The program shall be based on western snowy plover identification, basic biology and natural history, alarm behavior of the snowy plover, and applicable mitigation procedures required of LADWP and construction personnel. The program shall be conducted by a biologist familiar with the biology of the western snowy plover at Owens Dry Lake and familiar with special status plant and wildlife species of the Owens Lake basin. The education program shall explain the need for the speed limit in the snowy plover buffer areas and the identification and meaning of buffer markers. All construction, operation, and maintenance personnel working within the project area shall complete the program prior to their working on the lakebed. A list of personnel who have completed the education program shall be maintained and made available to GBUAPCD upon request.	Prior to the start of construction and as new employees are retained	LADWP (List of trained employees provided to GBUAPCD as requested)		
Bio-2	Installation of project facilities could result in disturbance of Western Snowy Plover.	Preconstruction Surveys for Western Snowy Plover To minimize potential direct impacts to western snowy plover within the project area due to construction activities, LADWP shall conduct a preconstruction survey for western snowy plover in all potential snowy plover habitat prior to any construction activity that is performed during the snowy plover breeding season (March 15 to August 15). Preconstruction surveys shall be performed no more than 7 days prior to the start	No more than 7 days prior to the start of construction activity to be performed from March 15 to August 15	LADWP (GBUAPCD to be notified of active nest locations.)		

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		of ground-disturbing activities. A 200-foot buffer shall be placed around all active snowy plover nests that are discovered within the construction area. This buffer shall protect the plover nest from both destruction and construction noise. Green-colored stakes of less than 60 inches in height with yellow flagging shall be used to mark buffer edges, with stakes spaced at eight approximately equidistant locations. The location of the nest (global positioning system coordinates) and current status of the nest shall be reported within 24 hours of discovery to GBUAPCD. Maps of snowy plover nest locations shall be posted at the construction office and made available to all site personnel and GBUAPCD staff. The activity of the nest shall be monitored by a biological monitor, as per existing guidelines for the North Sand Sheet and Southern Zones dust control projects, and any revisions to the monitoring protocol that have been approved by CDFG. Active snowy plover nests shall be monitored at least weekly. The nest buffer shall remain in place until such time as the biological monitor determines that the nest is no longer active and that fledglings are no longer in danger from proposed construction activities in the area. Buffers shall be more densely marked where they intersect project-maintained roads. Vehicles shall be allowed to pass through nest buffers on maintained roads at speeds less than 15 miles per hour, but shall not be allowed to stop or park within active nest buffers. Permitted activity within the nest buffer shall be limited to foot crews working with hand tools and shall be limited to 15-minute intervals, at least one hour apart, within a nest buffer at any one time.						

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Bio-3	Vehicle travel related to project construction could result in disturbance of nesting Western Snowy Plover.	Snowy Plover Nest Speed Limit To minimize potential direct and cumulative impacts to western snowy plover and other sensitive biological resources from vehicles construction activities, LADWP shall implement a speed limit of 30 miles per hour within all active construction areas on Owens Dry Lake during construction of dust control measures. Speed limits shall be 15 miles per hour within active snowy plover nest buffers. Designated speed limits for other construction areas outside of active nest buffers shall be maintained at 30 miles per hour where it is determined to be safe according to vehicle capabilities, weather conditions, and road conditions. Site personnel and GBUAPCD staff shall be informed daily of locations where active nest buffers overlap with roads in the construction area. Signs shall be posted that clearly state required speed limits. Speed limit signs shall be posted at all entry points to the lake. The number of speed limit signs shall be kept at a minimum near active snowy plover nest areas to reduce potential perches for raptors and other snowy plover predators and shall be outfitted with Nixalite or the functional equivalent if greater than 72 inches (increased from the original 60 inches) in height at entry points to the lake and 60 inches in height by active snowy plover nest areas.	During construction	LADWP (GBUAPCD to be notified if active nest buffers overlap with roads in the construction area.)		
Bio-4	Lighting used during project construction, if any, could	Lighting Best Management Practices To minimize indirect impacts to nesting bird species associated with project lighting during construction activities, LADWP shall institute all	During construction	LADWP		

ATTACHMENT 3

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	result in disturbance of nesting birds.	best management practices to minimize lighting impacts on nocturnal wildlife consistent with previous requirements and CDFG recommendations. Best management practices include those listed below, and are included in the Project Description of the GBUAPCD 2008 State Implementation Plan Subsequent Environmental Impact Report. Previous construction has occurred during nighttime hours to complete construction schedules and to prevent personnel from working during times of high temperatures. If night work is deemed necessary, then construction crews shall make every effort to shield lighting on equipment downward and away from natural vegetation communities or playas, and especially away from known nesting areas for snowy plovers during the nesting season (March to August). All lighting on newly built facilities shall be minimized to the greatest extent possible, while still being in compliance with all applicable safety requirements. Required lighting shall be shielded so that light is directed downward and away from vegetation or playas areas.					
Cul-1	Installation of project facilities could result in disturbance of known cultural resources.	Protection of Known Archaeological Sites Recorded archaeological sites on the project sites will be protected from incidental damage during project construction by flagging the locations prior to the start of construction activity. Extended Phase I testing will be accomplished to delineate site boundaries. The sites, and a radius of 20 feet around the sites shall not be subject to minor land leveling, geotextile installation, gravel installation, construction vehicle traffic, or other disturbances. Specific demarcation of the area to be avoided will be determined in coordination with a qualified archaeologist.	Prior to the start of construction	LADWP (Native American representatives to be notified in advance of the archaeologist site visit)			

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		Alternatively, if avoidance of resources is impractical, an archaeological testing and evaluation program to characterize and evaluate sites for CRHR-significance will be conducted. If the resources are found to be unique under CEQA, and avoidance is not feasible, then the archaeologist will conduct data recovery excavations, photodocument the sites (or other documentation including oral histories), or define a compensatory mitigation program (which comprises a budget be established for a specific purpose, such as a NRHP nomination). Any Phase II testing or Phase III data recovery programs would be subject to the approval and issuance of a permit from the CSLC. In addition, coordination will be conducted for cultural resources under the jurisdiction of the BLM to ensure the work will comply with Section 106 of the NHPA.						
Cul-2	Installation of project facilities could result in disturbance of unknown cultural resources.	Protection of Unknown Archaeological Sites During earthwork necessary for berm creation at the Phase 8 area, a qualified archaeological monitor shall be present. Based on the NAHC contact list for the project, Native American representatives shall be notified of the archaeological monitor's schedule, and be invited to be present on a volunteer basis.	During construction of Phase 8 berms	LADWP (Native American representatives to be notified in advance of the archaeological monitor's schedule)				

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Cul-3	Installation of project facilities could result in disturbance of unknown cultural resources.	Protection of Unknown Archaeological Sites If previously unrecorded cultural resources are encountered during the project, all work shall cease within 100 feet of the discovery until the find can be evaluated by a qualified archaeologist. Work will not resume until the qualified archaeologist provides approval.	During construction	LADWP		
Cul-4	Installation of project facilities could result in disturbance of paleontological resources.	Protection of Paleontological Resources During earthwork necessary for berm creation at the Phase 8 area, a paleontological monitor shall be present. The monitor may be a qualified paleontological monitor or a cross-trained archaeologist, biologist, or geologist working under the supervision of a qualified principal paleontologist. If paleontological materials are discovered that are significant or potentially significant, then the following would apply: data recovery and analysis, preparation of a data recovery report or other reports, and accession of recovered fossil material at an accredited paleontological repository (e.g., the University of California's Museum of Paleontology).	During construction of Phase 8 berms	LADWP		
Cul-5	Excavation for installation of project facilities could result in the disturbance of previously unknown human remains.	Protection of Unknown Human Remains In the unexpected event that human remains are discovered, the Inyo County Coroner shall be contacted, the area of the find shall be protected, and provisions of State CEQA Guidelines Section 15064.5 shall be followed.	During construction	LADWP (Inyo County Coroner to be contacted if human remains discovered)		
Trans-1	Truck trips for gravel transportation across SR 136 could create	Traffic Work Safety Plan LADWP shall develop and implement a Traffic Work Safety Plan to be approved by Caltrans for the construction phase of the Phase 8 project. The Plan will address the use of warning lights.	Prior to gravel transport during construction	LADWP (Plan approval by Caltrans)		

ATTACHMENT 3

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	traffic hazards.	signs, traffic cones, signals, flag persons and/or comparable measures as needed to maintain safe travel of haul trucks across SR 136 during construction.				
Trans-2	Truck trips for gravel transportation across SR 136 could result in roadway damage.	Roadway Repair Plan LADWP shall repair damage to SR 136 in the areas near the mines where project-related truck traffic crosses SR 136. Prior to the start of construction activity, existing conditions at the crossings will be documented. After construction of Phase 8 is complete, physical damage documented at the SR 136 crossings will be repaired.	Roadway conditions to be documented prior to the start of construction; repairs, if necessary, to be implemented after construction is complete	LADWP (Repair plans to be approved by Caltrans)		

Initial Study Text Revisions/Errata

for

The Owens Dry Lake Phase 8 Dust Control Measures Project Mitigated Negative Declaration



**Los Angeles Department of Water
Environmental Affairs and Sustainability Program
111 North Hope Street, Room 1044
Los Angeles, CA 90012**

September 2010

**Owens Dry Lake Dust Mitigation Measures Project
Initial Study Text Revisions/Errata**

September 2010

The following minor text changes are made to the Initial Study and incorporated as part of the Initial Study/Mitigated Negative Declaration. None of these changes substantially modify the analysis or conclusions of the document, but instead simply clarify aspects of the previously circulated document. The changes would not result in new, avoidable significant effects requiring mitigation. Based on agency comments, revisions to Mitigation Measure Air-1 are added to clarify, but not replace, the measure. Overall, the impacts of the project would remain less than significant as mitigated. Therefore, consistent with CEQA §15073.5, recirculation of the Negative Declaration for the Owens Dry Lake Phase 8 Dust Control Measures project is not required.

Changes to the text are noted with **bold** (for added text) or strikeout type (for deleted text).

Section 1.2, Project Background and Objectives, Page 1-1, footnote 1:

¹ Emissive areas are areas on the Owens Lake playa that produce dust emissions. This determination can be based on a combination of calculated sand fluxes, visible dust plume observations, and visible surface erosion after dust storm events, **PM10 measurements and federally approved computer modeling** (GBUAPCD, 2008a).

Section 1.2.1, Project Background, Page 1-2, and footnote 2:

LADWP is currently implementing the Owens Lake Dust Mitigation Program (OLDMP) in order to eliminate exceedances of the state and federal particulate matter (PM10) air quality standard².

² Particulate matter (PM) consists of varying combinations of dry solid fragments, solid cores with liquid coatings and small droplets of liquid. These tiny particles vary greatly in shape, size and chemical composition, and can be made up of many different materials such as metals, soot, soil and dust. PM₁₀ are particles up to 10 microns in size. The Federal PM₁₀ standard is 150 ug/m³ as a 24-hour average. **The state PM₁₀ standard is 50 ug/m³ as a 24-hour average.**

Therefore, due to the delay in implementation of a small portion of Phase 7, LADWP submitted a variance petition to the GBUAPCD Hearing Board on August 21, 2009 requesting a 1-year time extension for completion of 3.5 square miles of the Moat and Row DCM. ~~Consistent with As a condition of~~ the variance, the proposed action is implementation of Gravel Cover Best Available Control Measure (BACM) on 2.03 square miles of area identified by GBUAPCD as emissive; the boundaries of the area were provided to LADWP by GBUAPCD in December 2009 (T. Schade pers. comm., 2009).

Shallow Flooding, Managed Vegetation, and Gravel Cover are approved **BACM DCMs** for Owens Dry Lake.

Section 1.3, Project Location and Environmental Setting, Page 1-7:

Other nearby communities include Swansea, Dolomite and Keeler to the east, and Cartago and Olancha to the south, **and Boulder Creek to the west.**

Section 1.4.13, Corridor 1 Improvement, Page 1-11:

To allow for haul trucks traveling in two directions to the stockpile area, the width of the most northerly 0.3 miles of Corridor 1 will be increased from 12 feet to 30 feet to the east (Figure 4). **The area of disturbance will be approximately 1.5 acres (0.3 miles X 40 ft (18 ft expansion plus vehicle travel area)).** The expansion of Corridor 1 will require the addition of approximately 6,000 tons of road base. It is anticipated that necessary materials will be obtained from the LADWP Shale Pit.

Section 1.4.1.4, Berms, Page 1-11:

Phase 8 Area A will be protected from periodic high flows from the Owens River from existing Corridor 1 which is raised and armored. However, the north and south boundaries of Area A will be bermed for wind protection to limit sand inundation of the gravel. For Phase 8 Area B, a berm will be constructed around the area for wind protection and to prevent inundation and gravel washout during high flows. The berms will be earthen, approximately 3 feet high, approximately 12 feet wide, **with a maximum slope of 2:1**, and armored with gravel.

Section 1.4.2, Project Construction, Page 1-13:

Gravel Conveyance. Gravel will be conveyed from the shale pit to the stockpile location by truck or conveyor system. ~~Without the conveyor, Trucks will travel from the shale pit across SR 136 to Sulfate Road to Main Line Road (aka Brady Highway) to the stockpile (Figure 4).~~ Return travel to the shale pit will be along the same path. The total distance of 12.6 miles would result in an approximate circuit time, including loading and dumping, of 95 minutes.

~~If a conveyor is installed from the mine across SR 136 to the LADWP Sulfate Facility, the truck travel distance is reduced to 11.4 miles and estimated circuit time would be 70 minutes (Figure 5). The conveyor system would consist of an approximately 4 foot wide belt moving at 5 to 9 feet per second and a 900 horsepower (hp) electric motor. The motor is used to start the conveyor; once loaded, the motor will become a generator and power will be returned to the power distribution system on the lake (overall, the conveyor system would be a net generator of power). A new transformer and several power poles will also be installed on LADWP property as part of its operation. At the crossing with SR 136, the conveyor would be installed on BLM property and within the California Department of Transportation (Caltrans) right-of-way in a culvert (approximately 10-foot~~

~~diameter) under the roadway. To install the culvert, approximately 500 feet would be disturbed on the north/eastern (mine) side of SR 136 and approximately 200 to 300 feet would be disturbed on the south/western (lake) side of the roadway. The conveyer will be elevated on footings (metal with concrete foundations) and fencing and shielding will be installed for safety protection (in compliance with applicable MSHA and OSHA regulations). When carrying a full gravel load, the conveyor will transport 250 tons over 4,000 feet of length (approximately 125 pounds per foot) and take 8 minutes to clear.~~

[Similarly, other references to the conveyor system located in other sections of the document are not relevant.]

Gravel Installation. The vehicle and equipment staging area will be located at the construction office near the intersection of Main Line Road and Corridor 1, less than 1 mile from the Phase 8 project site (Figure 4). This area has been previously disturbed and has 20 acres available for staging activities **including:** **office trailer(s), open equipment storage area, fuel facilities with containment, and conexes (approximately 20 - 40 ft long) for equipment maintenance and materials storage.** Phone and power service already exist at the site. [Note that existing revegetation areas north and east of the existing fenceline will not be disturbed.] No vehicle fuels or oils will be stored in the gravel stockpile area; fuel trucks will be used to refuel construction equipment and gravel haul trucks and the existing fueling station at the Sulfate Facility will be available. Additionally, a five 2,000-gallon temporary aboveground fuel tanks will be installed at the construction office just northeast of the site to serve the fuel trucks. Once the geotextile is staked, dozers and ground crews will spread gravel to the required 4-inch thickness. It is assumed that geotextile fabric and gravel installation will proceed at two different areas concurrently and that construction will be completed over 18 months.

Section 1.6, Project Approvals, Page 1-15:

- Consistent with the previous DCMs installed on Owens Dry Lake, a Section 404 Permit will be sought from the U.S. Army Corps of Engineers and a **Section 401 Water Quality Certification will be sought from the Regional Water Quality Control Board.**

Section 2.3.3, Air Quality, Page 2-11:

Air-1. Fugitive Dust Emissions Control and Minimization. In compliance with GBUAPCD Rule 401, LADWP shall take reasonable precautions to prevent visible particulate matter from being airborne, under normal wind conditions, beyond the property from which the emission originates. Best available control measures shall be implemented during construction and maintenance activities to minimize emission of fugitive dust from earthwork and travel on unpaved roads and other areas. Best available control measures may include, but would not be limited to, ~~the use of chemical soil stabilizers, surface coverings, windbreaks, water trucks, and water sprays twice a day, or comparable measures that prevent visible dust from occurring.~~ At a minimum, active operations shall utilize one or more of the applicable best available control measures to

minimize fugitive dust emissions from each fugitive dust source type that is part of the active operation. **The maximum area of soil disturbance at any one time will be 40 acres; where applicable, geotextile will be installed within 10 working days with constructible conditions (i.e., no rain events).** Monitoring reports will be prepared during construction activity and made available to GBUAPCD and CSLC as requested.

Section 2.3.4, Biological Resources, Table 4 Header, Page 2-15:

Table 4
Sensitive Animal Species and Habitat Types
with the Potential to Occur on or near the Project Site

Page 2-20:

Bio-4. Lighting Best Management Practices. To minimize indirect impacts to nesting bird species associated with project lighting during construction activities, LADWP shall institute all best management practices to minimize lighting impacts on nocturnal wildlife consistent with previous requirements and CDFG recommendations. Best management practices include those listed below, and are included in the Project Description of the GBUAPCD 2008 State Implementation Plan Subsequent Environmental Impact Report. Previous construction has occurred during nighttime hours to complete construction schedules and to prevent personnel from working during times of high temperatures. If night work is deemed necessary, then construction crews shall make every effort to shield lighting on equipment downward and away from natural vegetation communities or playa areas, and especially away from known nesting areas for snowy plovers during the nesting season (March to August). All lighting, ~~in particular any permanent lighting~~, on newly built facilities shall be minimized to the greatest extent possible, while still being in compliance with all applicable safety requirements. Required lighting shall be shielded so that light is directed downward and away from vegetation or playa areas.

Section 2.3.5, Cultural Resources, Pages 2-23 and 2-24:

CUL-2. During earthwork necessary for berm creation at the Phase 8 area ~~and for installation of the gravel conveyor system across SR 136~~, a qualified archaeological monitor shall be present. Based on the NAHC contact list for the project, Native American representatives shall be notified of the archaeological monitor's schedule, and be invited to be present on a volunteer basis.

CUL-4. During earthwork necessary for berm creation at the Phase 8 area ~~and for installation of the gravel conveyor system across SR 136~~, a paleontological monitor shall be present. The monitor may be a qualified paleontological monitor or a cross-trained archaeologist, biologist, or geologist working under the supervision of a qualified principal paleontologist. If paleontological materials are discovered that are significant or potentially significant, then the following would apply: data recovery

Attachment 4

and analysis, preparation of a data recovery report or other reports, and accession of recovered fossil material at an accredited paleontological repository (e.g., the University of California's Museum of Paleontology).

Section 2.3.6 a)iii, Geology and Soils, Page 2-27:

The project will potentially expose structures (temporary fuel storage tanks) and one or more construction trailers to seismic-related ground failure. The construction trailer(s) will be a temporary, one-story structures (either one approximately 33 X 60 ft trailer or several single-wide approximately 11 ft by 60 ft trailers). As required by existing regulations, the fuel storage tank will be designed with necessary secondary containment and/or other spill prevention controls and countermeasures. ~~The project does not expose people or structures to potential substantial adverse effects involving strong seismic related ground failure.~~ Ground failure by liquefaction requires saturated soils, which would rarely occur on the Phase 8 project area. ~~Since habitable structures will not be built as part of the proposed project, people will not be exposed to adverse effects involving seismic related ground failure.~~ Since the proposed office trailer(s) will be one-story temporary structures, containment will be included with fuel storage tanks, and damage to ~~other~~ project facilities such as the gravel layer or underlying geotextile could be easily repaired, and impacts will therefore be less than significant.

Section 2.3.10, Land Use and Planning, Page 2-40:

For these reasons, and since a gravel layer for dust control was previously implemented **in the same general area of the lake bed as the proposed Phase 8 project** (Corridor 1 project), the Phase 8 project would be consistent with the Public Trust Doctrine and impacts on land use would be less than significant.