

Great Basi Air Pollution Co

2008 Owens Valley PM₁₀ Planning Area Demonstration of Attainment State Implementation Plan

Findings of Fact and Statement of Overriding Considerations

State Clearinghouse Number 2007021127

Prepared for:

Great Basin Unified Air Pollution Control District 157 Short Street Bishop, CA 93514

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I.A CERTIFICATION

FINDINGS OF FACT AND STATEMENT OF OVERRIDING CONSIDERATIONS REGARDING THE FINAL ENVIRONMENTAL IMPACT REPORT FOR THE 2008 OWENS VALLEY PM₁₀ PLANNING AREA DEMONSTRATION OF ATTAINMENT STATE IMPLEMENTATION PLAN (State Clearinghouse Number 2007021127)

The Great Basin Unified Air Pollution District (District) hereby certifies the Final Environmental Impact Report (EIR) for the 2008 Owens Valley PM₁₀ Planning Area Demonstration of Attainment State Implementation Plan (project), in Inyo County, State Clearinghouse Number 2007021127. The EIR consists of Volume I: Draft EIR, dated September 16, 2007; Volume II: Technical Appendices to the Draft EIR, dated September 16, 2007; and Volume III: Clarifications and Revisions to the Draft EIR, Comment Letters on the Draft EIR, and Response to Comments dated January 11, 2008. The EIR has been completed in compliance with the California Environmental Quality Act (CEQA), the State CEQA Guidelines, and all applicable federal, state, and local statutes and regulations that govern the management of environmental resources. The District has received, reviewed, and considered the information contained in the Final EIR, all hearings, and submissions of testimony from officials representing the City of Los Angeles Department of Water and Power (City), U.S. Army Corps of Engineers (USACOE), U.S. Bureau of Land Management (BLM), California State Lands Commission (CSLC), California Department of Fish and Game (CDFG), California Department of Transportation (Caltrans), and California Regional Water Quality Control Board (RWQCB), as well as from other interested agencies, organizations, tribal entities, and private individuals.

Having received, reviewed, and considered the foregoing information; recommendations of District staff; and any and all other information in the record and Section I herein, the District hereby makes findings pursuant to and in accordance with Section 21081 of the Public Resources Code as presented in Sections II through X of these Findings of Fact and Statement of Overriding Considerations.

I.B BACKGROUND

I.B.1 Existing Conditions

The Owens River flows south through the Owens Valley and terminates in the Owens Lake brine pool. There are three communities in the vicinity of the project (the community of Lone Pine to the north, the community of Keeler to the east, and the community of Olancha/Cartago to the southwest) and one designated Indian reservation (Lone Pine Indian Reservation to the north). Other land uses include mining, recreation (hiking, bird watching, hunting, and golfing) and cattle grazing. Historic mining and transportation sites are located along the former Owens Lake shoreline. The Owens Valley has a rich variety of plants, riparian habitat, alkaline meadow, and seep habitat, serving resident and migratory wildlife species. Several archaeological and historical sites are known in the area. The eastern shore of Owens Lake was used by Native American groups. The Los Angeles Aqueduct also traverses the Owens Valley from north to south. Water diverted from the Owens River through the aqueduct has resulted in a dry alkaline Owens Lake bed and the remnant Owens Lake brine pool. Winds in the Owens Valley raise clouds of fine

particulate dust from the lake bed causing exceedances of the National Ambient Air Quality Standards (NAAQS) for particulate matter (PM₁₀). Pursuant to an order from the District, the City has installed dust control measures (DCMs) consisting of Shallow Flooding areas, managed vegetation plots, and gravel on 29.8 square miles (19,072 acres) of the emissive dry lake bed pursuant to an existing 1998 State Implementation Plan (SIP) and 2003 SIP revision mandated and approved by the U.S. Environmental Protection Agency (EPA).^{1,2} These existing DCMs and proposed DCMs will result in a reduction in PM₁₀ emissions of approximately 73,174 tons per year. Annual uncontrolled lake bed emissions for 2007 are estimated to be 34,000 tons.

I.B.2 Project Objectives

The ultimate goal of the project, as stated in the EIR, is to reduce dust emissions from the dry Owens Lake bed to attain the NAAQS for PM₁₀ by April 1, 2010, pursuant to the revised 2008 SIP and consistent with the State of California's obligation of land and resource stewardship. The following objectives have been identified by the District in support of the project goal. These objectives are listed in order of their importance, beginning with the most important objective:

- Implement all Owens Lake bed PM₁₀ control measures by April 1, 2010, pursuant to the revised 2008 SIP to achieve the NAAQS
- Revise the approved 2003 SIP by July 1, 2008
- Minimize (or compensate for) long-term, significant, adverse changes to sensitive resources within the natural and human environment
- Provide a high technical likelihood of success without substantial delay
- Conform substantially to adopted plans and policies and existing legal requirements
- Minimize the long-term consumption of natural resources
- Minimize the cost per ton of particulate pollution controlled
- Be consistent with the State of California's obligation to preserve and enhance the public trust values associated with Owens Lake

I.C PROJECT IMPROVEMENTS

The project consists of revisions to the 1998 and 2003 SIP dust control program analyzed in the 1997 and 2003 Program EIR and the 1998 Addendum, including changes in the location and size of the emissive dust control areas (DCAs).^{3,4,5} Program-level environmental analysis is provided for these changes to develop and operate up to 15.1 square miles of new DCMs identified in the

¹ Great Basin Unified Air Pollution Control District. 1998. Owens Valley PM₁₀ Planning Area Demonstration of Attainment State Implementation Plan Addendum No.1 to the Final Environmental Impact Report. State Clearinghouse Number No. 96122077. Bishop, CA.

² Great Basin Unified Air Pollution Control District. February 2004. 2003 Owens Valley PM₁₀ Planning Area Demonstration of Attainment State Implementation Plan Integrated Environmental Impact Report. State Clearinghouse House Number 2002111020. Prepared by: Sapphos Environmental, Inc., Pasadena, CA.

³ Great Basin Unified Air Pollution Control District. 1998. Owens Valley PM₁₀ Planning Area Demonstration of Attainment State Implementation Plan Addendum No.1 to the Final Environmental Impact Report. State Clearinghouse Number No. 96122077. Bishop, CA.

⁴ Great Basin Unified Air Pollution Control District. February 2004. 2003 Owens Valley PM₁₀ Planning Area Demonstration of Attainment State Implementation Plan Integrated Environmental Impact Report. State Clearinghouse House Number 2002111020. Prepared by: Sapphos Environmental, Inc., Pasadena, CA.

⁵ Great Basin Unified Air Pollution Control District. 1998. Owens Valley PM₁₀ Planning Area Demonstration of Attainment State Implementation Plan Addendum No.1 to the Final Environmental Impact Report. State Clearinghouse Number No. 96122077. Bishop, CA.

revised SIP. In addition, operational environmental monitoring programs proposed through mitigation measures in this EIR would be used in the operation of previously developed DCMs to provide project consistency and efficiency.

L.C.1 Dust Control Measures

DCMs are defined as those measures of PM₁₀ abatement that could be placed onto portions of the playa, and when in place, are effective in reducing the PM₁₀ emissions from the surface of the playa. Since 1989, the District has pursued a comprehensive research and testing program to develop PM₁₀ control measures that are effective in the unique Owens Lake playa environment. The District, in cooperation with the City, has developed three PM₁₀ best available control measures (BACM) that it has found to be feasible and effective: Shallow Flooding, Managed Vegetation, and Gravel Cover. In addition, the project includes a new alternative non-BACM DCM known as Moat & Row, which may be mixed with the proposed DCMs. The project includes the use of Shallow Flooding and Moat & Row DCMs.

I.C.1.1 Shallow Flooding

This DCM consists of releasing water along the upper edge of the Owens Lake bed and allowing it to spread and flow down-gradient toward the center of the lake. Shallow Flood dust control areas must be sufficiently wetted to control PM₁₀ emissions between October 1 and June 30 of each year. The evaluation of this alternative is based on the assumption that an estimated approximately 3.0 acre-feet of water would be required annually to control PM₁₀ emissions from an acre of lake bed. Except for limited habitat maintenance flows, water will be turned off between July 1 and September 30 to allow for facility maintenance activities. This is typically a period when dust storms do not occur.

I.C.1.2 Moat & Row

The general form of the Moat & Row DCM is an array of earthen berms (rows) about 5 feet high with sloping sides, flanked on either side by ditches (moats) about 4 feet deep. As analyzed, the Moat & Row would include placement of up to a 5-foot-high sand fence on the top of the row. Moats serve to capture moving soil particles, and rows physically shelter the downwind lake bed from the wind. The performance standard for the Moat & Row DCM consists of achieving PM₁₀ control efficiency through the construction of moats and rows, aligned generally perpendicular to the predominant wind direction such that the majority of the saltating particles are retained within the height of the uppermost feature of the row. The City proposes to achieve the performance standard through the construction of individual Moat & Row elements that would generally be aligned parallel to one another, and spaced at variable intervals, to minimize the fetch between rows along the predominant wind directions. The predominant winds are from the north and the south, with the north-blowing wind being the strongest but less frequent. It is anticipated that the Moat & Row berms would primarily be oriented perpendicular to the primary wind vector, and may be serpentine where necessary to control emissions under the full range of principal wind directions.

Initial pre-test modeling indicates that Moat & Row spacing will generally vary from 250 to 1,000 feet, depending on the surface soil type and the PM₁₀ control effectiveness required on the Moat & Row area. For the purpose of the analyses in this EIR, it was assumed that the Moat & Row elements would be spaced a minimum of 250 feet apart and would not be separated by more than 1,000 feet, thus allowing up to 21 Moat & Row elements per mile treated with this DCM (5,280

feet per mile divided by 250 feet between Moat & Row elements). Thus, for the purpose of this environmental analysis, it was assumed that the Moat & Row DCM would affect up to 33 percent of the ground surface in each Moat & Row area where it would be applied (85 feet per Moat & Row element times 21 elements per mile divided by 5,280 feet per mile). For purposes of the analysis in this EIR, both the moats and rows were assumed to have sloped sides and not pose a barrier to wildlife movements. If moats or rows are recommended to be formed with vertical sides, additional environmental analysis would be required.

It is anticipated that the PM₁₀ control effectiveness of Moat & Row could be enhanced by combining it with various approved DCMs and currently utilized measures, including Augmentation, Shallow Flooding, Application of Brine, Armoring, and Managed Vegetation. These enhancements would ensure that if significant dust sources (hot spots) develop within these areas, they will be addressed. Any single method or combination of the enhancements could be implemented for both primary and secondary wind vector mitigation, where demonstrated to be in substantial conformance with the performance standards for the Moat & Row DCM and within or below the impact analysis parameters. The primary Moat & Row DCMs include earthen Moat & Row and a sand fence. Enhancements to these methods include Managed Vegetation, Shallow Flooding facilities, and enhancement of existing vegetation and natural topographic and surface drainage features at Owens Lake. Moat & Row earthwork and sand fences may also be enhanced through a number of additional methods. These measures include placing sand fences on the open playa between Moat & Row elements (as long as the total number of sand fence elements did not exceed a density of 21 per mile and no more than 33 percent of the surface area is disturbed), adding bands of Managed Vegetation, adding water from surrounding Shallow Flooding DCAs, and enhancing or protecting existing vegetation and natural topographic and surface drainage features at Owens Lake. If utilized, these enhancements would be added during the primary construction phase or during a later phase.

I.C.1.3 Study Areas

Included in the total 15.1 square miles of the total project area are 1.9 square miles of study areas. These are areas where the exact location and magnitude of dust emissions is uncertain. In order to provide as extensive an impact analysis as possible, these areas would be treated as other areas requiring dust control. The District would continue to collect data in these four areas to determine their emissivity through the course of the project.

I.C.1.4 Channel Areas

In addition to the above-listed DCMs, this EIR addresses potential impacts to 0.5 square mile of channel areas. These areas contain natural drainage channels that have been observed to be emissive and require some level of dust control. These areas may have potentially significant resource issues and regulatory constraints that could affect the type and location of DCMs within these areas.

I.C.2 Other Project Elements

I.C.2.1 Water Supply Conservation

An additional element of the project is the refinement of the amount of water used to control dust in Shallow Flood DCM areas. The District's Shallow Flood research conducted in the 1990s indicated that 99-percent control was achieved when 75 percent of an area consisted of standing

water or surface-saturated soil. This is considered a conservative requirement; the actual amount of water required to provide 99-percent control may be less than 75 percent. The City will conduct limited field testing on no more than 1.5 square miles of existing Shallow Flood areas to refine the amount of water required to achieve 99-percent control. Based on data collected from January 2000 through June 2006, the level of control required to reduce lake bed emissions to below the federal standard has been identified for areas of the lake bed known as the minimum dust control efficiency (MDCE). The MDCEs for the new DCAs vary from 99 percent to 0 percent. Although some of the new Shallow Flood DCM areas will be constructed and operated to provide less than 99-percent dust control efficiency, existing Shallow Flood DCMs will require 99-percent control efficiency and thus 75 percent of wetted area.

I.C.2.2 Water Supply and Conveyance

Expanded water conveyance pipeline systems would be tied into existing mainlines on the proposed project site. The mainline capacity shall be increased by tying the existing brine line into the mainline and using the brine line in parallel with the mainline for transmission of water. In addition, paralleling of the mainline in selected reaches is being considered. Those mainline improvements would be in existing disturbed operational areas or in the areas already analyzed in this EIR. The estimated water demand for the proposed project ranges between 0 and 4 acre-feet per year depending on the control measures selected and climatic and operational conditions. The source of water for the project analyzed in this EIR is from the Los Angeles Aqueduct. The City may seek to utilize other sources of water for dust control in the future, such as groundwater from Inyo County. However, utilization of water for dust control from sources other than the Los Angeles Aqueduct would require separate environmental review and is not covered in this analysis.

I.C.2.3 Access Roads

Unpaved and gravel-paved, permanent all-year access roads would be constructed and used for construction, operation, and maintenance of the DCAs. New secondary access roads would connect to existing primary access roads. Secondary access roads would be about 10 feet wide, with centerline elevation 2 feet above existing grade and shoulder slopes of 3:1. The elevation of the access roads may increase to about 4 feet above existing grade on portions of the lake bed. Access is currently provided from U.S. Highway 395 via the existing north and south mainline pipeline access roads, from State Route 136 via the existing Sulfate Road, and from State Route 190 via the existing Dirty Socks access road. Two new secondary access roads would be constructed directly off U.S. Highway 395 for the northwestern areas of the DCAs, with the travel-way being built on existing dirt roads rather than completely new construction routes for access. It is not anticipated that pipelines and buried power lines would be constructed along these access roads as part of the initial construction. If required, pipelines and buried power lines would be placed and constructed under, along, or close to these access roads. All lake bed roads are to be maintained in a substantially nonemissive condition through the use of water, brine, and/or gravel. Improvements to access roads may be nonpermanent and performed when necessary, as required. These may include, but are not limited to, mats, grading, fill, compaction, and base-course at any "soft spots" encountered. Improvements to existing access road to DCA No T37-1 shall not be made, as it falls under the BLM's jurisdiction.

I.C.2.4 Power Supply

Up to 2,000 kilovolts of electrical power may be required to operate project facilities, including the Shallow Flooding facilities. This power will be supplied from existing power facilities to the site

provided by the City. Underground power lines will be buried 18 to 30 inches below ground surface and will be located generally in the vicinity of access roads and pipelines. Up to several thousand feet of underground power line may be installed.

Existing overhead power lines run along the north end and down the east side of Owens Lake, generally paralleling the historic shoreline on the north and State Route 136 on the east. Power drops from nearby overhead lines are connected to the underground power lines that carry power to the lake bed DCM facilities.

In addition, small portable generators mounted on construction vehicles will provide some temporary construction and emergency power.

I.C.2.5 Water Distribution Facilities

Shallow Flooding areas will be subdivided into smaller irrigation blocks to improve water use efficiency. It is anticipated that approximately half of the units will be operated simultaneously, with water being supplied nearly continuously during peak demand periods.

Water distribution facilities within the irrigation blocks may include irrigation, submain pipelines, lateral pipelines, irrigation risers, drip and spray irrigation systems, tile drains, drain pump stations, ponds, whiplines, tailwater pumping stations, and sideslope and downslope berms. The number and size of the individual irrigation blocks may vary based on the final design and layout. However, the anticipated facilities would be similar to existing facilities.

I.C.2.6 Staging Areas

Three staging areas have been established to provide contractor(s) currently working on ongoing implementation of approved DCMs with storage and placement of heavy equipment and construction materials and supplies. One contractor staging area is located south of Sulfate Road and west of State Route 136 near their junction, just above the eastern historic shoreline of Owens Lake. A secondary contractor staging area is located above the southeast shoreline of the lake bed near Dirty Socks Spring. A third staging area is located at T-37. It is anticipated that these areas would also suffice as staging areas for construction activities associated with the project.

I.C.2.7 Effectiveness Monitoring Program

A dust emissions monitoring program, known as the Dust ID Program, has been established by the District. The program consists of air monitoring devices, a grid of sand motion monitoring devices deployed on the lake bed, remote cameras, visual observations, and global positioning system mapping to measure and map dust emissions from the lake bed. The District and the City, with assistance of third-party technical experts, would work cooperatively to improve the Dust ID Program by 2010. The Dust ID Program will continue to operate during and after DCM installation. The City may also install and operate additional air monitoring devices within the project area.

I.D EIR PROCESS

The District prepared an EIR for the project in accordance with CEQA.

The District has taken steps to encourage the public to participate in preparation of the environmental analysis for the project. On February 27, 2007, the District circulated a Notice of

Preparation (NOP) for a Draft EIR for the project to the State Clearinghouse and to various federal, state, regional, and local government agencies. Sapphos Environmental, Inc. also posted notices on and off site and placed newspaper advertisements regarding the scoping period. Notices were also mailed out to landowners within 0.25 mile of the project areas.

The District attracted approximately six members of the public when they hosted a community workshop and scoping meeting on March 21, 2007, to solicit input from the public on the elements of the project. The public review period for the NOP closed on March 27, 2007. The District received 14 letters of comment on the NOP. The District did not receive any late letters of comment on the NOP. The Final EIR considered the environmental issues identified in the NOP, responses to letters of comments received on the Draft EIR, and clarifications and revisions resulting from public review of the Draft EIR. This consideration included a reassessment of the potential for significant impacts to aesthetics, agricultural resources, geology and soils, noise, population and housing, public services, and recreation. As a result of this analysis, it was reconfirmed that significance thresholds for these issue areas would not be exceeded. A clarification of the analysis of each of these issue areas undertaken in the Initial Study and addressing public comments concerning the scope of this EIR for each of these issue areas is included in Section 3.0 of the EIR.

The EIR was prepared to inform public agency decision makers and the general public about the project and its significant environmental effects, to suggest possible ways of minimizing those significant effects, and to describe a reasonable range of alternatives that could feasibly attain most of the basic objectives of the project but would avoid or substantially lessen any of the significant effects of the project. The Draft EIR was completed and forwarded to the State Office of Planning and Research (OPR) on September 16, 2007, for a 45-day review period that ended on October 30, 2007. The Notice of Completion (NOC) was posted at OPR on the same day September 16, 2007. A public Notice of Availability (NOA) of the Draft EIR appeared in the *Ridgecrest Daily Independent, Mammoth Times, Inyo Register*, and the *Tahoe Daily Tribune*. A public Notice of Availability (NOA) of the Draft EIR was mailed directly to more than 20 local interested parties, was posted at both on- and off-site locations, and was posted on the District's Web site.

A copy of the Draft EIR was mailed to more than 60 agency representatives, including more than 30 federal, state, regional, and local agencies, and copies of the Draft EIR were available throughout the public review period at the following libraries: Big Pine Library, Bishop Library, Death Valley Library, Independence Library, Lone Pine Library, Tecopa Library, and Ridgecrest Library. In addition, copies of the Draft EIR were available throughout the public review period at the Great Basin Unified Air Pollution Control District and Sapphos Environmental, Inc.

The Final EIR was prepared based on the Draft EIR, comments provided in response to circulation of the Draft EIR for public review, and clarifications and revisions resulting from public review of the Draft EIR. A community workshop was held on October 17, 2007, to solicit comments on the Draft EIR, including recommended mitigation measures. A total of 14 timely letters of comment were received on the Draft EIR from resource agencies and organized groups.

I.D.1 Federal Agencies

The NOA was sent to the USFWS, U.S. Forest Service, USACOE, U.S. EPA Regional 9, National Park Service, BLM, and China Lakes Naval Air Weapons Station (NAWS). The Draft EIR was sent to the USFWS, U.S. Forest Service, USACOE, BLM, and China Lakes NAWS. No comment letters were received from any of the federal agencies.

I.D.2 State Agencies

A total of seven state agencies received copies of the NOA and the Draft EIR: OPR; California Air Resources Board; California Native American Heritage Commission; California State Office of Historic Preservation; California Department of Fish and Game; California State Lands Commission; and the California Department of Transportation. Four comment letters were received from the California Department of Fish and Game, California Department of Transportation, Native American Heritage Commission, and California State Lands Commission.

I.D.3 Regional Agencies

Three regional agencies received copies of the NOA and Draft EIR: Lahontan Regional Water Quality Control Board (RWQCB), Indian Wells Water District, and Mojave Desert Air Quality Management District. One comment letter was received from the Lahontan RWQCB.

I.D.4 Native American Tribes

The Native American tribes listed below received copies of the NOA and/or the Draft EIR. A timely letter of comment was received from the Lone Pine Paiute-Shoshone Reservation.

- Benton Paiute Tribe
- Big Pine Tribe
- Big Pine Paiute Tribe of the Owens Valley
- Big Pine Tribal Historic Preservation Office
- Bishop Paiute Tribe of the Owens Valley
- Bridgeport Indian Colony
- Fort Independence Community of Paiute
- Fort Independence Indian Reservation
- Lone Pine Paiute-Shoshone Reservation
- Timbisha-Shoshone Tribe of Death Valley

I.D.5 County Agencies

The 10 county agencies listed below received copies of the NOA and/or the Draft EIR. Six Inyo County libraries received copies of the Draft EIR, while the Kern County library received a Draft EIR on CD. One county newspaper received an NOA. No letters of comment were received from the agencies, libraries, or newspaper.

- Alpine County Counsel
- Fresno County Planning and Resource Management
- Inyo County Environmental Health
- Inyo County Mosquito Abatement
- Inyo County Planning Department
- Inyo County Water Department
- Kern County Air Pollution Control District
- Kern County Planning Department
- Mono County Development Department
- Tulare County Resource Management Agency

Libraries where the Draft EIR are kept:

- Inyo County Library–Big Pine
- Inyo County Library–Bishop
- Inyo County Library–Death Valley
- Inyo County Library–Independence
- Inyo County Library–Lone Pine
- Inyo County Library–Tecopa
- Kern County Library–Ridgecrest

The county newspaper, the *Inyo Register*, also received a notice.

I.D.6 City Agencies

Four city or community service agencies received copies of the NOA and/or Draft EIR: the City of Los Angeles Department of Water and Power, the City of Bishop Planning Department, the Keeler Community Service District, and the Town of Mammoth Lakes. A timely letter of comment was received from the City of Los Angeles Department of Water and Power.

I.D.7 Private Organizations

The 37 private organizations listed below received copies of the NOA and/or the Draft EIR. Two letters of comment were received from the Owens Lake Operations of Rio Tinto Minerals and the Range of Light Chapter of the Sierra Club.

- Agrarian Research and Management, Ltd.
- Air Sciences
- Barnard Construction Company, Inc.
- Big Pine Distributors
- California Indian Legal Services
- California Native Plant Society, Bristlecone Pine Chapter
- Carole Keegan Co.
- Coso Operating Company, LLC
- DM Miller Ranch
- Eastern Sierra Audubon Society
- Fanelli Stores, Inc.
- Friends of the Inyo
- Hydro Bio, Inc.
- KIBS/KBOV Radio
- KMMT Radio and KRHV Radio
- KSRW Radio and Television
- Linscott, Law & Greenspan Engineers
- Los Angeles Times
- Mammoth Times
- Mammoth-Pacific, LP
- Maturango Museum
- Mono Lake Committee
- Morrison and Foerster, LLP

- Neubauer-Jennison, Inc.
- Northern Inyo Hospital
- Owens Valley Committee
- Rantec Corporation
- Rio Tinto Minerals, Owens Lake Operations
- Sierra Club, Range of Light Chapter
- Sierra Nevada Aquatic Research Laboratory
- Tahoe Daily Tribune
- Team Engineering and Management, Inc.
- The Daily Independent
- The News Review
- The Sheet
- VSA n Associates
- Wilson Geosciences

I.D.8 Individuals

The distribution list for the NOA and/or the Draft EIR for public review included 20 individuals referenced in Section 11, Distribution List, of the Draft EIR. Timely letters of comment on the Draft EIR were received from six parties: the Owens Lake Operations of Rio-Tinto Minerals, Dan and Carol Dickman (private party), Mike Prather (private party), Peter Pumphrey (private party), Julie Robinson (private party), and Samuel Wasson (private party).

Upon completion of the evaluation, this Final EIR was prepared and provided to the District Board for certification of compliance with CEQA and for review and consideration as part of the decision-making process for the project.

I.E GENERAL FINDINGS

The District has evaluated all environmental issues recommended by CEQA and the State CEQA Guidelines during the environmental evaluation of the project.

The Initial Study for the 2008 Owens Valley PM₁₀ Planning Area Demonstration of Attainment State Implementation Plan (Initial Study) determined that the project was not likely to result in significant impacts to seven environmental issues: Aesthetics, Agricultural Resources, Geology and Soils, Noise, Population and Housing, Public Services, and Recreation. The Initial Study determined that the project may cause a significant impact to nine environmental issues: Air Quality, Biological Resources, Cultural Resources, Hazards and Hazardous Materials, Hydrology and Water Quality, Land Use and Planning, Mineral Resources, Transportation and Traffic, and Utilities and Service Systems. These issue areas were carried forward for analysis in the EIR.

The EIR determined that the project is expected to result in significant impacts to nine environmental issues that can be mitigated to below the threshold of significance with the incorporation of mitigation measures: Air Quality, Biological Resources, Cultural Resources, Hazards and Hazardous Materials, Hydrology and Water Quality, Land Use and Planning, Mineral Resources, Transportation and Traffic, and Utilities and Service Systems. Measures Air-1, Biology-1 through -14, Cultural-1 through -4, Hazards-1 through -4, Hydrology-1 through -5, Land Use and Planning-1 and -2, Minerals-1, and Transportation-1 through -3 would reduce the significant impacts in all issue areas to below the threshold of significance.

The EIR determined that development of the project would result in significant impacts to one environmental issue that cannot be reduced to below the threshold for significance with the incorporation of mitigation measures related to greenhouse gas emissions: Air Quality. Implementation of mitigation measure Air-1 would reduce potential impacts on air quality in relation to fugitive dust from the construction of the project to below the level of significance. Construction, operation, and maintenance of DCMs at Owens Lake introduces the use of mechanized vehicles and the storage and application of chemicals on the lake bed that would exceed the levels that occurred in 1990 when operations on the lake bed were limited to mineral extraction, incidental recreation, and air quality studies. Application of mitigation measures Air-2 through Air-6 would reduce greenhouse gas emissions to the maximum extent practicable but are not capable of reducing impacts to 1990 levels; thus, the project would result in a significant unavoidable adverse impact to the achievement of greenhouse gas emission controls commensurate with the goals articulated in Assembly Bill 32.

The District evaluated four alternatives to the project:

- No Project
- Alternative 1: All Shallow Flooding Alternative
- Alternative 2: All Managed Vegetation Alternative
- Alternative 3: All Gravel Cover Alternative

As required by CEQA, the No Project Alternative was analyzed. The All Shallow Flooding Alternative was determined to be the environmentally superior alternative.

In accordance with Section 21081.6(a)(1) of CEQA, the District has prepared a mitigation monitoring program for those measures required to mitigate or avoid significant effects on the environment.

In accordance with Section 21081.6(a)(2) of CEQA, the District has specified the location and custodian of the documents and other materials that constitute the record of decision used in the decision-making process for the project.

In accordance with Section 21082.1(c)(1), the District has independently reviewed and analyzed the information contained in the reports and environmental documents required by CEQA, has circulated draft documents that reflect its independent judgment, and finds that the Final EIR reflects the independent judgment of the District.

The District has prepared a Statement of Overriding Considerations for the unmitigated impacts to one environmental issue that cannot be reduced to below the threshold for significance: Air Quality.

This report constitutes the required findings and statement pursuant to Sections 15091 and 15093 of the State CEQA Guidelines.

SECTION II POTENTIAL ENVIRONMENTAL EFFECTS THAT ARE NOT SIGNIFICANT

The analysis undertaken in support of the Initial Study for the 2008 Owens Valley PM₁₀ Planning Area Demonstration of Attainment State Implementation Plan (project) determined that there are seven environmental issue areas related to the California Environmental Quality Act (CEQA) that are not expected to have significant impacts resulting from implementation of the project based on the Initial Study completed on February 2, 2007: Aesthetics, Agricultural Resources, Geology and Soils, Noise, Population and Housing, Public Services, and Recreation. Therefore, these issue areas were not carried forward for detailed analysis in support of the Environmental Impact Report (EIR) for the project.

II.A AESTHETICS

Significant Impact:

None

Findings:

The project is not expected to result in significant impacts to aesthetics. Therefore, no mitigation is required.

Facts:

The above findings are based on the analysis included in Section 2.0, Environmental Checklist, and Section 3.0, Environmental Analysis, of the Initial Study. There would be no negative effect on existing scenic vistas. The project is not located near a state-designated scenic highway and will not result in significant impacts to the visual character of the surrounding area. Additions of water and vegetation to the dry lake bed surface would be expected to have beneficial impacts to aesthetics by contributing to expanded wildlife habitat that provides nesting and feeding sites for migratory birds and an increase in visual clarity throughout the basin by reducing the density of airborne particulate matter. All pipelines and electric power lines would be placed in trenches not visible from off-site areas. The proposed project would not include the construction of new permanent sources of light and glare. In addition, in an effort to avoid impacts to the pubic trust visual quality values at Owens Lake bed, all fence components for Moat & Row dust control measures (DCMs) shall be colored in neutral earth tones to blend in with the visual character of the surrounding area.

II.B AGRICULTURAL RESOURCES

Significant Impact:

None

Findings:

The project is not expected to result in significant impacts to agricultural resources. Therefore, no mitigation is required.

Facts:

The above findings are based on the analysis included in Section 2.0, Environmental Checklist, and Section 3.0, Environmental Analysis, of the Initial Study. There are no Prime Farmlands, Unique Farmlands, or Farmlands of Statewide Importance present within or nearby the project site. No farmlands will be converted to nonagricultural use, and the project will not conflict with zoning for agriculture or any Williamson Act contracts.

II.C GEOLOGY AND SOILS

Significant Impact:

None

Findings:

The project is not expected to result in significant impacts to geology and soils. Therefore, no mitigation is required.

Facts:

The above findings are based on the analysis included in Section 2.0. Environmental Checklist, and Section 3.0, Environmental Analysis, of the Initial Study. Implementation of the project will not result in significant impacts related to geology and soils. Although the project site does have numerous faults on the lake bed trending roughly northwestsoutheast, there are no large and/or habitable structures proposed, and employees would only be on site temporarily during construction, operations, and maintenance activities. The project site would be subject to strong ground shaking in the event of a major regional earthquake. However, the proposed project includes compliance with standard seismic design measures and worker safety practices that would be expected to reduce the risks associated with surface fault rupture to the maximum extent practicable, and to below the threshold of significance. The project is expected to result in less than significant impacts from exposing people or structures to potential substantial adverse effects involving seismic-related ground failure, including liquefaction and landslides. The site topography is nearly level with no major slopes; the possibility of a seismically induced landslide is remote. There will be no expected impacts to geology and soils related to location on a geologic unit or soil that is unstable or that will become unstable, or due to expansive soils, as a result of the project. The overall reduction in soil erosion and loss of topsoil, particularly as PM₁₀ emissions, that would occur with implementation of the project would be much greater than the amount of soil lost during the construction period.

II.D NOISE

Significant Impact:

None

Findings:

The project is not expected to result in significant impacts to noise. Therefore, no mitigation is required.

Facts:

The above findings are based on the analysis included in Section 2.0, Environmental Checklist, and Section 3.0, Environmental Analysis, of the Initial Study. The project will not result in noise levels in excess of standards established in local general plans, noise ordinances, or applicable standards of other agencies. There will be some noise generated during construction and, depending on the method chosen for dust control, by the water pumps. Taking into consideration the losses associated with distance from the noise generation sources to the noise-sensitive receptors, the predicted noise levels would be below the criteria outlined in the Noise element of the Inyo County General Plan. The project will not expose persons to or generate excessive groundborne vibration or noise levels. Although there will be temporary and/or periodic noise sources, including construction and maintenance activities, the increase in the temporary and/or periodic noise levels would be less than 3 dBA and well below the substantial impact criteria. The project site is not located within 2 miles of a public airport or public use airport or within the vicinity of a private airstrip.

II.E POPULATION AND HOUSING

Significant Impact:

None

Findings:

The project is not expected to result in significant impacts to population and housing. Therefore, no mitigation is required.

Facts:

The above findings are based on the analysis included in Section 2.0, Environmental Checklist, and Section 3.0, Environmental Analysis, of the Initial Study. The project will not result in direct or indirect population growth. The project does not propose the development of new homes or businesses. All support services provided in the project will be consistent with existing plans and policies of the County.

II.F PUBLIC SERVICES

Significant Impact:

None

Findings:

The project is not expected to result in significant impacts related to public services. Therefore, no mitigation is required.

Facts:

The above findings are based on the analysis included in Section 2.0, Environmental Checklist, and Section 3.0, Environmental Analysis, of the Initial Study. The project is not expected to result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities. Implementation of the project will maintain acceptable service ratios, response times, and other performance objectives for the public services of fire protection, police protection, schools, parks, and other public facilities.

II.G RECREATION

Significant Impact:

None

Findings:

The project is not expected to result in significant impacts related to recreation. Therefore, no mitigation is required.

Facts:

The above findings are based on the analysis included in Section 2.0, Environmental Checklist, and Section 3.0, Environmental Analysis, of the Initial Study. The project is not expected to result in adverse impacts associated with recreation. Installation of additional ponds is expected to increase recreational use of the project area, which is currently limited. However, the project is not expected to induce population growth or otherwise attract substantially more visitors to Owens Lake or the facilities in Lone Pine, except for a modest increase in birding and hunting activity. The project will not include the construction or expansion of recreational facilities.

SECTION III POTENTIAL ENVIRONMENTAL EFFECTS THAT CAN BE MITIGATED TO A LEVEL OF INSIGNIFICANCE

The analysis undertaken in support of the Environmental Impact Report (EIR) for the 2008 Owens Valley PM₁₀ Planning Area Demonstration of Attainment State Implementation Plan (project) determined that eight of the nine environmental issues expected to be subject to significant impacts as a result of the project will be reduced to a level of insignificance with the incorporation of the specified mitigation measures: biological resources, cultural resources, hazards and hazardous materials, hydrology and water quality, land use and planning, mineral resources, transportation and traffic, and utilities and service systems.

III.A BIOLOGICAL RESOURCES

Significant Impact:

Implementation of the project will result in impacts to biological resources related to sensitive habitats, federally protected wetlands, and special status biological resources.

Findings:

Changes or alterations have been required in, or incorporated into, the project that mitigate or avoid the significant effects on the environment related to biological resources.

Facts:

Incorporation of the mitigation measures described in Section 3.2 of the EIR would eliminate or substantially lessen the significant impact to a level of insignificance.

Construction Measures

Measure Biology-1, Lake Bed Worker Education Program

To minimize potential direct impacts to western snowy ployer from construction activities to below the level of significance, the City of Los Angeles Department of Water and Power shall continue the lake bed worker education program consistent with the previous approach and per California Department of Fish and Game recommendations. The program shall mirror the program instituted for workers for the 1997 EIR and shall focus on western snowy plover identification, basic biology and natural history, alarm behavior of the snowy plover, and applicable mitigation procedures required of the City of Los Angeles Department of Water and Power and construction personnel. The program shall be conducted by a biologist familiar with the biology of the western snowy plover at Owens Lake and familiar with special status plant and wildlife species of the Owens Lake basin. The biologist shall be approved by the Great Basin Unified Air Pollution Control District prior to implementation of the education program. The qualifications of the biologist shall be submitted to the California Department of Fish and Game for review. The education program shall be based on the 1997 program EIR and shall include relevant updates by the biologist. 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 lake bed. A list of existing personnel who have completed the program shall be submitted to the Great Basin Unified Air Pollution Control District prior to the start of any work on the lake bed. A list of new personnel who have participated and completed the education program shall be submitted monthly to the Great Basin Unified Air Pollution Control District. A copy of the worker education program shall be provided to the California Department of Fish and Game and California State Lands Commission.

Measure Biology-2, Preconstruction Surveys for Western Snowy Plover

To minimize potential direct impacts to western snowy plover within the project area due to construction activities, the City of Los Angeles Department of Water and Power 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 seven days prior to the start of ground-disturbing activities. The City of Los Angeles Department of Water and Power shall place a 200-foot buffer 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. Greencolored 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 the Great Basin Unified Air Pollution Control District. Maps of snowy plover nest locations shall be posted at the construction office and made available to all site personnel and Great Basin Unified Air Pollution Control District staff. The activity of the nest shall be monitored by a biological monitor approved by the Great Basin Unified Air Pollution Control District, 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 the California Department of Fish and Game. Active snowy plover nests shall be monitored at least weekly. The qualifications of the biological monitor shall be submitted to the California Department of Fish and Game for review. 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. Compliance with this mitigation measure shall be confirmed by the Great Basin Unified Air Pollution Control District through issuance of a weekly written report by the City of Los Angeles Department of Water and Power to the Great Basin Unified Air Pollution Control District.

Measure Biology-3, 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, the City of Los Angeles Department of Water and Power shall implement a speed limit of 30 miles per hour within all active construction areas on Owens 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 Great Basin Unified Air Pollution Control District 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. Compliance with this mitigation measure shall be confirmed by the Great Basin Unified Air Pollution Control District through issuance of a summary written report by the City of Los Angeles Department of Water and Power to the Great Basin Unified Air Pollution Control District after posting of speed limits. A copy of the summary report shall be provided to the California Department of Fish and Game.

Measure Biology-4, Lighting Best Management Practices

To minimize indirect impacts to nesting bird species associated with project lighting during construction activities, the City of Los Angeles Department of Water and Power shall institute all best management practices to minimize lighting impacts on nocturnal wildlife consistent with previous requirements and California Department of Fish and Game recommendations. Best management practices include those listed below, and are included in the Project Description of the 2008 State Implementation Plan 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. Proof of compliance with this mitigation measure shall be confirmed by the Great Basin Unified Air Pollution Control District, and a copy of the compliance record shall be provided to the California Department of Fish and Game.

Measure Biology-5, Marking of Nonemissive Wetland and Upland Scrub Areas

To minimize the potential direct impacts to nonemissive wetland and upland scrub vegetation communities from construction activities to below the level of significance, the City of Los Angeles Department of Water and Power shall clearly mark the boundary of construction zones (including the 50-foot buffer) within 50 feet of the boundary of nonemissive wetland areas and upland scrub communities to prevent incursion into these vegetation communities. No construction zone buffer is allowed for construction areas immediately adjacent to wetland or sensitive areas. Construction zone buffers are not allowed to impact wetland or sensitive areas. Construction zone boundaries near nonemissive areas shall be marked using stakes less than 72 inches (originally 60 inches) high, spaced 10 feet apart, along the edges of spring mounds, and spaced 100 feet apart along other wetland and vegetated edges. Marking shall occur prior to the initiation of construction activities. Construction buffer areas outside of the dust control boundaries shall not exceed 50 feet in width and shall be reduced as required to prevent construction activities from impacting adjacent vegetated areas. No temporary or permanent access routes through vegetated areas shall be established, except those specified in the Project Description. Incursions into established vegetated areas, including vegetated areas within the temporary impact area of the 50-foot construction zone buffer, that cause measurable loss of plant cover shall require revegetation with suitable local,

native plant species. Proof of compliance with this mitigation measure shall be verified by submitting a written report to the Great Basin Unified Air Pollution Control District and the California Department of Fish and Game that details the location of markings and the type and locations of delineated wetland and upland areas that are marked. This report shall be submitted prior to the start of construction activities. A written mitigation plan for those vegetated areas where plant cover loss has been measured must be submitted to the Great Basin Unified Air Pollution Control District following the completion of construction. The mitigation plan must contain a schedule and protocol for achieving revegetation within two years of any impacts to vegetation caused by access routes or construction activities outside the areas specified in the Project Description.

Operations and Maintenance Measures

Measure Biology-6, Wetland Mitigation Program

To minimize direct impacts to riparian and wetland communities caused by installation of dust control measures to below the level of significance, the City of Los Angeles Department of Water and Power shall obtain a Programmatic Streambed Alteration Agreement for all existing or proposed activities that may impacts areas subject to the jurisdiction of the California Department of Fish and Game pursuant to Section 1600 of the California Department of Fish and Game in the form of a Streambed Alteration Agreement. If previous phases or the proposed work covered by the 2008 State Implementation Plan and Environmental Impact Report do not require a Streambed Alteration Agreement, then they will not be incorporated into the Programmatic Streambed Alteration Agreement. The City of Los Angeles Department of Water and Power shall institute a wetland mitigation program prior to the initiation of construction activities as recommended by the California Department of Fish and Game. The program shall be designed to emphasize restoration of equivalent functions and values of wetlands within the project area as compared to pre-project impacts.

The wetlands mitigation program shall include mitigation goals, target success criteria, identification of impact areas, an implementation plan, plant species and spacing, irrigation design, post-implementation monitoring plan, and maintenance requirements. Managed Vegetation is deemed to have equivalent functions and values to dry transmontane alkali meadow that would be impacted by the project at a ratio of 2 acres of Managed Vegetation created for every 1 acre of dry transmontane alkali meadow impacted. Up to 413 acres of dry transmontane alkali meadow may be converted to dust control measures as a result of the project. The creation-to-impact ratio for the proposed project would be approximately 2:1. A Managed Vegetation area of up to 826 acres, based on actual impact area identified, shall be designated as the wetland mitigation area within the prescribed Managed Vegetation areas as proposed in the project description. The City of Los Angeles Department of Water and Power shall designate the wetland mitigation area within a Managed Vegetation area that is on the bed of Owens Lake. The City of Los Angeles Department of Water and Power currently has a bank of 53.9 acres of excess installed transmontane alkali meadow that may count toward the total number of acres that would be required as mitigation. Potential mitigation areas may include the Sulfate Well outflow area and Swansea outflow area. Potential mitigation areas may not include state-owned lands currently used for cattle grazing. Banked mitigation (Table 2.4.4-1) credits may be applied for in-kind mitigation.

A design and plan for the designated wetland mitigation area shall be provided to the Great Basin Unified Air Pollution Control District and California State Lands Commission for approval prior to construction of any Managed Vegetation. Included in the plan shall be the location, plant species, schematics, schedule, irrigation requirements, performance criteria, and contingency measures. A copy of the plan shall be provided to the California Department of Fish and Game, U.S. Army Corps of Engineers, and the California State Lands Commission. A transmontane alkali meadow management plan shall be created by the City of Los Angeles Department of Water and Power that sets forth a program to monitor the designated wetland mitigation areas for appropriate coverage of native plant species, for change in the extent of transmontane alkali meadow over a five-year period postconstruction, and for management of invasive, nonnative plant species in wetland areas in and within 500 feet of the project area. The transmontane alkali meadow management plan shall be approved by the Great Basin Unified Air Pollution Control District prior to the initiation of construction activities. A copy of the management plan and subsequent monitoring reports shall be provided to the California Department of Fish and Game, U.S. Army Corps of Engineers, and to the California State Lands Commission.

Calculations of dry transmontane alkali meadow impacts from implementation of the project are estimates based on the mapped extent of transmontane alkali meadow areas within the project area and a determination of whether an area is emissive or nonemissive based on dust monitoring data. The total acreage of wetland mitigation for dry transmontane alkali meadow shall be two times the actual direct and indirect impact area caused to dry transmontane alkali meadow by both construction and postconstruction activities. If any unanticipated indirect postconstruction impacts to riparian communities proximal to Shallow Flood dust control measures occur as a result of project construction or operation, the City of Los Angeles Department of Water and Power shall designate additional wetland mitigation areas and incorporate design parameters that would result in the replacement of equivalent functions and values to the impacted moist or saturated transmontane alkali meadow wetlands within two years of the initiation of the replacement effort. Significant impacts would include loss of vegetative cover due to ground disturbance or change in species composition attributable to drying of springs or ponds, which does not self-repair within two years of detection. Managed Vegetation would not be suitable mitigation for impacts to moist or saturated transmontane alkali meadow communities. The City of Los Angeles Department of Water and Power shall compensate for all loss of transmontane alkali meadow that occurs. Mitigation for impacts to all transmontane alkali meadow associated with construction and operation of dust control measures constructed between 1998 and 2008 (prior to the project) shall be replaced at a ratio of 1 acre of wetland replacement for every acre of wetland impact (1:1 replacement ratio). Replacement wetlands shall consist of similar habitat function and values as the wetland that is lost. Banked mitigation (described in EIR Table 2.4.4-1) credits may be applied for in-kind mitigation. All wetland replacement described in this mitigation measure shall be approved by the Great Basin Unified Air Pollution Control District, California Department of Fish and Game, U.S. Army Corps of Engineers, and California State Lands Commission. All wetland replacements for anticipated impacts shall be constructed and fully functional no later than April 1, 2010. All wetland replacements for unanticipated impacts shall be constructed and fully functional within two years of when the impact was determined.

Measure Biology-7, Toxicity Monitoring Program

To avoid direct and cumulative impacts to native wildlife communities that may potentially result from bioaccumulation of toxic substances resulting from naturally occurring heavy metals and other potential toxins in lake bed deposits to below the level of significance, the City of Los Angeles Department of Water and Power shall implement a toxicity monitoring program to

investigate the potential of bioaccumulation of heavy metals and other potential toxins in wildlife from feeding in dust control areas throughout the Owens Lake bed. A copy of the long-term monitoring program shall be submitted to the California State Lands Commission and Great Basin Unified Air Pollution Control District for review and comment at least 60 days prior to the start of operation of new water-based dust control measures. Monitoring shall take place in all dust control areas within the Owens Lake as well as at all spring and outflow areas within 500 feet of the construction boundaries. The purpose of the monitoring program shall be to determine if bioaccumulation of toxins is occurring within native wildlife populations attributable to the Dust Control Mitigation Program. Procedures for bioaccumulation monitoring shall follow existing permits issued by the Lahontan Water Quality Control Board (Lahontan Water Quality Control Board) and any subsequent water quality monitoring requirements deemed necessary by the Lahontan Water Quality Control Board. All monitoring shall be conducted by individuals familiar with the native wildlife species of the Owens Lake bed. Monitoring personnel shall be approved by the Great Basin Unified Air Pollution Control District prior to implementation of the long-term monitoring. The monitoring plan shall include adaptive management procedures and mitigation procedures to follow in the instance that signs of toxicity do develop in native wildlife populations that are attributable to the Dust Control Mitigation Program. Management procedures would be implemented depending on the type and extent of impact that was observed and could potentially, but not necessarily, include covering of dust control areas to prevent wildlife utilization, hazing of wildlife to prevent utilization of dust control areas, or any other appropriate measures. Any adaptive management measures that would potentially be implemented shall be approved by the Great Basin Unified Air Pollution Control District, and the California Department of Fish and Game prior to implementation.

The monitoring shall be conducted as described in Table 3.2.5-1, Biology-7, Postconstruction Bioaccumulation Monitoring Schedule. In order to have the 2003 State Implementation Plan and 2008 State Implementation Plan monitoring schedules coincide, the final year for monitoring in 2003 State Implementation Plan areas has been moved from 2020 to 2023. Monitoring shall be conducted on a semiannual basis (summer and winter) during each year that monitoring is conducted. If, after the completion of the 14-year monitoring schedule as described in mitigation measure Biology-7, it is determined that there is no evidence of toxicity issues in native wildlife populations, then the monitoring program may be discontinued. If monitoring determines that impacts to native wildlife species are occurring, then the monitoring shall continue on a semiannual basis (summer and winter) in every year until significant impacts are not detected, and the monitoring sequence shall resume at the Year 3 monitoring event and shall continue at the intervals shown in Table 3.2.5-1. Written monitoring reports shall be provided to the Great Basin Unified Air Pollution Control District, the California Department of Fish and Game, Lahontan Water Quality Control Board, and the California State Lands Commission by the approved biological monitor within four months following the end of the monitoring year. Any changes in the existing monitoring requirements by the Regional Water Quality Control Board shall be included into this mitigation measure.

TABLE 3.2.5-1
BIOLOGY-7, POSTCONSTRUCTION BIOACCUMULATION MONITORING SCHEDULE

2003 SIP areas	2003 SIP areas	Year 1 monitoring	Year 2 monitoring	Year 3 monitoring
only	only	event*	event*	event [†]
2008	2009	2010	2011	2012
Year 4 monitoring	Year 5 monitoring	Year 6 monitoring	Year 9 monitoring	Year 14 monitoring
event*	event [†]	event*	event [†]	event*
2013	2014	2015	2018	2023

NOTE:

Measure Biology-8, Exotic Pest Plant Control Program

To minimize indirect impacts to native vegetation communities that may result from the project construction and operations and to prevent creating an environment for weedy plant species to become established in native plant communities, the City of Los Angeles Department of Water and Power shall continue the exotic pest plant control program initiated in 2007 per the 2003 State Implementation Plan within all current and previously constructed designated dust control areas after full build-out of the project (April 1, 2010). The spread of exotic, invasive plant species, such as salt cedar (Tamarix spp.), has detrimental effects on habitat quality for native plant and wildlife species and, in the case of species like salt cedar, can reduce the availability and quality of water within native vegetation areas for plant and wildlife species. The goals of the program shall be consistent with the goals specified in the Inyo County General Plan, the Inyo County Inter-Agency Weed Management Program, and the U.S. Fish and Wildlife Service Owens Basin Wetland and Aquatic Species Recovery Plan for the portion of the Recovery Plan included within the project area. The program shall be written by a pest management specialist or other person familiar with exotic plant species management and shall be submitted to the Great Basin Unified Air Pollution Control District no later than April 1, 2010. Measures for control shall include all best management practices, which include prudent and safe use of control measures such as herbicides, brushing, direct weed removal, tire washing, or comparable measures such that no increase in invasive plant cover occurs. The program shall include yearly monitoring to ensure that exotic plant species are being sufficiently controlled. The draft exotic plant species control program shall be submitted to both the Great Basin Unified Air Pollution Control District and California State Lands Commission and approved by the Great Basin Unified Air Pollution Control District prior to the initiation of exotic plant control activities. All pesticide use shall be undertaken by a state-certified and licensed pesticide applicator. Annual written monitoring reports documenting exotic plant location, type, pretreatment abundance, control type used, and control efficacy shall be delivered to the Great Basin Unified Air Pollution Control District within four months following the end of each calendar year (by April 30). A copy of the control program and resulting monitoring reports shall be provided to the California State Lands Commission and to the California Department of Fish and Game.

Measure Biology-9, Plover Identification Training

To minimize potential direct, indirect, and cumulative impacts to western snowy plover resulting from required maintenance within Shallow Flooding dust control areas during the western snowy plover breeding season (March to August), foot crews and all-terrain vehicle (ATV) operators that must enter Shallow Flooding panels within the entire Owens Lake bed during the snowy plover breeding season shall be briefed in plover identification, nest identification, and adult alarm

^{* 2003} and 2008 SIP areas monitored

[†] 2008 SIP areas only

behavior, and the identification and meaning of buffer markers. Crews shall receive this training from a biologist knowledgeable in western snowy plover biology at Owens Lake as part of the contractor education program as described in mitigation measure Biology-1. The qualifications of the biological monitor shall be submitted to the California Department of Fish and Game for review. Maintenance crews shall utilize hand tools and ATVs only to conduct maintenance activities during this time period in Shallow Flooding panels where snowy plovers may be present. Crews shall minimize time within the Shallow Flooding and playa areas to the greatest extent possible. In the event that a crew discovers an active nest, a biologist shall be contacted to mark the nest buffer. If crews are working within an active nest buffer, they shall be limited to 15 minutes out of every hour within the buffer. If an unanticipated take to western snowy plovers or an active snowy plover nest occurs during any maintenance activities, a project biologist shall document the impact and report the incident to the Great Basin Unified Air Pollution Control District and the California Department of Fish and Game within 48 hours of the event. A take in this case would be defined as mortality to adults, chicks, or fledglings, or a modification in adults' behavior due to human pressure that results in a loss of a nest and its contents. Proof of compliance with this mitigation measure shall be verified by submitting copies of any incident reports to the Great Basin Unified Air Pollution Control District, the California State Lands Commission, and the California Department of Fish and Game.

Emergency repair activities are exempt from the requirements of this provision. An emergency is defined in the State of California Environmental Quality Act Guidelines, Section 15269, as "a sudden, unexpected occurrence that presents a clear and imminent danger, demanding action to prevent or mitigate loss of or damage to life, health, property, or essential public services." Emergency repairs as defined under the 2003 State Implementation Plan revision and the 1998 State Implementation Plan are further defined as those repairs that must be completed immediately to protect human health and safety, ensure the project is in compliance with required air quality standards, or protect project infrastructure from significant and immediate damage that could result in the failure of a dust control measure to maintain compliance with required air quality standards. In the event that an emergency repair must be performed on a Shallow Flooding panel during the snowy plover breeding season, a qualified biological monitor shall be present on site during the duration of the repair activity to document any impacts to western snowy plover adults, juveniles, or active nests. The Great Basin Unified Air Pollution Control District and the California Department of Fish and Game shall be notified within 24 hours of the start of all emergency repair activities. A copy of the biological monitor's written report shall be provided to the Great Basin Unified Air Pollution Control District and the California Department of Fish and Game within 48 hours of completion of the emergency repair activity. Any appropriate mitigation that may be required from impacts to western snowy plovers shall be negotiated between City of Los Angeles Department of Water and Power and the California Department of Fish and Game based on the report provided by the biological monitor. A copy of the resultant mitigation that is negotiated between City of Los Angeles Department of Water and Power and the California Department of Fish and Game shall be provided to the Great Basin Unified Air Pollution Control District and California State Lands Commission.

Measure Biology-10, Long-Term Monitoring Program for Western Snowy Plover

To minimize potential direct, indirect, and cumulative impacts resulting from operation and maintenance of dust control measures to western snowy plover, the City of Los Angeles Department of Water and Power shall implement a long-term snowy plover population monitoring program for the entire Owens Lake bed. Long-term monitoring is required due to long-term implementation of the proposed project. Long-term population monitoring allows for the

distinction between natural population fluctuations and human-induced population changes. Postconstruction surveys implemented under the 2003 State Implementation Plan shall be continued under the 2008 State Implementation Plan 1, 2, 3, 4, 5, 7, 9, and 14 years after project implementation. The final western snowy plover monitoring schedule for all dust control measures on Owens Lake bed shall be coordinated so that long-term monitoring for all dust control measures covered within this document, as well as for preceding environmental documents, are conducted simultaneously. The long-term monitoring shall begin in 2010 or at such time that full build-out is completed. The goals of the monitoring are to confirm that overall numbers of snowy plovers within the dust control areas do not decrease due to implementation of the 2008 State Implementation Plan relative to baseline plover population numbers prior to implementation of the 2003 State Implementation Plan as shown by the 2002 plover report for Owens Lake, which found the population to be 272 plovers. Monitoring shall be conducted during the months of May and lune by a qualified biologist familiar with the natural history and habitat requirements of western snowy plovers within the Owens Lake basin. The qualifications of the biological monitor shall be submitted to the California Department of Fish and Game for review. The monitoring methodology shall be consistent with the methodology used for the Owens Lake 2002 plover surveys.

Annual summary reports for the monitoring efforts shall be filed with the Great Basin Unified Air Pollution Control District, the California State Lands Commission, and the California Department of Fish and Game by December 31 of each monitoring year. The Great Basin Unified Air Pollution Control District shall require adaptive management changes to operation and maintenance of dust control measures if it determines that a decline in snowy plover numbers is occurring that is directly attributable to operation or maintenance procedures of the Owens Lake Dust Mitigation Program. The Great Basin Unified Air Pollution Control District shall consult with the City of Los Angeles Department of Water and Power, California State Lands Commission, and the California Department of Fish and Game prior to requiring adaptive management changes. Monitoring shall continue for a minimum of five years after implementation of adaptive management procedures to ensure that the procedures are having the desired effect on the lake-wide snowy plover population. If after the Year 5 monitoring event it is determined that no adverse impacts to the western snowy plover population at Owens Lake are occurring as a result of the project, then the long-term monitoring program and subsequent reporting may be discontinued.

Specified calendar years for conducting lake-wide plover population surveys are provided in Table 3.2.5-2, *Biology-10, Postconstruction Lake-wide Plover Population Monitoring Schedule*. Lake-wide surveys in 2008 and 2009 shall be conducted per the 2003 State Implementation Plan. Beginning in 2010, lake-wide surveys shall conform to the 2008 State Implementation Plan schedule. Proof of compliance with this mitigation measure shall be through issuance of a written monitoring summary report for each monitoring year specified in Table 3.2.5-2. Reports shall be submitted to the Great Basin Unified Air Pollution Control District by December 31 of each monitoring year. The report shall document survey locations and dates, the number of plovers observed, and an estimate of the total plover population. A copy of the yearly summary reports shall be provided to the California Department of Fish and Game and the California State Lands Commission.

¹ CH2MHill. 2002. Summary of Surveys for Snowy Plovers at Owens Lake, March 1 through April 30, 2002. Prepared by: Point Reyes Bird Observatory (Ruhlen and Page), Stinson Beach, CA.

TABLE 3.2.5-2 BIOLOGY-10, POSTCONSTRUCTION LAKE-WIDE PLOVER POPULATION MONITORING SCHEDULE

Year 1 monitoring	Year 2 monitoring	Year 3 monitoring	Year 4 monitoring event
event	event	event	
2010	2011	2012	2013
Year 5 monitoring	Year 7 monitoring	Year 9 monitoring	Year 14 monitoring event
event	event	event	
2014	2016	2018	2023

Measure Biology-11, Corvid Management Plan

To reduce potential direct and cumulative impacts to western snowy plover and other migratory shorebirds within the project area due to increased predation on shorebird young and eggs from potential corvid population increases on Owens Lake resulting from construction of dust control measures, the City of Los Angeles Department of Water and Power shall continue to implement the corvid management plan resulting from the 2003 State Implementation Plan with an extension of one year within the project area, or comparable corvid control measures, to the satisfaction of the California Department of Fish and Game that are capable of achieving the same performance standard of no substantial net increase in corvid predation of native nesting shorebirds (including eggs). The corvid management plan was implemented in 2005 and may conclude in 2011 depending on success. Components of the corvid management plan include lake bed trash management procedures associated with dust control measures, utilization of Nixalite or the functional equivalent on all structures greater than 72 inches in height (increased from the original 60 inches in height) to minimize perching of corvids and raptor species on dust control equipment where they can easily observe shorebirds during the nesting season, burial of power and communication lines on all lake bed areas below the elevation of 3,600 feet, and use of harassment techniques for corvids in specific instances where corvids are proving to be particularly harmful to nesting shorebirds. Specifically in conjunction with the Moat & Row DCM, the corvid management techniques shall be expanded to specify that the sand fence fabric shall be sufficiently flexible and that the post caps shall be designed to prevent perching by corvids, within 0.25 mile of occupied nesting shorebird habitat. The use of sand fencing in Moat & Row areas will be considered under this mitigation measure as exceeding the height of 72 inches, thereby requiring the utilization of Nixalite or the functional equivalent on top of sand fencing. The corvid management plan shall be implemented by a wildlife biologist familiar with the sensitive shorebird populations within the project area and familiar with corvid management techniques. The qualifications of the wildlife biologist shall be submitted to the California Department of Fish and Game for review. Lethal methods of corvid control such as shooting or poisoning shall not be implemented initially due to public and government agency concerns in the project region for such control methods and to prevent putting workers at risk from such control measures. If it is later determined that corvids are having a significant impact on shorebird populations within the project area and direct removal of corvids is a viable alternative, proposed control methods would be presented to the Great Basin Unified Air Pollution Control District and the California Department of Fish and Game for approval prior to implementation of the additional control measures. The corvid management plan includes a yearly written report estimating the lake bed nesting and foraging corvid population size, documenting the results of the corvid management techniques, documenting the observed effectiveness of the techniques in minimizing corvid impacts on shorebirds within the lake bed, and suggesting improvements for corvid management within the lake bed. Effectiveness may be determined based on the corvid population size on the lake bed.

Copies of the yearly reports shall be submitted to the Great Basin Unified Air Pollution Control District and the California Department of Fish and Game no later than December 31 of each corvid management year. If after the sixth year of reporting in 2011, the Great Basin Unified Air Pollution Control District determines that the corvid management program is effective, and corvids are not impacting snowy plover populations, then the reporting schedule shall phase out in the same time frame as shown in Table 3.2.5-1. However, the corvid management practices shall be continuously implemented.

Measure Biology-12, Habitat Management Program for Nesting Snowy Plovers

To minimize potential direct and cumulative impacts to nesting western snowy plover from shutdown of all Shallow Flooding panels on June 30, a habitat management program shall be implemented by the City of Los Angeles Department of Water and Power on all Owens Lake bed Shallow Flooding areas to mimic the natural summer drying of seeps and springs in the area. Each year Shallow Flooding shall be slowly turned off from July 1 to July 21 to allow snowy plover broods to complete their nesting cycle. Consult Figure 3.2.5-1, Conceptual Owens Lake Operational Calendar, and Figure 3.2.5-2, Shallow Flooding Management for the Month of July, for a conceptual picture of Shallow Flooding panel operation. The schedule for decreasing the percentage of wetness in Shallow Flooding areas shall follow Table 3.2.5-3, Biology-12, Schedule of Percent Surface Area Wetted Required to Achieve Level of Control Efficiency After June 30.

The City of Los Angeles Department of Water and Power has the option of surveying within 0.5 mile of Shallow Flooding areas for snowy plovers, and if active snowy plover nests or young are not present on or within a 0.5-mile radius of Shallow Flooding areas, then the habitat flows described above would not be needed in those areas and those Shallow Flooding panels may be shut down as the City of Los Angeles Department of Water and Power determines necessary. Surveying shall be conducted by a qualified biologist familiar with the natural history and habitat requirements of western snowy plovers within the Owens Lake basin and must be conducted within seven calendar days of planned shut down. The qualifications of the biologist who conducts the snowy plover surveys shall be submitted to the California Department of Fish and Game for review. A final operations plan detailing the drying operations shall be submitted to the Great Basin Unified Air Pollution Control District for approval, and a copy shall be provided to the California Department of Fish and Game prior to startup of new Shallow Flooding operations. Any changes made to the operations plan related to the drying of Shallow Flooding areas at the end of the dust season must be submitted in writing to the Great Basin Unified Air Pollution Control District for approval at least one month prior to implementation, and a copy of the changes shall be provided to the California Department of Fish and Game.

TABLE 3.2.5-3 BIOLOGY-12, SCHEDULE OF PERCENT SURFACE AREA WETTED REQUIRED TO ACHIEVE LEVEL OF CONTROL EFFICIENCY AFTER JUNE 30

	July 1–7	July 8–14	July 15–21	July 22
ĺ	~ 50% wetted area	~ 20% wetted area	~15% wetted area	Off

Measure Biology-13, Wildlife Movement Gaps

To minimize potential direct impacts to migratory corridors, used by wildlife such as flightless juvenile shorebirds and herpetofauna, from the installation of sand fencing, either atop the rows of Moat & Row areas or as enhancements between Moat & Row elements, or from the moats

themselves, the City of Los Angeles Department of Water and Power shall include gaps in sand fencing and appropriate moat design that allow wildlife movement on the lake bed. For purposes of the analysis in this EIR, moats in Moat & Rows were assumed to have sloped sides and not pose a barrier to wildlife movements. If moats or rows are recommended to be formed with vertical sides, additional environmental analysis would be required. Gaps in the fences shall be no more than 0.25 mile apart and may consist of breaks in the fencing or openings within a fence. Alternatives to gaps may be utilized in place of gaps. Alternatives may include culverts and/or passage holes where wildlife could travel under berms or rows, voids in the fencing mesh, gaps between segments, and open row ends. Moats shall be required to be designed to prevent trapping of wildlife. Potential methods may include, but are not limited to, gentle side slopes and ramps. The size of gaps or alternatives to gaps in the sand fencing and the design of moats shall be submitted to and approved by the California Department of Fish and Game. Proof of compliance with this mitigation measure shall be verified by submitting a written report to the Great Basin Unified Air Pollution District and California Department of Fish and Game detailing the locations, size, and spacing of gaps and moat design for wildlife movement in Moat & Row areas.

Measure Biology-14, Long-term Habitat Management Plan

To avoid direct and cumulative impacts to native wildlife communities that may result from the proposed project, a Long-term Habitat Management Plan shall be prepared, pursuant to the California Department of Fish and Game requirements, by a qualified biologist familiar with the habitats and species present at Owens Lake and knowledgeable of wildlife management techniques. The qualifications of the biologist shall be submitted to the California Department of Fish and Game for review. The Long-term Habitat Management Plan shall be submitted to both the California Department of Fish and Game and the California State Lands Commission for comment, with final approval by the California Department of Fish and Game by April 1, 2009. The approved Long-term Habitat Management Plan shall be fully implemented by April 1, 2010. The Long-term Habitat Management Plan area shall encompass all emissive areas subject to dust control measures on lands owned y the California State Lands Commission and lands owned by the City of Los Angeles Department of Water and Power. In recognition of the public trust values related to resident and migratory wildlife resources at Owens dry lake, the California Department of Fish and Game and the California State Lands Commission have acknowledged the benefit of a Long-term Habitat Management Plan as a tool for ensuring compatibility between the construction, maintenance, and operation of the State Implementation Plan and the protection of public trust values. The plan shall include, at a minimum, the following objectives:

- Achieve no net loss of riparian or aquatic baseline habitat functions and values or total acres of these habitats.
- Manage 1,000 acres in perpetuity for shorebirds in Zone II, in consultation with the California Department of Fish and Game.
- Manage 137 acres in perpetuity as habitat shallow flood in the vicinity of Dirty Socks, in consultation with the California Department of Fish and Game.
- Manage 1,000 acres (that comprise areas that are 100 acres or greater in size) in perpetuity of deep-water habitat at a water depth equal to or deeper than 12 inches, in consultation with California Department of Fish and Game, to support focal migratory waterfowl determined to be present during 1995–1997 baseline surveys in support of the 1998 SIP, including wood duck (*Aix sponsa*), green-winged teal

(Anas crecca), mallard (Anas platyrhynchos), blue-winged teal (Anas discors), gadwall (Anas strepera), and American wigeon (Anas americana), among others.

- Maintain a baseline population of 272 snowy plovers.
- In addition to the 1,000 acres of shorebird habitat in Zone II, the City of Los Angeles Department of Water and Power shall maintain a minimum of 523 acres of habitat for snowy plovers in perpetuity at Owens Lake in consultation with the California Department of Fish and Game. Suitability of Shallow Flooding habitat for western snowy plover consists of a mix of exposed sandy or gravelly substrate suitable for nesting in close proximity to standing water equal to or less than 12 inches in depth.
- Ensure that the 17.5 acres of proposed DCMs that are within California Department of Fish and Game Cartago Springs Wildlife Area is compatible with the designated land use. The California Department of Fish and Game has determined that habitat shallow flooding or habitat restoration would be compatible with the Cartago Springs Wildlife Area's designated use (Figure 3.2.5-3, Cartago Springs Wildlife Area).

Components of the plan shall also include, at a minimum, a description of baseline conditions of plant and wildlife resources, effects on biological resources as a result of implementation of dust control measures, descriptions of biological elements targeted for management, and a description of the operations and maintenance tasks required to complete each goal. Preparation of the Longterm Habitat Management Plan shall be subject to the oversight of the California Department of Fish and Game. The California State Lands Commission shall be consulted for comments on the plan. As the landowner, California State Lands Commission shall be provided copies of all monitoring and compliance reports prepared pursuant to the plan. The Long-term Habitat Management Plan shall include yearly monitoring, including a written report documenting the results of the management techniques, recording the observed effectiveness of the techniques, and suggesting improvements for habitat management within the lake bed. Copies of the yearly reports shall be submitted to the California State Lands Commission, Great Basin Unified Air Pollution Control District, and the California Department of Fish and Game no later than December 31 of each calendar year. If after five years of reporting in 2015, the California Department of Fish and Game determines that the Long-term Habitat Management Plan is effective, then the reporting schedule shall phase out in the same time frame as shown in Table 3.2.5-1. However, the habitat management practices shall be continuously implemented.

III.B CULTURAL RESOURCES

Significant Impact:

Implementation of the project has the potential to result in impacts to cultural resources related to the destruction of a unique paleontological resource, a substantial adverse change to the significance of archaeological and historical resources, and unknown burial sites.

Findings:

Changes or alterations have been required in, or incorporated into, the project that mitigate or avoid the significant effects on the environment related to cultural resources.

Facts:

Incorporation of the mitigation measures described in Section 3.3 of the EIR would eliminate or substantially lessen the significant impact to a level of insignificance.

Paleontological Resources

Measure Cultural-1, Paleontological Resources Construction Monitoring

The impacts to cultural resources directly or indirectly related to the destruction of unique paleontological resource that has the potential to be present within the eastern and southern Owens Lake playa shall be reduced to below the level of significance through monitoring of ground-disturbing activities during construction and salvage of paleontological resources within 1 mile of the historic shoreline on the eastern border of the Owens Lake bed (Figure 3.3.4.1-1, *Paleontologically Sensitive Areas*). Ground-disturbing activities include, but are not limited to, drilling, excavation, trenching, and grading. Where any such ground-disturbing activity is anticipated in early Pleistocene to late Holocene units within the area shown on Figure 3.3.4.1-1 in conjunction with the construction of dust control measures, the Great Basin Unified Air Pollution Control District shall require construction monitoring. The Great Basin Unified Air Pollution Control District shall require that construction monitoring, salvage, and recovery of unique paleontological resources be consistent with standards for such recovery established by the Society of Vertebrate Paleontology (SVP):

- A qualified paleontologist shall be retained to provide professional paleontological services. The paleontologist shall be responsible for implementation of the mitigation plan and maintenance of professional standards of work. A "qualified paleontologist" is defined as a practicing scientist who meets the qualifications established by the SVP. The qualifications of the paleontologist shall be submitted to the responsible agency (California State Lands Commission) for approval.
- Shallow Flooding without any excavation, trenching, and grading does not require mitigation; however, excavations required for the berms to implement this measure require monitoring. In addition, planned grading, trenching, and excavation activities associated with Moat & Row (or flooding areas associated with early Pleistocene to late Holocene units in the eastern and southern Owens Lake playa as shown on Figure 3.3.4.1-1) shall be monitored. This measure may be modified by the qualified paleontologist for specific locations as the depth of recent sediments varies across the project area. In conjunction with the subsurface work, the monitor shall inspect exposed sediments, including microscopic examination of matrix, to determine if fossils are present. In addition, the qualified paleontologist shall be available on call to respond to unanticipated discoveries.
- 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. The function of the monitor is to identify potential resources and recover them with appropriate scientific data.
- Paleontological Resources Sensitivity Training is required for all project personnel, if the monitor will not be present full-time. This 15-minute field training shall review what fossils are, what fossils might potentially be found, and the appropriate procedures to follow if fossils are found.
- Discovery of fossil-producing localities shall require that stratigraphic columns be measured and that geologic samples be taken for analysis.
- If fossil localities are discovered, the paleontologist shall collect controlled samples for processing. All fossils recovered shall be prepared, identified, and cataloged before donation to the accredited repository designated by the lead agency. The qualified paleontologist shall be required to secure a written agreement with a recognized repository, regarding the final disposition, permanent storage, and maintenance of any significant fossil remains and associated specimen data and corresponding geologic and geographic site data that might be recovered as a result of the specified monitoring program. The written agreement shall specify the level of treatment (i.e., preparation, identification, curation, cataloguing, etc.) required before the fossil collection would be accepted for storage. In addition, a technical report shall be completed. The final disposition of paleontological resources recovered on State lands must be approved by the California State Lands Commission.
- Within 90 days of the completion of the paleontological monitoring, the qualified paleontologist shall submit a final mitigation report to the Great Basin Unified Air Pollution Control District and the California State Lands Commission with an appended, itemized inventory of the specimens. The report shall include a list of specimens recovered, documentation of each locality, interpretation of fossils recovered, and any technical or specialist's reports as appendices. The report and inventory, when submitted to the Great Basin Unified Air Pollution Control District, shall signify the completion of the program to mitigate impacts to paleontological resources.

Archaeological and Historical Resources

The direct and indirect impacts to cultural resources related to substantial adverse changes to the significance of archaeological and historical resources resulting from implementation of the proposed project would be reduced to below the level of significance through the implementation of mitigation measures Cultural-2 and Cultural-3, which are in accordance with Section 15126.4 (b)(3) of the State CEQA Guidelines.

Measure Cultural-2, Cultural Resources Investigations

The Great Basin Unified Air Pollution Control District shall ensure that potentially impacted prehistoric and historic archaeological sites be assessed for significance, as defined by Public Resources Code Section 21083.2 or State of California Environmental Quality Act Guidelines Section 15064.5(a), through the implementation of Phase II investigations. Impacts to those sites

found to be significant shall be mitigated to below the level of significance through a Phase III data recovery program. Resources found to be not significant shall not require mitigation.

Coordination with the California State Lands Commission shall be undertaken to mitigate impacts consistent with California State Lands Commission practices for the mitigation of archaeological sites that occur on lands under their jurisdiction. This coordination shall include the issuance of permits for Phase II testing and Phase III data recovery programs, and reviews and comments, when appropriate. The Great Basin Unified Air Pollution Control District shall consult with the State Historic Preservation Officer as required by 15064.5 (b)(5) of the State of California Environmental Quality Act Guidelines for state-owned historical resources. Construction shall not occur on state property until concurrence from the State Historic Preservation Officer is obtained concerning determinations of eligibility and that mitigation has reduced the impact to cultural resources to below the level of significance. In addition, coordination with interested Native American tribes identified by the Native American Heritage Commission shall be undertaken. Local tribes shall be contacted by the qualified archaeologist specified for the project, and a Native American monitor(s) shall be retained to be present on site during all ground-disturbing activities, including but not limited to archaeological evaluation, excavation, Phase II investigations and Phase III data recovery (if needed), and construction activities. The Native American monitor(s) shall coordinate with the qualified project archaeologist, the Great Basin Unified Air Pollution Control District, and the Citv of Los Angeles Department of Water and Power to ensure responsible remediation of Native American sites and sacred materials. Should human remains be discovered, the Inyo County Coroner shall be notified within 24 hours.

Phase II

A total of 12 newly recorded prehistoric archaeological sites (OL Sites 1, 2, 5, 6, 7, 12, 14, 15, 16, 17, 20, and 21), one previously recorded prehistoric site (CA-INY-6375), 12 newly recorded historic archaeological sites (OL Sites 3H, 4H, 8H, 10H, 11H, 18H, 19H, 22H, 23H, 24H, 25H, and 26H), 2 previously recorded historic sites (P14-8141 and CA-INY-6375H), and any additional prehistoric or historic archaeological sites located on the 9,664-acre proposed project site, including those sites recorded by Jones & Stokes (JS Site 1 and 2), shall be assessed for significance as defined by the California Environmental Quality Act prior to the initiation of construction activities in those areas where the sites are located. This requires the following measures:

- Development of a research design that guides assessments of site significance and scientific potential. This design shall be an update, expansion, and refinement of research designs that have guided previous Phase II evaluations in the Study Area.
- Mapping and systematic collection of a representative sample of surface artifacts
- Subsurface investigation through shovel test pits, surface scrapes, or 1 by 1 meter excavation units; a combination of such methods; or equivalent methods
- Analysis of recovered material to determine significance pursuant to the State of California Environmental Quality Act
- Preparation of a report, including evaluation of site significance and recommendations for mitigation if appropriate

- Transmittal of report to the Eastern Information Center at the University of California, Riverside
- Curation of artifact collection. The final disposition of collected artifacts from State lands is subject to approval by the California State Lands Commission

Phase III

A Phase III data recovery effort, in accordance with the State of California Environmental Quality Act [Section 21083.2 (d)], shall be implemented by the Great Basin Unified Air Pollution Control District for those sites determined to be significant, pursuant to the State of California Environmental Quality Act, through Phase II testing and evaluation. The Great Basin Unified Air Pollution Control District shall ensure that data recovery has been completed prior to the issuance of a construction permit for any area containing a site determined to be significant and for which it can be demonstrated that consequential scientific information can be recovered. The Phase III data recovery program shall include:

- Development of a comprehensive research design to answer questions addressed during the Phase II on a broader regional level and to provide a procedural framework for the collection of data at sites determined to be significant.
- Mapping and systematic collection of surface artifacts, possibly complete data recovered depending on site size
- Subsurface investigation through methods, such as controlled hand-excavation units, machine excavations, deep testing, or a combination of methods. When applicable, other techniques, such as geophysical testing methods may also be used
- Analysis of recovered material through visual inspection, and chemical analysis when applicable
- Preparation of a report
- Transmittal of report to involved parties and Eastern Information Center at the University of California, Riverside
- Curation of artifact collection. The final disposition of collected artifacts from State lands is subject to approval by the California State Lands Commission

Measure Cultural-3, Cultural Resources Monitoring Program

Impacts to surface and subsurface cultural resources not identified during the Phase I (survey), Phase II (testing and evaluation), or Phase III (data recovery) shall be mitigated through the implementation of a monitoring program during construction or any ground-disturbing activities. Native American consultation shall be undertaken as part of this mitigation measure. Previous monitoring efforts have demonstrated that there is a high potential for the unanticipated discovery of cultural resources during construction on the Owens Lake bed, even in those areas that have been previously surveyed. This is a consequence of the movement of sediment by wind and/or water across the lake bed, which results in the exposure and covering of cultural materials on the

surface of the lake bed on a regular basis. Monitoring shall be required only during initial grading and earthmoving activities. The Great Basin Unified Air Pollution Control District shall require that the following program be implemented and that the requirement be duly noted in the plans and specifications:

- Retain a Qualified Archaeologist. A qualified archaeologist shall be retained to implement a monitoring and recovery program in any area identified as having the potential to contain unique archaeological resources as defined by Public Resources Code Section 21083.2 or historical resources as defined by the State of California Environmental Quality Act Guidelines Section 15064.5(a) and Public Resources Code Sections 5020.1(k) and 5024.1(g).
- Agreement for Disposition of Recovered Artifacts. The selected archaeologist shall be required to secure a written agreement with a recognized museum repository, such as the University of California, Davis and the San Bernardino County Museum, regarding the final disposition and permanent storage and maintenance of any unique archaeological resources or historical resources recovered as a result of the archaeological monitoring, as well as corresponding geographic site data that might be recovered as a result of the specified monitoring program. The written agreement shall specify the level of treatment (i.e, preparation, identification, curation, cataloging, etc.) required before the collection would be accepted for storage.

The ultimate decision regarding the disposition of artifacts collected during Phase I (survey), Phase II (testing and evaluation), Phase III (data recovery), or monitoring efforts on lands administered by the California State Lands Commission shall be made by the California State Lands Commission. Artifacts collected during past efforts on California State Lands Commission lands have been sent to the University of California, Davis, if they had been recovered from a site that was eligible for the National Register of Historic Places or the California Register of Historical Resources. The California State Lands Commission has indicated that those artifacts collected from sites that were not eligible for the National Register of Historic Places or the California Register of Historical Resources will be returned to the tribes. The final disposition of artifacts recovered from lands administered by other agencies (e.g., Bureau of Land Management) shall be determined in accordance with the policies of those agencies.

- Preconstruction Briefing. The selected archaeologist, or an equally qualified designee, shall attend a preconstruction briefing to provide information regarding regulatory requirements for the protection of unique archaeological resources, historical resources, and human remains. Construction personnel shall be briefed on procedures to be followed in the event that a unique archaeological resource, historical resource, or human remains are encountered during construction. An information package shall be provided for construction personnel not present at the initial preconstruction briefing. The archaeologist(s) shall be required to provide a telephone number where they can be reached by the construction contractor, as necessary.
- Unanticipated Discovery of Human Remains on State Lands (Public Resources Code 5097). The archaeologists shall ensure that all construction personnel shall be informed of the requirement to notify the coroner of the County within 24 hours of

the discovery of human remains on state lands. Upon discovery of human remains, there shall be no further excavation or disturbance of the site or any that are reasonably suspected to overlie adjacent human remains until the following conditions are met:

- The Inyo County Coroner has been informed and has determined that no investigation of the cause of death is required, and if the remains are of Native American origin, the descendants from the deceased Native Americans have made a recommendation to the landowner or the person responsible for the excavation work, for means of treating or disposing of, with appropriate dignity, the human remains and any associated grave goods as provided in Public Resources Code Section 5097.98.
- Unanticipated Discovery of Human Remains on Federal Lands (Native American Graves Protection and Repatriation Act). Whenever any person inadvertently discovers human remains on public lands, including lands administered by the Bureau of Land Management, 43 Code of Federal Regulations 10.4 requires the individual to notify the land manager in writing of such discovery. If the discovery occurs in connection with an authorized use, the activity that caused the discovery is to cease and the materials are to be protected until the land manager can respond to the situation. Upon receipt of written confirmation of the discovery, 43 Code of Federal Regulations 10.4 requires the manager to do the following: (1) certify receipt of the notification; (2) take immediate steps, if necessary to further protect the materials; (3) notify by telephone, with written confirmation, the tribes likely to be culturally affiliated with the materials; and (4) initiate consultation with such tribes. If, after consultation with tribes, the manager determines that the material will be adequately protected in situ, without the need to excavate or remove the material from the area of discovery, then the requirements under the Native American Graves Protection and Repatriation Act have been completed. The materials remain in federal ownership, adequately protected by the manager as provided for in the law. If, after consultation with tribes, the manager determines that the circumstances warrant intentional excavation or removal of the materials from the area of discovery, then 43 Code of Federal Regulations 10.3 applies, and the manager must complete the steps outlined therein for intentional excavations.
- Construction Monitoring. A qualified archaeologist shall monitor earthmoving activities in areas that are likely to contain unique archaeological resources or historical resources. The archaeologist shall be authorized to halt construction, if necessary, in the immediate area where buried cultural remains are encountered. Prior to the resumption of grading activities in the immediate vicinity of the cultural remains, the project proponent shall provide the archaeologist with the necessary resources to identify and implement a program for the appropriate disposition (as specified by Section 15064.5 (e) of the State of California Environmental Quality Act Guidelines).
- Monitoring Report. The monitor shall maintain daily monitoring logs that shall be submitted quarterly to the Great Basin Unified Air Pollution Control District. A complete set of the daily monitoring logs shall be kept on site throughout the earthmoving activities and be available for inspection. The daily monitoring log shall be keyed to a location map to indicate the area monitored, the date, assigned

personnel, and the results of monitoring, including the recovery of archaeological material, sketches of recovered materials, and associated geographic site data. Within 90 days of the completion of the archaeological monitoring, a monitoring report shall be submitted to the Great Basin Unified Air Pollution Control District, the City of Los Angeles Department of Water and Power, the California State Lands Commission, and to the Eastern Information Center at the University of California, Riverside. The report, when submitted to the Great Basin Unified Air Pollution Control District, shall signify the completion of the program to mitigate impacts to unique archaeological resources or historical resources.

Human Remains

Implementation of the project has the potential to result in direct impacts to unknown burial sites. Mitigation measure Cultural-2, which requires Phase II and Phase III archaeological investigations and Native American monitoring, and Cultural-3, which requires monitoring of all other ground-disturbing activities and specifies the statutory procedures to be followed in the event of the discovery of human remains, would mitigate impacts to unknown locations of human remains to a less than significant level.

III.C HAZARDS AND HAZARDOUS MATERIALS

Significant Impact:

Implementation of the project has the potential to result in impacts related to hazards and hazardous materials.

Findings:

Changes or alterations have been required in, or incorporated into, the project that mitigate or avoid the significant effects on the environment related to hazards and hazardous materials.

Facts:

Incorporation of the mitigation measures described in Section 3.4 of the EIR would eliminate or substantially lessen the significant impact to a level of insignificance.

Measure Hazards-1, Hazardous Materials Transport

To minimize impacts related to the unauthorized release of hazardous materials during routine transport, use, or disposal of hazardous materials, prior to construction work specified in the 2008 State Implementation Plan, the City of Los Angeles Department of Water and Power shall ensure through its construction permitting process, or through enforcement of contractual obligations for its own projects, that all contractors transport, store, and handle construction-required hazardous materials in a manner consistent with relevant regulations and guidelines established by the California Code of Regulations (Title 13, Division 2, Chapter 6); the California Department of Transportation; and the California Regional Water Quality Control Board, Lahontan Region, prior to construction. Should additional storage of hazardous materials be undertaken by the City of Los Angeles Department of Water and Power and approved by the California State Lands Commission, the City of Los Angeles Department of Power and Water shall submit proof of incorporation of this

requirement in all construction contracts related to work specified in the 2008 State Implementation Plan to the Great Basin Unified Air Pollution Control District and Inyo County. The City of Los Angeles Department of Water and Power shall submit an operation plan for the routine transport, use, storage, handling, and disposal of hazardous materials to the Great Basin Unified Air Pollution Control District and Inyo County prior to the operation of dust control measures specified in the 2008 State Implementation Plan. The City of Los Angeles Department of Water and Power shall provide to the Great Basin Unified Air Pollution Control District and Inyo County an annual update as required for the transport, use, storage, handling, and disposal of hazardous materials.

Measure Hazards-2, Spill Prevention Control and Countermeasure Program

To minimize impacts related to the unauthorized release of hazardous materials into the environment, the City of Los Angeles Department of Water and Power shall prepare a Spill Prevention Control and Countermeasure Program applicable to all statutes and regulations. Should additional storage of hazardous materials be undertaken by the City of Los Angeles Department of Water and Power and approved by the California State Lands Commission, the City of Los Angeles Department of Water and Power shall submit a Spill Prevention Control and Countermeasure Program to Inyo County and California State Lands Commission for review and approval. The City of Los Angeles Department of Water and Power shall demonstrate approval of the Spill Prevention Control and Countermeasure Program by Inyo County to the Great Basin Unified Air Pollution Control District prior to the use, storage, and handling of hazardous materials in conjunction with construction or operation of work specified in the Revised 2008 State Implementation Plan. The Spill Prevention Control and Countermeasure Program shall address all aboveground storage tanks within the fertilizer injection and water treatment systems in accordance with all federal, state, and local laws and regulations. The City of Los Angeles Department of Water and Power shall enclose all the fertilizer injection and water treatment systems with a minimum 6-foot-high, barb-wiretopped, chain-link fence or equivalent enclosure and locked gate to prevent unauthorized access. The City of Los Angeles Department of Water and Power shall amend its existing lease with the California State Lands Commission to allow for the improvement specified in this measure. The Spill Prevention Control and Countermeasure Program shall be in place throughout construction, operation, and maintenance of work specified in the 2008 State Implementation Plan.

Measure Hazards-3, Emergency Response Business Plan

To minimize impacts related to the unauthorized release of hazardous materials into the environment, the City of Los Angeles Department of Water and Power shall develop a business plan for emergency response for the routine transport, use, storage, handling, and disposal of hazardous materials. Should additional storage of hazardous materials be undertaken by the City of Los Angeles Department of Water and Power and approved by the California State Lands Commission, the City of Los Angeles Department of Power and Water shall ensure that the business plan for emergency response addresses preparation for possible emergencies involving hazardous materials. The City of Los Angeles Department of Water and Power shall provide copies of the approved business plan for emergency response to the Great Basin Unified Air Pollution Control District and Inyo County. The City of Los Angeles Department of Water and Power shall provide to the Great Basin Unified Air Pollution Control District and Inyo County an annual update to the approved business plan as required for the transport, use, storage, handling, and disposal of hazardous materials.

Measure Hazards-4, Fire Protection Services

To minimize the direct, indirect, and cumulative impacts related to the occurrence of wildland fires during construction and operation of work specified in the 2008 State Implementation Plan, the City of Los Angeles Department of Water and Power shall provide for fire protection services for all dust control areas to the satisfaction of Inyo County. Fire protection services shall be provided prior to any further construction on the lake bed. Fire protection services shall include provision of adequate equipment and personnel as determined by Inyo County. Proof of compliance with this mitigation measure shall be submitted by the City of Los Angeles to Inyo County and the Great Basin Unified Air Pollution Control District prior to construction of any additional dust control measures.

III.D HYDROLOGY AND WATER QUALITY

Significant Impact:

Implementation of the project has the potential to result in impacts related to hydrology and water quality.

Findings:

Changes or alterations have been required in, or incorporated into, the project that mitigate or avoid the significant effects on the environment related to hydrology and water quality.

Facts:

Incorporation of the mitigation measures described in Section 3.5 of the EIR would eliminate or substantially lessen the significant impact to a level of insignificance.

Measure Hydrology-1, Acquire and Adhere to National Pollution Discharge Elimination System General Permit

To mitigate for direct, indirect, and cumulative surface water quality impacts caused by construction pollutants contacting storm water, products of erosion moving off the proposed project site into receiving waters, and unauthorized non-storm-water discharges, the City of Los Angeles Department of Water and Power shall obtain and adhere to the requirements of the National Pollution Discharge Elimination System General Permit for the 15.1 square miles of new work area specified in the 2008 State Implementation Plan. This includes the development and implementation of a Storm Water Pollution Prevention Plan, which specifies best management practices that shall prevent all construction pollutants from contacting storm water and with the intent of keeping all products of erosion from moving off site into receiving waters; the elimination or reduction of unauthorized non-storm-water discharges; and inspections of best management practices. The Storm Water Pollution Prevention Plan shall also identify best management practices for controlling temporary construction dewatering discharges and may include temporary sediment control measures such as the addition of low-flow dispersal methods for minimizing erosion. The City of Los Angeles Department of Water and Power shall also be required to comply with the Guidelines for Erosion Control as listed in the Water Quality Control Plan for the Lahontan Region. The City of Los Angeles Department of Water and Power shall submit the final Storm Water Pollution Prevention Plan to the Great Basin Unified Air Pollution Control District and the

California State Lands Commission after its approval by the Regional Water Quality Control Board for the Lahontan Region.

Measure Hydrology-2, Water Quality Monitoring and Reporting Program

The City of Los Angeles Department of Water and Power, prior to issuing any Notices to Proceed for construction of work in the areas specified in the 2008 State Implementation Plan, shall implement a Water Quality Monitoring and Reporting Program to ensure that there is no substantial degradation of water quality and to mitigate direct, indirect, and cumulative impacts to surface and groundwater quality and off-site groundwater levels. The Water Quality Monitoring and Reporting Program shall monitor operational water volumes and flows, and analyze the quality of project surface waters and groundwater. This shall also include the existing but newly exposed groundwater in Moat & Row areas. The Water Quality Monitoring and Reporting Program shall include a monitoring plan of surface water and groundwater, along with an evaluation of the monitoring data and a plan for corrective actions should impacts be observed to ensure that the proposed project is operating within the quality limitations specified by the waste discharge requirements (Board Order No. R6V-2006-0036, WDID No. 6B14000903) adopted by the Regional Water Quality Control Board for Revised Waste Discharge Requirements for the Southern Zones Dust Control Project at Owens Lake.² The monitoring program shall be submitted to the Great Basin Unified Air Pollution Control District and the California State Lands Commission prior to the start of construction in the areas designated for dust control in the 2008 State Implementation Plan. All chemical analyses shall be performed by a laboratory with National Environmental Laboratory Accreditation Program certification.

Monitoring reports shall be completed and submitted to the Great Basin Unified Air Pollution Control District, the California State Lands Commission, and the Regional Water Quality Control Board within 60 days of the end of the monitoring period as described in Table 3.5.5-1, *Hydrology Monitoring and Reporting Schedule*. The reports shall include a summary of monitoring results and any corrective actions proposed or undertaken for any observed violations of water quality limitations or impacts to off-site groundwater levels. The water quality limitations are defined as a substantial (statistically significant based on a statistical analysis of current and baseline data) variation from the long-term baseline water data collected by the Great Basin Unified Air Pollution Control District for surface and groundwater quality and groundwater levels.³ The Great Basin Unified Air Pollution Control District shall continue to collect this baseline water data during project construction and operation. Periodic reductions in monitoring and reporting requirements, when justified by a documented review and evaluation of monitoring results, shall be implemented as authorized by the Regional Water Quality Control Board. Until monitoring results justify a reduction in monitoring requirements, monitoring shall be completed as follows:

• Flow rates and total volumes of flow to all dust control measure areas shall be monitored for each day and month for the first five years of work specified in the 2008 State Implementation Plan and thereafter as specified in Table 3.5.5-1.

² California Regional Water Quality Control Board, Lahontan Region. 28 September 2006. Letter to Richard Harasick, City of Los Angeles Department of Water and Power, Los Angeles, CA. Subject: Revised Waste Discharge Requirements for the City of Los Angeles Department of Water and Power and the California State Lands Commission; Southern Zones Dust Control Project, Owens Lake Dust Mitigation Program, Inyo County..

³ Great Basin Unified Air Pollution Control District. 2000 (Revised 2003). *Archive of Groundwater and Hydrology Data, Owens Lake*. Bishop, CA.

• Surface water monitoring of Shallow Flood, Moat & Row, and Managed Vegetation areas and groundwater monitoring of perimeter project observation wells shall be completed as described in Table 3.5.5-1 for total dissolved solids (TDS), chloride, chlorine, dissolved oxygen (DO), pH, electrical conductivity (EC), ammonia, aluminum, arsenic, barium, boron, cadmium, calcium, iron, lead, magnesium, manganese, nitrate, nitrite, potassium, selenium, sodium, carbonate, bicarbonate, phosphate, sulfate, vanadium, total alkalinity, total organic carbon (TOC), copper, chromium, zinc, bromide, Treflan (or Trifluralin), and sulfur.

TABLE 3.5.5-1
HYDROLOGY MONITORING AND REPORTING SCHEDULE

		Monitoring Schedule						
Description	2010	2011	2012	2013	2014	2016	2018	2023
Flow rates and total	Daily	Daily	Daily	Daily	Daily	Daily	Daily	Daily
volumes of flow to all DCM areas	(report monthly)	(report monthly)	(report monthly)	(report monthly)	(report monthly)	(report monthly)	(report monthly)	(report monthly)
Surface water quality of Shallow Flood areas	Quarterly	Quarterly	Quarterly	Quarterly	Quarterly	Annually (during DCM operation)	Annually (during DCM operation)	Annually (during DCM operation)
Surface water quality of Managed Vegetation areas, if any	Quarterly	Quarterly	Quarterly	Quarterly	Quarterly	Annually (during DCM operation)	Annually (during DCM operation)	Annually (during DCM operation)
Quality of groundwater that becomes exposed in Moat and Row areas	Quarterly	Quarterly	Quarterly	Quarterly	Quarterly	Annually (during DCM operation)	Annually (during DCM operation)	Annually (during DCM operation)
Groundwater monitoring of perimeter project observation wells	Quarterly	Quarterly	Quarterly	Quarterly	Quarterly	Annually (during DCM operation)	Annually (during DCM operation)	Annually (during DCM operation)

NOTE:

DCM = dust control measures

Measure Hydrology-3, Shallow Flood Water Retention Berms

The City of Los Angeles Department of Power and Water shall construct water-retention berms along the down-gradient and side boundaries of each Shallow Flooding block to minimize leakage and increases in the rate, quantity, or quality of dust control waters and storm water flows to the brine pool area or mineral lease area. These berms shall be designed to collect excess surface water along the sideslope and downslope borders of each flooding-area block. The final design of flood protection berms shall be submitted to the California State Lands Commission, the Great Basin Unified Air Pollution Control District, and the Lahontan Regional Water Quality Control Board. The requirement to provide the above-described berms does not apply to Shallow Flood Area T36-4, due to its adjacency to the Owens River Delta and the need to minimize surface disturbances in this area. However, operation of Shallow Flood Area T36-4 would be subject to the quality limitations specified by the waste discharge requirements (Board Order No. R6V-2006-0036, WDID No. 6B14000903) adopted by the Regional Water Quality Control Board for Revised Waste Discharge Requirements for the Southern Zones Dust Control Project at Owens Lake such that there is no substantial change in the salinity and chemistry of the surface water and shallow groundwater in the adjacent portion of the Owens River Delta. The design of flood protection

berms is subject to California State Lands Commission staff approval and would be undertaken in conjunction with the review of the City of Los Angeles Department of Power and Water's application for the lease amendment to construct, implement, and maintain additional dust control measures on the bed of Owens Lake.

Measure Hydrology-4, Reduction of Flash Flood and Alluvial Sediment Damage Potential

The City of Los Angeles Department of Power and Water shall provide for flood damage and alluvial sediment protection in the design of all dust control measures. These mitigation measures shall protect the dust control measures themselves, as well as the brine pool mineral lease, from increased flash flood damage potential due to the channelization of waters and transport of sediments. All dust control measure designs shall ensure that there is no increase in the rate and quantity, or decrease in the quality, of storm water flows to the brine pool mineral lease areas. The final design elements that avoid potential increases in flash flood and alluvial sediment damage impacts to the dust control measures and the mineral lease shall be submitted to the California State Lands Commission, the Great Basin Unified Air Pollution Control District, and the Lahontan Regional Water Quality Control Board.

Measure Hydrology-5, Berm Failure Emergency Management Plan

The City of Los Angeles Department of Water and Power shall develop an emergency management plan for potential berm failures. This plan shall include the immediate notification of the downgradient trona mineral extraction operation on the lake and all other lake bed personnel to ensure the safety to personnel and equipment on the lake bed. The plan shall also include a commitment by the City of Los Angeles Department of Water and Power to take prompt action to repair failed berms and shall set forth the actions to be taken by the City of Los Angeles Department of Water and Power to do so. The plan shall include provisions for notification to the California State Lands Commission and the Great Basin Unified Air Pollution Control District. The emergency management plan shall be reviewed and approved by the California State Lands Commission prior to operation of the proposed project dust control measures.

III.E LAND USE AND PLANNING

Significant Impact:

Implementation of the project would not result in significant impacts to land use and planning. However, as found in the 2003 SIP, in order to continue to lessen and/or alleviate the potential impacts related to land use and planning that would occur when the project is implemented, the following measure would be required.

Findings:

Changes or alterations have been required in, or incorporated into, the project that mitigate or avoid the significant effects on the environment related to land use and planning.

Facts:

Incorporation of the mitigation measure described in Section 3.6 of the EIR would eliminate or substantially lessen the significant impact to a level of insignificance.

Implementation of the project would not result in significant impacts to land use and planning. However, in order to continue to lessen and/or alleviate the potential impacts related to land use and planning, as found in the 2003 SIP, that would occur if the project were implemented, the following measure would be required.

Measure Land Use and Planning-1, Resident Insect Control Program

Due to increased areas of potential standing water, to minimize potential impacts to local residents from a potential increase in mosquitoes and other biting insects as a result of dust control measure construction and operation from the proposed project, the City of Los Angeles Department of Water and Power shall institute a program for nearby residents whereby windows of existing residences in the potentially impacted communities of Swansea, Keeler, Cartago, and Olancha within three (3) miles of a water-based dust control measure will be screened or other insect control devices will be provided to residents to reduce nuisance insect populations in the vicinity of their residence. Residents shall provide proof of residence in identified, potentially affected areas prior to the issuance of screening or insect control devices. In addition, the City of Los Angeles Department of Water and Power shall continue to pay for Inyo County vector control treatments on the dust control measure areas and within impacted communities as required to control mosquitoes and other biting insects. A study shall be required to evaluate the cause of insects in the adjacent communities and to require continued support of treatment methods if the dust control measures have been found to cause insect pest problems. This study shall be conducted by the City of Los Angeles Department of Water and Power, approved by Inyo County, and implemented before April 1, 2010.

III.F MINERAL RESOURCES

Significant Impact:

Implementation of the project has the potential to result in impacts to mineral resources.

Findings:

Changes or alterations have been required in, or incorporated into, the project mitigate or avoid the significant effects on the environment related to mineral resources.

Facts:

Incorporation of the mitigation measures described in Section 3.7 of the EIR would eliminate or substantially lessen the significant impact to a level of insignificance.

The mineral resources impacts identified in this section may be reduced to below the level of significance through the adoption of mitigation measure Minerals-1 and mitigation measures Hydrology-3 and Hydrology-4 from Section 3.9.6, *Hydrology*, *Mitigation Measures*, of the EIR. The measures listed below may mitigate impacts to mineral resources by protecting the mineral lease areas.

Measure Minerals-1, U.S. Borax Lease Area Approval and Compensation

The City of Los Angeles Department of Water and Power shall be required to obtain approval from the California State Lands Commission prior to working in the areas that overlap with the areas leased to U.S. Borax. In addition, the City of Los Angeles Department of Water and Power shall be required to compensate the California State Lands Commission for associated staff time to prepare the legal description for any transfers of mineral lease areas to dust control areas. This includes areas requiring rerouting of access roads under mineral leases PRC 5464.1 and PRC 3511.1.

Measure Hydrology-3, Shallow Flood Water Retention Berms

The City of Los Angeles Department of Power and Water shall construct water-retention berms along the down-gradient and side boundaries of each Shallow Flooding block to minimize leakage and increases in the rate, quantity, or quality of dust control waters and storm water flows to the brine pool area or mineral lease area. These berms shall be designed to collect excess surface water along the sideslope and downslope borders of each flooding-area block. The final design of flood protection berms shall be submitted to the California State Lands Commission, the Great Basin Unified Air Pollution Control District, and the Lahontan Regional Water Quality Control Board. The requirement to provide the above-described berms does not apply to Shallow Flood Area T36-4, due to its adjacency to the Owens River Delta and the need to minimize surface disturbances in this area. However, operation of Shallow Flood Area T36-4 would be subject to the quality limitations specified by the waste discharge requirements (Board Order No. R6V-2006-0036, WDID No. 6B14000903) adopted by the Regional Water Quality Control Board for Revised Waste Discharge Requirements for the Southern Zones Dust Control Project at Owens Lake such that there is no substantial change in the salinity and chemistry of the surface water and shallow groundwater in the adjacent portion of the Owens River Delta. The design of flood protection berms is subject to California State Lands Commission staff approval and would be undertaken in conjunction with the review of the City of Los Angeles Department of Power and Water's application for the lease amendment to construct, implement, and maintain additional dust control measures on the bed of Owens Lake.

Measure Hydrology-4, Reduction of Flash Flood and Alluvial Sediment Damage Potential

The City of Los Angeles Department of Power and Water shall provide for flood damage and alluvial sediment protection in the design of all dust control measures. These mitigation measures shall protect the dust control measures themselves, as well as the brine pool mineral lease, from increased flash flood damage potential due to the channelization of waters and transport of sediments. All dust control measure designs shall ensure that there is no increase in the rate and quantity, or decrease in the quality, of storm water flows to the brine pool mineral lease areas. The final design elements that avoid potential increases in flash flood and alluvial sediment damage impacts to the dust control measures and the mineral lease shall be submitted to the California State Lands Commission, the Great Basin Unified Air Pollution Control District, and the Lahontan Regional Water Quality Control Board.

III.G TRANSPORTATION AND TRAFFIC

Significant Impact:

Implementation of the project has the potential to result in impacts to transportation and traffic.

Findings:

Changes or alterations have been required in, or incorporated into, the project that mitigate or avoid the significant effects on the environment related to transportation and traffic.

Facts:

Incorporation of the mitigation measures described in Section 3.8 of the EIR would eliminate or substantially lessen the significant impact to a level of insignificance.

Measure Traffic-1, Traffic Work Safety Plan

The City of Los Angeles Department of Water and Power shall work with the State of California Department of Transportation to determine the necessity for traffic safety equipment to be installed and maintained on U.S. Highway 395, State Route 136, and State Route 190 in order to ensure traffic safety during construction of the proposed project by developing a Traffic Work Safety Plan. The Traffic Work Safety Plan shall specify the measures to be implemented and maintained by the City of Los Angeles Department of Water and Power for each location on U.S. Highway 395, State Route 136, and State Route 190 that would be affected by the construction phase of the project to ensure traffic safety. The plan should include measures such as signage to warn oncoming motorists of large slow-moving trucks ahead and flag persons to warn motorists of large slowmoving trucks ahead during peak periods and times of large load deliveries. The City of Los Angeles Department of Water and Power shall document to the Great Basin Unified Air Pollution Control District and California State Lands Commission that State of California Department of Transportation has approved the Traffic Work Safety Plan prior to the initiation of construction work specified by the 2008 Revised State Implementation Plan, or related transportation and staging of equipment and materials. Operation and maintenance of the approach known as Willow Dip from U.S. Highway 395 to the lake bed is subject to a permit issued by the California Department of Transportation to U.S. Borax. Should the City of Los Angeles Department of Water and Power wish to share the Willow Dip access with U.S. Borax, the California Department of Transportation would require that a new permit be issued for the road connection/maintenance in both names. Use of the paved access at U.S. Highway 395, Post Miles 50.52 and 53.27 and any required improvements by the City of Los Angeles Department of Water and Power would be subject to an encroachment permit from the California Department of Transportation. Use of the paved access at State Route 190, Post Mile 14.58, Dirty Socks Springs Road requires the assignment of a county road number if it is not a county road, and use of the road and any required improvements by the City of Los Angeles Department of Water and Power would be subject to an encroachment permit from the California Department of Transportation.

Measure Traffic-2, Traffic Work Safety Plan Conformance

The City of Los Angeles Department of Water and Power shall be responsible for funding, installing, and conforming to the measures specified in the approved Traffic Work Safety Plan prior to the use of U.S. Highway 395, State Route 136, and State Route 190 for gravel hauling or other heavy truck trips such as the delivery of materials, heavy equipment, and construction vehicles to the proposed project site to ensure traffic safety during the construction operations. The City of Los Angeles Department of Water and Power shall demonstrate conformance with the measures specified in the approved Traffic Work Safety Plan by submitting quarterly compliance reports to the Great Basin Unified Air Pollution Control District, California State Lands Commission, and State

of California Department of Transportation throughout the duration of the construction work specified by the 2008 Revised State Implementation Plan, and related transportation and staging.

Measure Traffic-3, Regional Transportation Network Damage Repair

The City of Los Angeles Department of Water and Power shall be required to repair damage to the regional transportation network (U.S. Highway 395, State Route 136, and State Route 190) from construction activities required for the 2008 Revised State Implementation Plan to pre-project conditions. Prior to initiating construction of work specified by the 2008 Revised State Implementation Plan, or related transportation and staging of equipment and materials, the City of Los Angeles Department of Water and Power shall retain a qualified pavement consultant engineer to document the existing condition of all regional transportation network roadways used for access, egress, and haul routes by the construction activities required for the 2008 Revised State Implementation Plan. A California Department of Transportation representative shall participate with the qualified pavement consultant engineer. The City of Los Angeles Department of Water and Power or its contractor must be on-call to revisit the documented roadway sections and delineate physical damages that are directly attributed to construction activities required for the 2008 Revised State Implementation Plan and repair any damage immediately or in short term, or as specified by California Department of Transportation. The City of Los Angeles Department of Water and Power shall provide in-lieu fees for remediation of construction-generated impacts on the regional transportation network, or a comparable measure to the mutual satisfaction of the City of Los Angeles Department of Water and Power, Invo County, and the California Department of Transportation, demonstrating that damage to the regional transportation network that resulted from the construction activities has been repaired. Within 12 months after construction activities for the 2008 Revised State Implementation Plan is completed, the City of Los Angeles Department of Water and Power shall provide written documentation to the Great Basin Unified Air Pollution Control District, California State Lands Commission and State of California Department of Transportation demonstrating that damage to the regional transportation network that resulted from the construction activities has been repaired.

The California Department of Transportation has specified the requirement that construction monitoring be undertaken at six intersections within the regional roadway system:

- U.S. Highway 395, Post Mile 39.7, Willow Dip
- U.S. Highway 395, Post Mile 48.94, Bartlett Road
- U.S. Highway 395, Post Mile 50.52
- U.S. Highway 395, Post Mile 53.27, Boulder Creek RV Park
- State Route 136, Post Mile 14.44
- State Route 190, Post Mile 14.58, Dirty Socks Springs Road

III.H UTILITIES AND SERVICE SYSTEMS

Significant Impact:

Implementation of the project has the potential to result in impacts to utilities and service systems.

Findings:

Changes or alterations have been required in, or incorporated into, the project that mitigate or avoid the significant effects on the environment related to utilities and service systems.

Facts:

Incorporation of the mitigation measures described in Section 3.9 of the EIR would eliminate or substantially lessen the significant impact to a level of insignificance.

The utility impacts as identified in this section (specifically, impacts to the flood control system on the lake) may be reduced to below the level of significance through the adoption of mitigation measures Hydrology-3 and Hydrology-4.

Measure Hydrology-3, Shallow Flood Water Retention Berms

The City of Los Angeles Department of Power and Water shall construct water-retention berms along the down-gradient and side boundaries of each Shallow Flooding block to minimize leakage and increases in the rate, quantity, or quality of dust control waters and storm water flows to the brine pool area or mineral lease area. These berms shall be designed to collect excess surface water along the sideslope and downslope borders of each flooding-area block. The final design of flood protection berms shall be submitted to the California State Lands Commission, the Great Basin Unified Air Pollution Control District, and the Lahontan Regional Water Quality Control Board. The requirement to provide the above-described berms does not apply to Shallow Flood Area T36-4, due to its adjacency to the Owens River Delta and the need to minimize surface disturbances in this area. However, operation of Shallow Flood Area T36-4 would be subject to the quality limitations specified by the waste discharge requirements (Board Order No. R6V-2006-0036, WDID No. 6B14000903) adopted by the Regional Water Quality Control Board for Revised Waste Discharge Requirements for the Southern Zones Dust Control Project at Owens Lake such that there is no substantial change in the salinity and chemistry of the surface water and shallow groundwater in the adjacent portion of the Owens River Delta. The design of flood protection berms is subject to California State Lands Commission staff approval and would be undertaken in conjunction with the review of the City of Los Angeles Department of Power and Water's application for the lease amendment to construct, implement, and maintain additional dust control measures on the bed of Owens Lake.

Measure Hydrology-4, Reduction of Flash Flood and Alluvial Sediment Damage Potential

The City of Los Angeles Department of Power and Water shall provide for flood damage and alluvial sediment protection in the design of all dust control measures. These mitigation measures shall protect the dust control measures themselves, as well as the brine pool mineral lease, from increased flash flood damage potential due to the channelization of waters and transport of sediments. All dust control measure designs shall ensure that there is no increase in the rate and quantity, or decrease in the quality, of storm water flows to the brine pool mineral lease areas. The final design elements that avoid potential increases in flash flood and alluvial sediment damage impacts to the dust control measures and the mineral lease shall be submitted to the California State Lands Commission, the Great Basin Unified Air Pollution Control District, and the Lahontan Regional Water Quality Control Board.

SECTION IV SIGNIFICANT UNAVOIDABLE ADVERSE IMPACTS THAT CANNOT BE MITIGATED TO A LEVEL OF INSIGNIFICANCE

The Environmental Impact Report (EIR) has determined that the 2008 Owens Valley PM₁₀ Planning Area Demonstration of Attainment State Implementation Plan (project) is not expected to result in significant impacts to aesthetics, agriculture resources, geology and soils, noise, population and housing, public services, and recreation. With the implementation of the mitigation measures specified in the EIR, impacts to biological resources, cultural resources, hazards and hazardous materials, hydrology and water quality, land use and planning, mineral resources, transportation and traffic, and utilities and service systems will be mitigated to below the level of significance.

The Great Basin Unified Air Pollution Control District (District) has determined that although the mitigation measures would substantially reduce the level of impacts to air quality related to greenhouse gas emissions resulting from the project, these impacts would result in significant unavoidable impacts. Consequently, in accordance with Section 15093 of the State of California Environmental Quality Act (CEQA) Guidelines, a Statement of Overriding Considerations has been prepared (see Section IX of this document) to substantiate the District's decision to accept these unavoidable adverse environmental effects on the grounds that they are outweighed by the benefits afforded by the project.

IV.A AIR QUALITY

Significant Impact:

Implementation of mitigation measure Air-1 would reduce potential impacts on air quality in relation to fugitive dust from the construction of the project to below the level of significance.

Construction, operation, and maintenance of dust control measures (DCMs) at Owens Lake introduces the use of mechanized vehicles and the storage and application of chemicals on the lake bed that would exceed the levels that occurred in 1990 when operations on the lake bed were limited to mineral extraction, incidental recreation, and air quality studies. Application of mitigation measures Air-2 through Air-6 would reduce greenhouse gas emissions to the maximum extent practicable but are not capable of reducing impacts to 1990 levels; thus, the project would result in a significant unavoidable adverse impact to the achievement of greenhouse gas emission controls commensurate with the goals articulated in Assembly Bill 32.

Findings:

A Statement of Overriding Considerations has been prepared (See Section IX of this document) to address the air quality impacts associated with greenhouse gas emissions that would occur during the construction of the project. Implementation of the following mitigation measures would minimize impacts on air quality related to greenhouse gas emissions.

Facts:

The District is cognizant that a project of this magnitude may generate environmental impacts to air quality during the construction and operation phases. The District has identified in Section 3.1, Air Quality, of the EIR, six mitigation measures, Air-1 through Air-6 that would reduce the potential air quality impacts from both the construction and operational phases of the project.

Measure Air-1, Construction Activities Fugitive Dust Emissions Control and Minimization

Fugitive dust emissions during construction shall be controlled and minimized, to comply with Great Basin Unified Air Pollution Control District Rules 400 and 401 (EPA 1992), through the City of Los Angeles Department of Water and Power's application of best available control measures during construction activities from unpaved roads and areas affected by the construction work specified in this 2008 Revised SIP, or related transportation and staging of equipment and materials. This may include, but would not be limited to, the use of, 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 City of Los Angeles Department of Water and Power shall demonstrate compliance with this measure through the preparation of a project construction dust control plan to be prepared by the City of Los Angeles Department of Water and Power and approved by the Great Basin Unified Air Pollution Control District prior to the start of construction and the submission of weekly monitoring reports to the Great Basin Unified Air Pollution Control District and the California State Lands Commission. The Great Basin Unified Air Pollution Control District shall monitor the application of best available control measures at least once a week on an ongoing basis during the construction phase of the proposed project, and maintain a monitoring log on file.

Measure Air-2, Construction Equipment Low-emissions Tune-ups Schedule

To mitigate the air quality impact related to greenhouse gas emissions, the City of Los Angeles Department of Water and Power shall develop a schedule of low-emissions tune-ups for all equipment operating on site for more than 10 working days, and maintain a log of required tune-ups and submit a monthly copy to the Great Basin Unified Air Pollution Control District during the project's construction phase. Prior to implementation of the schedule, the City of Los Angeles Department of Water and Power shall submit the schedule to the Great Basin Unified Air Pollution Control District and the California State Lands Commission. The Great Basin Unified Air Pollution Control District shall ensure conformance of the equipment operation with the approved schedule.

Measure Air-3, Low-emission Construction Equipment Utilization

To mitigate the air quality impact related to greenhouse gas emissions, the City of Los Angeles Department of Water and Power shall apply best available control measures during construction by utilizing low-emission equipment/mobile construction equipment for the proposed project site, unless the City of Los Angeles Department of Water and Power submits documentation and consults with the Great Basin Unified Air Pollution Control District and the California State Lands Commission that use of such equipment is not practical, feasible, or available. The Great Basin Unified Air Pollution Control District should monitor the application of low-emission equipment/mobile construction equipment, or other approved equipment at least once a week on

an ongoing basis during the project's construction phase and should maintain a monitoring log on file during this phase.

Measure Air-4, Low-sulfur Fuel Utilization during Construction

To mitigate the air quality impact related to greenhouse gas emissions, the City of Los Angeles Department of Water and Power shall apply best available control measures during construction by utilizing low-sulfur and/or alternative fuels for on-site stationary equipment. Stationary sources of air emissions, such as pumps, compressors, and generators shall be line-powered, unless the City of Los Angeles Department of Water and Power submits documentation and consults with the Great Basin Unified Air Pollution Control District and the California State Lands Commission that the use of such equipment is not practical, feasible, or available. The Great Basin Unified Air Pollution Control District should monitor the application of low-sulfur and/or alternative fuels for on-site stationary equipment, or other approved on-site stationary equipment at least once a week on an ongoing basis during the project's construction phase and should maintain a monitoring log on file during this phase.

Measure Air-5, Low-emission Mobile Vehicle Utilization during Construction

To mitigate the air quality impact related to greenhouse gas emissions, low-emission or alternative-fueled mobile vehicles during the proposed project's construction shall be utilized for the proposed project site, unless the City of Los Angeles Department of Water and Power submits documentation and consults with the Great Basin Unified Air Pollution Control District and the California State Lands Commission that use of such equipment is not practical, feasible, or available. In addition, carpooling of construction workers should be considered and encouraged by the City of Los Angeles Department of Water and Power to reduce vehicular emissions.

Measure Air-6, Low-emission Mobile Vehicle Utilization during Operation

To mitigate the air quality impact related to greenhouse gas emissions during the proposed project's operation, hybrid, low-emission (CA LEV II; PZEV, SULEV; or ULEV) or alternative-fueled mobile vehicles, such as electric or fuel cells, shall be utilized for the proposed project site, unless the City of Los Angeles Department of Water and Power submits documentation and consults with the Great Basin Unified Air Pollution Control District and the California State Lands Commission that use of such equipment is not practical, feasible, or available. The City of Los Angeles Department of Water and Power shall provide the Great Basin Unified Air Pollution Control District with its purchasing policy procedures that shall provide provisions that encourage the use of low-emission or alternative-fueled mobile vehicles before operation of the project. In addition, carpooling of operations and maintenance workers should be considered and encouraged by the City of Los Angeles Department of Water and Power to reduce vehicular greenhouse gas emissions.

Alternatives were analyzed in the Environmental Impact Report (EIR) for the 2008 Owens Valley PM₁₀ Planning Area Demonstration of Attainment State Implementation Plan (project), consistent with the recommendations of Section 15126.6 of the State of California Environmental Quality Act (CEQA) Guidelines, which require evaluation of a range of reasonable alternatives to the project, or to the location of the project, which would feasibly attain most of the basic objectives of the project but would avoid or substantially lessen any of the significant project effects, and evaluate the comparative merits of the alternatives. An environmentally superior alternative must be identified in addition to the No Project Alternative. The analysis of alternatives is limited to those that the Great Basin Unified Air Pollution Control District (District) determines could feasibly attain most of the basic objectives of the project. Section 15126.6(f) of the State CEQA Guidelines describes feasibility as being dependent on site suitability, economic viability, availability of infrastructure, general plan consistency, consistency with other plans or regulatory limitations, jurisdictional boundaries, and the ability of the project proponent to gain access to or acquire an alternative site.

Alternatives addressed in the EIR were derived from work undertaken by the District, from comments that were received in response to the Notice of Availability, and from comments provided by interested parties that attended the public scoping meeting. The resulting range of alternatives considered in this EIR consists of the following:

No Project Alternative

Alternative 1: All Shallow Flooding (the environmentally superior alternative)

Alternative 2: All Managed Vegetation

Alternative 3: All Gravel Cover

The ability of the project and four alternatives under consideration to meet the objectives of the project is summarized in these Findings as Table V-1, Summary of Adequacy of Project and Alternatives to Attain Project Objectives; Table V-2, Project Alternative Elements; and Table V-3, Comparative Analysis of Impacts for Project and Alternatives. As required by CEQA, evaluation of the No Project Alternative considered what would reasonably be expected to occur in the foreseeable future if the project were not approved; however, the No Project Alternative is not capable of meeting most of the project objectives. Three of the proposed alternatives were consistent with some of the basic project objectives and, for this reason, were carried forward for comparative analysis with respect to the determined environmental issues of the project.

TABLE V-1 SUMMARY OF ADEQUACY OF PROJECT AND ALTERNATIVES TO ATTAIN PROJECT OBJECTIVES

				Alternatives		
	Objectives	Project	All Shallow Flooding	All Managed Vegetation	All Gravel Cover	No Project
1.	Implement all Owens Lake bed PM ₁₀ control measures by April 1, 2010, pursuant to the revised 2008 SIP to achieve the NAAQS	Yes	Yes	Yes	Yes	No
2.	Revise the approved 2003 SIP by July 1, 2008	Yes	Yes	Yes	Yes	No
3.	Minimize (or compensate for) long-term, significant, adverse changes to sensitive resources within the natural and human environment	Yes	Yes	Yes	No	No
4.	Provide a high technical likelihood of success without substantial delay	Yes	Yes	No	No	No
5.	Conform substantially to adopted plans and policies and existing legal requirements	Yes	Yes	Yes	No	No
6.	Minimize the long-term consumption of natural resources	Yes	No	Yes	Yes	No
7.	Minimize the cost per ton of particulate pollution controlled	Yes	Yes	No	No	No
8.	Be consistent with the State of California's obligation to preserve and enhance the public trust values associated with Owens Lake	Yes	Yes	Yes	No	No

KEY:

SIP = State Implementation Plan

NAAQS = National Ambient Air Quality Standards

TABLE V-2 PROJECT ALTERNATIVE ELEMENTS

Project	All Shallow Flooding	All Managed Vegetation	All Gravel Cover	No Project
Dust Control Measures (DCMs)				,
Shallow Flooding: 9.2 square miles (approximately 5,888 acres) of the project area would be subject to shallow flooding. Moat & Row: 3.5 square miles (approximately 2,240 acres) of the project area would be subject to Moat & Row. Gravel Cover: There are no Gravel Cover DCMs.	Shallow Flooding: 12.7 square miles of the project area would be subject to DCMs. Managed Vegetation: There are no managed vegetation DCMs. Moat & Row: There are no Moat & Row DCMs. Gravel Cover: There are no Gravel Cover DCMs.	Shallow Flooding: There are no shallow flooding DCMs. Managed Vegetation: 12.7 square miles of the project area would be subject to DCMs. Gravel Cover: There are no Gravel Cover DCMs.	Shallow Flooding: There are no shallow flooding DCMs. Managed Vegetation: There are no managed vegetation DCMs. Gravel Cover: 12.7 square miles of the project area would be subject to DCMs.	Same as existing conditions. No additional DCMs would be constructed in areas required to reduce PM10 emissions to meet NAAQS by April 2010.
Note: There are a mandatory 12.7 square miles of new DCMs with 0.5 square mile of Channel Area and 1.9 square mile of potential study area Moat & Row. Power Supply and Control	Note: There are a mandatory 12.7 square miles of new DCMs with up to a 15.1 square miles of DCMs overall.	of new DCMs with up to a 15.1 square miles of DCMs overall.	of new DCMs with up to a 15.1 square miles of DCMs overall.	
be required to operate project facilities,	Similar to the project; however, more power would be needed for the greater number of Shallow Flooding areas required by this alternative.	would be needed for the greater number of	number of Gravel Cover areas required by this	Same as existing conditions. Existing power supplies would generate the energy necessary for the completed 29.8 square miles of DCMs pursuant to the 2003 SIP. No additional DCMs would be constructed in areas required to reduce PM ₁₀ emissions to meet NAAQS by April 2010.
Existing overhead power lines run along the north end and down the east side of Owens Lake, generally paralleling the historic shoreline on the north and State Route 136 on the east. Power drops from nearby overhead lines are connected to the underground power lines that carry power to the lake bed control measure facilities. In addition, small portable generators mounted on construction vehicles will provide some temporary construction and emergency power.				

TABLE V-3 COMPARATIVE ANALYSIS OF IMPACTS FOR PROJECT AND ALTERNATIVES

Project	All Shallow Flooding	All Managed Vegetation	All Gravel Cover	No Project
Air Quality	ÿ	3 8		,
The project would allow PM ₁₀ emissions to be brought into compliance with the NAAQS for PM ₁₀ with maximum efficiency, substantially benefiting air quality. The project would install a total of 15.1 square miles (9,664,acres) of DCMs. These would pose potentially significant impacts to air quality, which would be reduced to below the level of significance through the implementation of mitigation measure Air-1. Unavoidable impacts would occur related to greenhouse gas emissions. Implementation of	Same as the project.	Same as project.	Same as project	The No Project Alternative would not allow PM ₁₀ emissions to be brought into compliance with the NAAQS for PM ₁₀ with maximum efficiency, resulting in greater operational air quality impacts from PM ₁₀ emissions. There would be no construction-related air quality impacts from this alternative, and the impacts related to greenhouse gases would not occur. However, the No Project Alternative would not allow for the improvement of overall air quality in the area by attaining NAAQS for PM ₁₀ by 2010 and does not revise the 2003 SIP.
mitigation measures Air-2 through Air-6 would				
reduce the impacts related to greenhouse gas				
emissions.	Comparative Impact: Neutral	Comparative Impact: Neutral	Comparative Impact: Neutral	Comparative Impact: Negative
Biological Resources	This alternative has the metantial to marrial	This also was a second and the back as its lab	This alkanishing would have sometime in mark to	The Nie Duele of Alternative consulting
The project would install a total of up to 15.1 square miles (9,664,acres) of DCMs. These would pose potentially significant impacts to biological resources, which would be reduced to below the level of significance through the implementation of mitigation measures Biology-1 through -14.	This alternative has the potential to provide more habitat for western snowy plover (Charadrius alexandrinus nivosus) than the project as it would provide a greater acreage of Shallow Flooding.	for nesting western snowy plovers and special		The No Project Alternative would only result in the 29.8 square miles (19,072acres) of DCMs installed pursuant to the 2003 SIP. DCMs would be placed primarily in salt pan areas of similar habitat.
	Comparative Impact: Positive	Comparative Impact: Negative	Comparative Impact: Negative	Comparative Impact: Neutral
Cultural Resources				
square miles (9,664 acres) of DCMs. These would pose potentially significant impacts to	This alternative would result in significant impacts related to archaeological and historical resources. As with the project, potentially significant impacts related to cultural resources resulting from this alternative would be reduced to below the level of significance through the incorporation of mitigation measures	Same as the project.	The alternative would entail heavy equipment and the placement of gravel on the lake surface, resulting in significant adverse impacts to cultural resources.	The No Project Alternative would only result in the 29.8 square miles (19,072 acres) of DCMs installed pursuant to the 2003 SIP. This alternative would not entail conversion of vacant land, including grading, paving, and construction. Therefore, the No Project Alternative would not require implementation of mitigation measures for cultural resources.
	Comparative Impact: Neutral	Comparative Impact: Neutral	Comparative Impact: Neutral	Comparative Impact: Positive

TABLE V-3
COMPARATIVE ANALYSIS OF IMPACTS FOR PROJECT AND ALTERNATIVES, Continued

Project	All Shallow Flooding	All Managed Vegetation	All Gravel Cover	No Project
Hazards and Hazardous Materials				
The project would install a total of up to 15.1		Same as the project.		The No Project Alternative would only result in
square miles (9,664 acres) of DCMs. These	generation of chemicals that would potentially		chemicals but may still result in release of	the 29.8 square miles (19,072 acres) of DCMs
would pose potentially significant impacts to	occur with the project. This alternative would		hazardous materials from construction	installed pursuant to the 2003 SIP. The 2003
hazards and hazardous materials, which would	not result in short- or long-term impacts from		equipment related to gravel hauling and	SIP includes DCMs that would continue the use
be reduced to below the level of significance	hazards and hazardous materials; therefore,		dumping, therefore requiring implementation of	of potentially hazardous materials associated
through the implementation of the mitigation	mitigation measures would not be required.		mitigation measures.	with the operation of Managed Vegetation.
measure.				
	Comparative Impact: Positive	Comparative Impact: Neutral	Comparative Impact: Neutral	Comparative Impact: Negative
Hydrology and Water Quality				
The project would install a total of up to 15.1	Same as the project.	Unlike the project, this alternative would	This alternative would reduce some of the	The No Project Alternative would only result in
square miles (9,664 acres) of DCMs. These		require the use of additional chemicals for	potential impacts associated with the project	the 29.8 square miles (19,072 acres) of DCMs
would pose potentially significant impacts to		vegetation growth.	due to the reduced application of water or use	installed pursuant to the 2003 SIP. This
hydrology and water quality, which would be		regetation growth.	of chemicals associated with the application of	alternative would not entail conversion of the
reduced to below the level of significance			gravel. However, this alternative may result in	playa to DCMs via grading and installation of
through the implementation of the mitigation			construction-related release of hazardous	infrastructure for dust control, and
measures Hydrology-1 through -5.			materials from equipment related to gravel	implementation of mitigation measures would
medsures rivarology i unough 5.			hauling and dumping, requiring construction-	not be required for hydrology. However, the
			related mitigation measures.	No Project Alternative would not provide
			related mitigation measures.	control of emissive dust.
				Control of emissive dust.
	Comparative Impact: Neutral	Comparative Impact: Neutral	Comparative Impact: Neutral	Comparative Impact: Negative
Land Use	Comparative impact. Neutral	Comparative impact. Neutral	Comparative impact. (vedual)	Comparative impact. (10gative
The project would install a total of up to 15.1	This alternative would require installation of	Same as the project	This alternative would not be consistent with	The No Project Alternative would only result in
square miles (9,664 acres) of DCMs. These	more infrastructure associated with Shallow	Same as the project.	adopted plans and policies in the project area	the 29.8 square miles (19,072 acres) of DCMs
would not pose potentially significant impacts	Flooding than the multiple DCMs of the		and may therefore result in a greater impact	installed pursuant to the 2003 SIP. This
to land use and planning, but implementation	project. This alternative would require		than the project in terms of land use and	alternative would not be consistent with
of mitigation measure Land Use-1 would	implementation of one mitigation measure to		planning. Therefore, this alternative may	adopted plans and policies in the project area
reduce the potential impacts related to land use	reduce impacts to below the level of		require additional mitigation measures to	and may therefore result in a greater impact
and planning to below the level of significance.	significance.		reduce these potential impacts.	than the project in terms of land use and
and planning to below the level of significance.	significance.		reduce these potential impacts.	planning. Therefore, the No Project Alternative
				may require additional mitigation measures to
				reduce these potential impacts.
	Comparative Impact: Neutral	Comparative Impact: Neutral	Comparative Impact: Negative	Comparative Impact: Negative
Mineral Resources	Comparative impact. Neutral	Comparative impact. Neutral	Comparative impact. Negative	Comparative impact. Negative
The project would install a total of 15.1 square	Same as the project	Same as the project.	This alternative would have the notential for	The No Project Alternative would only result in
1	Jame as the project.	Same as the project.	lesser impacts related to mineral resources	the 29.8 square miles (19,072 acres) of DCMs
miles (9,664 acres) of DCMs. These would pose potentially significant impacts to mineral			because it does not include a provision for the	
				installed pursuant to the 2003 SIP. This
resources, which would be reduced to below			use of high amounts of freshwater resources or	alternative would not entail the construction of
the level of significance through the			the possible channeling of those resources.	new structures to support the DCMs.
implementation of mitigation measures Land			However, the potential increase in recharge to	Implementation of mitigation measures would
Use–1 through –3.			shallow groundwater from precipitation may	not be required.
			affect mineral resources and would require	
			mitigation measures.	
	Commonsting Immedia	Commonstine Insurant N. J. J.	Commonstive Insurent N	Company the Language Do 't'
	Comparative Impact: Neutral	Comparative Impact: Neutral	Comparative Impact: Negative	Comparative Impact: Positive

TABLE V-3
COMPARATIVE ANALYSIS OF IMPACTS FOR PROJECT AND ALTERNATIVES, Continued

Project	All Shallow Flooding	All Managed Vegetation	All Gravel Cover	No Project
Transportation and Traffic				
The project would install a total of up to 15.1 square miles (9,664 acres) of DCMs. These would pose potentially significant impacts to transportation and traffic, which would be reduced to below the level of significance through the implementation of mitigation measures Traffic-1 through -3.		Same as the project.	Same as the project.	The No Project Alternative would only result in the 29.8 square miles (19,072 acres) of DCMs installed pursuant to the 2003 SIP. This alternative would create no additional transportation components that could cause greater damage to existing roadways. Implementation of mitigation measures would not be required.
	Comparative Impact: Neutral	Comparative Impact: Neutral	Comparative Impact: Neutral	Comparative Impact: Positive
Utilities and Service Systems				
square miles (9,664 acres) of DCMs. These would pose potentially significant impacts to	Flooding. This alternative has the potential of using more water resources than the project. The All Shallow Flooding Alternative would	DCM, which would require the installation of more infrastructure related to Managed Vegetation (mainline, submain, lateral and riser pipes, irrigation lines, fertilizer injection, water treatment systems, perimeter berms, and tailwater recycling facilities) than the multiple	impacts to utilities and service systems. Unlike the project, this alternative would not require	the 29.8 square miles (19,072 acres) of DCMs installed pursuant to the 2003 SIP. This alternative would not entail the construction of new water control infrastructure. Implementation of mitigation measures would
	Comparative Impact: Negative	Comparative Impact: Negative	Comparative Impact: Positive	Comparative Impact: Positive

Based on the alternatives analysis provided in Section 4.0 of the EIR, the District determined that the No Project Alternative does not accomplish most of the basic objectives of the project and that it does not qualify as the environmentally superior alternative. The No Project Alternative includes continuing the implementation of the 2003 SIP, which involved the construction of 29.8 square miles of DCMs per year until the NAAQS for PM10 are met. Under the No Project Alternative, the NAAQS would not be achieved by December 31, 2010, and DCMs would not be installed in locations that the District now knows cause or contribute to NAAQS exceedances. In addition, the No Project Alternative would not benefit from air quality improvement measures that are part of the project.

The project meets all project objectives without resulting in impacts that cannot be mitigated to below the level of significance. The All Shallow Flooding and All Managed Vegetation Alternatives analyzed in Section 4.0 of the Draft EIR are also feasible because they meet most of the project objectives, including the primary objective of attaining the NAAQS for PM₁₀ by April 1, 2010, pursuant to the revised 2008 SIP, but do not meet the secondary objective of minimizing the long-term consumption of natural resources, as described below. The No Project Alternative is not feasible since it does not meet the objective of attaining the NAAQS for PM₁₀ by April 1, 2010, although it may minimize consumption of natural resources.

The City of Los Angeles Department of Water and Power (City) is concerned about the diversion of water and the potential loss of other beneficial uses of that water. Therefore, under requirements of the SIP agreements, they have negotiated the use of Moat & Row as a possible allowable DCM more effectively utilizing the water resources at Owens Lake. The City has not provided enough evidence in the record to demonstrate the efficacy of the Moat & Row DCM. The City is the party responsible for the implementation and construction of the DCMs within the proposed area and believes it to be an effective means for dust control. The EIR analyzed the potential for effects on the sixteen (16) CEQA regulated environmental issue areas. Based on the data collected during the analysis and resulting from coordination with the City, the EIR does not make the determination that the Moat & Row DCM is the environmentally superior alternative for dust control on Owens Lake.

The All Shallow Flooding Alternative (Alternative 1) was identified as the environmentally superior alternative due to its proven capability to control PM₁₀ emissions needed to meet NAAQS by April 2010. Alternative 1 also has the ability to minimize impacts to biological resources (especially western snowy plover) because it provides additional wildlife habitat resources. However, it failed to minimize the long-term consumption of natural resources due to its need for more water, and it failed to provide an adequate time interval to perform the site maintenance necessary to ensure reliable operation of the dust control facilities.

The alternatives to the project evaluated in Section 4 are as follows:

No Project Alternative

Alternative 1: All Shallow Flooding (the environmentally superior alternative)

Alternative 2: All Managed Vegetation

Alternative 3: All Gravel Cover

V.A No Project

Description of Alternative: The project components of the No Project Alternative are identical to the project components of the 2003 SIP. They include Shallow Flooding, Gravel Cover, and

Managed Vegetation DCMs (and associated infrastructure) installed over 29.8 square miles of the Owens Lake bed.

Effectiveness in Meeting Project Objectives: The No Project Alternative would not allow the District to meet its primary project objective of attaining the NAAQS for PM₁₀ by April 1, 2010 (Objective 1), since only 29.8 square miles of DCMs would be implemented by that time. The No Project Alternative would not meet the District's secondary objective of revising the approved 2003 SIP by July 1, 2008 (Objective 2). The No Project Alternative may minimize adverse changes to sensitive resources (Objective 3). The No Project Alternative would not have the capability of being implemented with a high technical likelihood of success without delay, since it would not allow for the needed 43 square miles of DCMs to meet attainment of the NAAQS (Objective 4). In addition, the No Project Alternative would not conform to adopted plans, policies, and legal requirements, as required by Objective 5. The No Project Alternative would not allow for flexibility in use of water, thus potentially increasing long-term consumption of natural resources such as water (Objective 6). The No Project Alternative would not minimize the cost per ton of particulate matter controlled (Objective 7) because it may not allow the most efficient DCM construction to take place through installation on the most emissive areas of the lake bed. Finally, the No Project Alternative would not be consistent with the State of California's obligation to preserve and enhance the public trust values associated with Owens Lake. The summary of this alternative's ability to meet the objectives is described in Table V-1.

Comparison of Effects of the Alternative to Effects of the Project: A summary comparison of this alternative to effects of the project is presented in Table V-3. The analysis presented in the table shows that this alternative differs from the project in the area affected by DCMs and the efficiency with which they would be installed. This alternative differs from the project in the assessment of air quality, biological resources, cultural resources, hazards and hazardous materials, hydrology and water quality, land use and planning, mineral resources, transportation and traffic, and utilities and service systems.

- **Air Quality**: As documented in Table V-3, the No Project Alternative would not allow PM₁₀ emissions to be brought into compliance with the NAAQS for PM₁₀ with maximum efficiency, resulting in greater air quality impacts from PM₁₀ emissions.
- Biological Resources: As documented in Table V-3, the No Project Alternative
 would only result in the 29.8 square miles (19,072 acres) of DCMs installed
 pursuant to the 2003 SIP. DCMs would be placed primarily in salt pan areas of
 similar habitat. Any impacts to biological resources would be mitigated to below
 the level of significance.
- **Cultural Resources**: As documented in Table V-3, the No Project Alternative would only result in the 29.8 square miles (19,072 acres) of DCMs installed pursuant to the 2003 SIP. This alternative would not entail conversion of vacant land, including grading, paving, and construction. Therefore, the No Project Alternative would not require implementation of mitigation measures for cultural resources.
- Hazards and Hazardous Materials: As documented in Table V-3, the No Project Alternative would only result in the 29.8 square miles (19,072 acres) of DCMs installed pursuant to the 2003 SIP. The 2003 SIP includes DCMs that would continue the use of potentially hazardous materials associated with the operation of

Managed Vegetation. Any impacts from hazards and hazardous materials would be mitigated to below the level of significance.

- Hydrology and Water Quality: As documented in Table V-3, the No Project Alternative would only result in the 29.8 square miles (19,072 acres) of DCMs installed pursuant to the 2003 SIP. This alternative would not entail conversion of the playa to DCMs via grading and installation of infrastructure for dust control, and implementation of mitigation measures would not be required for hydrology. However, the No Project Alternative would not provide control of emissive dust.
- Land Use and Planning: As documented in Table V-3, the No Project Alternative would only result in the 29.8 square miles (19,072 acres) of DCMs installed pursuant to the 2003 SIP. This alternative would not be consistent with adopted plans and policies in the proposed project area and may therefore result in a greater impact than the proposed project in terms of land use and planning. Therefore, the No Project Alternative may require additional mitigation measures to reduce these potential impacts. Any impacts to land use and planning would be mitigated to below the level of significance.
- Mineral Resources: As documented in Table V-3, the No Project Alternative would only result in the 29.8 square miles (19,072 acres) of DCMs installed pursuant to the 2003 SIP. This alternative would not entail conversion of vacant land, including grading, paving, and construction. No water resources would be necessary for this DCM, thus the mineral lease would be protected against leakage. Therefore, the No Project Alternative would not require implementation of mitigation measures for mineral resources.
- Transportation and Traffic: As documented in Table V-3, the No Project Alternative would only result in the 29.8 square miles (19,072 acres) of DCMs installed pursuant to the 2003 SIP. This alternative would create no additional transportation components that could cause greater damage to existing roadways. Implementation of mitigation measures would not be required.
- Utilities and Service Systems: As documented in Table V-3, the No Project Alternative would only result in the 29.8 square miles (19,072 acres) of DCMs installed pursuant to the 2003 SIP. This alternative would not entail the construction of new water control infrastructure. Implementation of mitigation measures would not be required.

Feasibility: This alternative is not feasible.

Facts: The above feasibility finding is based on the following:

- None of the eight objectives are met in the No Project Alternative (Table V-1).
- The primary goal of the project, to achieve NAAQS for PM₁₀ by April 1, 2010, is not likely to be met by this alternative.

V.B Alternative 1: All Shallow Flooding

Description of Alternative: Alternative 1, All Shallow Flooding, would involve the use of the known and effective Shallow Flooding DCM on the proposed 15.1 square miles, including the 12.7 square miles of supplemental dust control areas. In this alternative, the project elements would be constructed or carried forward with the exception of the Managed Vegetation, Gravel Cover, and Moat & Row DCMs on the project area. Alternative 1 does not include additional components to those described for the project. However, this alternative would require the installation of more infrastructure associated with Shallow Flooding (mainline, submain, lateral, and riser pipes, perimeter berms, and tailwater recycling facilities) than the project. It would also require the use of a greater amount of water.

Effectiveness in Meeting Project Objectives: Alternative 1 would be capable of meeting seven of the eight project objectives identified by the District:

- Implement all Owens Lake bed PM₁₀ control measures by April 1, 2010, pursuant to the revised 2008 SIP to achieve the NAAQS
- Minimize (or compensate for) long-term, significant, adverse changes to sensitive resources within the natural and human environment
- Provide a high technical likelihood of success without substantial delay
- Conform substantially to adopted plans and policies and existing legal requirements
- Minimize the cost per ton of particulate pollution controlled
- Be consistent with the State of California's obligation to preserve and enhance the public trust values associated with Owens Lake

Alternative 1 would only entail the use of one DCM, Shallow Flooding. Implementation of this alternative would result in more consumption of freshwater resources than the project. Thus, Alternative 1 would not be able to meet the objective of minimizing the long-term use of natural resources.

Comparison of Effects of the Alternative to Effects of the Project: A summary comparison of this alternative to effects of the project is presented in Table V-3. The analysis presented in the table shows that this alternative differs from the project in terms of use of water. This alternative differs from the project in the assessment of impacts to biological resources, hazards and hazardous materials, hydrology and water quality, land use and planning, and utilities and service systems. Impacts related to air quality, cultural resources, mineral resources, and transportation and traffic would be similar to the project.

- Air Quality: As documented in Table V-3, Alternative 1 would have the same impacts to air quality as the project. As with the project, the impacts resulting from implementation of Alternative 1 on global climate change related to greenhouse gas emissions may be considered significant and unavoidable.
- **Biological Resources**: As documented in Table V-3, Alternative 1 has the potential to provide more habitat for western snowy plover than the project as it would provide a greater acreage of Shallow Flooding. Any impacts to biological resources would be mitigated to below the level of significance.

- **Cultural Resources**: As documented in Table V-3, Alternative 1 would have the same impacts to cultural resources as the project. Any impacts to cultural resources would be mitigated to below the level of significance.
- Hazards and Hazardous Materials: As documented in Table V-3, Alternative 1 would reduce the use and generation of chemicals that would potentially occur with the project. Therefore, Alternative 1 would not require the use of mitigation measures. Alternative 1 would not result in short- or long-term impacts from hazards and hazardous materials. Any impacts from hazards and hazardous materials would be mitigated to below the level of significance.
- **Hydrology and Water Quality**: As documented in Table V-3, Alternative 1 would not require the use of additional chemicals for vegetation growth but would still require implementation of mitigation measures to reduce impacts to below the level of significance. As with the project, any impacts to hydrology and water quality would be mitigated to below the level of significance.
- Land Use and Planning: As documented in Table V-3, Alternative 1 would require installation of more infrastructure associated with Shallow Flooding than the multiple DCMs of the project. Alternative 1 would require implementation of one mitigation measure to reduce impacts to below the level of significance. Any impacts to land use and planning would be mitigated to a below the level of significance.
- **Mineral Resources**: As documented in Table V-3, Alternative 1 would have the same impacts to mineral resources as the project. Any impacts from mineral resources would be mitigated to a below the level of significance.
- **Transportation and Traffic**: As documented in Table V-3, Alternative 1 would have the same impacts to transportation and traffic as the project. Any impacts to transportation and traffic would be mitigated to below the level of significance.
- Utilities and Service Systems: As documented in Table V-3, Alternative 1 would require installation of more infrastructure associated with Shallow Flooding. Alternative 1 has the potential of using more water resources than the project. Any impacts to utilities and service systems would be mitigated to below the level of significance.

Feasibility: This alternative is feasible.

Facts: The above feasibility finding is based on the following:

• Seven of the eight objectives are met; however, the objective of minimizing the long-term consumption of natural resources is not met with Alternative 1 (Table V-1).

V.C Alternative 2: All Managed Vegetation

Description of Alternative: Alternative 2, All Managed Vegetation, would involve the use of the known and effective Managed Vegetation DCM on the proposed 15.1 square miles, including the 12.7 square miles of supplemental dust control areas (EIR, Figure 4.3-1, *Alternative 2: All Managed Vegetation*). In this alternative, the project elements would be constructed or carried forward with the exception of the Shallow Flooding, Gravel Cover, and Moat & Row DCMs on the project area.

Effectiveness in Meeting Project Objectives: Alternative 2 would allow the District to meet its objective of implementing and attaining the NAAQS for PM₁₀ by April 1, 2010 (Objective 1). The District could also attain its second objective to revise the approved 2003 SIP by July 1, 2008 (Objective 2) through this alternative. This alternative would minimize (or compensate for) long-term, significant, adverse changes to sensitive resources within the natural and human environment (Objective 3), and conform substantially to adopted plans and policies and existing legal requirements (Objective 5). In addition, this alternative would minimize the long-term consumption of natural resources (Objective 6) and allow the District to meet it final objective of consistency with the State of California's obligation to preserve and enhance the public trust values associated with Owens Lake (Objective 8).

This alternative would not enable the District to meet it objective to provide a high technical likelihood of success without substantial delay (Objective 4) because the amount of time needed for plants to reach the level of growth required for dust control may be difficult to achieve by the determined date of April 2010. This alternative would not allow the District to meet is objective to minimize the cost per ton of particulate pollution controlled (Objective 7) due to the fact that implementation of Managed Vegetation would result in a higher cost per acre. The summary of this alternative's ability to meet the objectives is described in Table V-1.

Comparison of Effects of the Alternative to Effects of the Project: A summary comparison of this alternative to effects of the project is presented in Table V-3. The analysis presented in the table shows that this alternative differs from the project in its impacts to biological resources, hydrology and water quality, and utilities and service systems. Impacts related to air quality, cultural resources, hazards and hazardous materials, land use and planning, mineral resources, and transportation and traffic would be similar to the project.

- **Air Quality**: As shown in Table V-3, Alternative 2, like the project, would result in potentially significant impacts to air quality due to construction-related activities. As with the project, the impacts of Alternative 2 on global climate change may be considered significant and unavoidable.
- Biological Resources: As documented in Table V-3, Alternative 2 would have greater impacts on biological resources than the project and would require the incorporation of mitigation measures to reduce impacts to below the level of significance.
- **Cultural Resources:** As documented in Table V-3, Alternative 2 would result in a substantial adverse change in the significance of a paleontological resource or site or unique geological feature. As with the project, potentially significant impacts related to cultural resources resulting from Alternative 2 would be reduced to below the level of significance through the incorporation of mitigation measures.

- Hazards and Hazardous Materials: As documented in Table V-3, Alternative 2 would result in potentially significant impacts related to hazards and hazardous materials. As with the project, potentially significant impacts related to hazards and hazardous materials resulting from Alternative 2 would be reduced to below the level of significance through the incorporation of mitigation measures.
- Hydrology and Water Quality: As documented in Table V-3, Alternative 2 would result in potentially significant impacts related to hydrology and water quality. This alternative would reduce potential impacts from Moat & Row and Shallow Flooding DCMs in terms of flood risk, but would have the potential to affect water quality.
- Land Use and Planning: As documented in Table V-3, Alternative 2 would result in potentially significant impacts related to land use and planning. As with the project, potentially significant impacts related to land use and planning resulting from Alternative 2 would be reduced to below the level of significance through the incorporation of a mitigation measure.
- **Mineral Resources:** As documented in Table V-3, Alternative 2 would result in potentially significant impacts related to mineral resources. As with the proposed project, potentially significant impacts related to mineral resources resulting from Alternative 2 would be reduced to below the level of significance through the incorporation of mitigation measures.
- Transportation and Traffic: As documented in Table V-3, Alternative 2 would result in potentially significant impacts related to transportation and traffic. As with the proposed project, potentially significant impacts related to transportation and traffic resulting from Alternative 2 would be reduced to below the level of significance through the incorporation of mitigation measures.
- vesult in potential impacts to utilities and service systems. This alternative 2 may result in potential impacts to utilities and service systems. This alternative would entail the use of one DCM, which would require the installation of more infrastructure related to Managed Vegetation (mainline, submain, lateral and riser pipes, irrigation lines, fertilizer injection, water treatment systems, perimeter berms, and tailwater recycling facilities) than the multiple DCMs of the project. The Managed Vegetation DCM uses approximately 1.2 acre-feet/acre, which is greater than that of the project with the inclusion of Moat & Row. Thus, implementation of this alternative has the potential to use more water resources than the project.

Feasibility: This alternative is feasible.

Facts: The above feasibility finding is based on the following:

- Six of the eight objectives are met in the All Managed Vegetation Alternative (Table V-1).
- The All Managed Vegetation Alternative would have grater significant impacts related to biological resources and utilities and service systems than the project.

V.D Alternative 3: All Gravel Cover

Description of Alternative: Alternative 3, All Gravel Cover, would involve the use of the known and effective Gravel Cover DCM on the proposed 15.1 square miles, including the 12.7 square miles of supplemental dust control areas.

Effectiveness in Meeting Project Objectives: This alternative would meet the objective of implementing all Owens Lake bed PM₁₀ control measures by April 1, 2010, pursuant to the revised 2008 SIP to achieve the NAAQS. Alternative 3 would meet the objective to revise the approved 2003 SIP by July 1, 2008. Gravel Cover would meet the objective of minimizing the log-term consumption of natural resources. This alternative would not minimize the long-term significant, adverse changes to sensitive resources as it would essentially cover all potential resources. It would not provide a high likelihood of success as it would require large amounts of gravel. Available sources of aggregate are difficult to obtain. Gravel Cover would not conform to adopted plans and policies. This alternative would not minimize the cost per ton of particulate pollution controlled since there are high costs associated with mining, processing, and hauling the aggregate. In addition, this alternative is incompatible with the State of California's public trust values.

Comparison of Effects of the Alternative to Effects of the Project: A summary comparison of this alternative to the effects of the project is presented in Table V-3. This alternative differs from the project in the assessment of biological resources, cultural resources, hazards and hazardous materials, hydrology and water quality, land use and planning, mineral resources, and utilities and service systems. Impacts related to air quality and transportation and traffic would remain similar to the project.

- Air Quality: As documented in Table V-3, Alternative 3, as with the project, would result in potentially significant impacts related to air quality. It cannot be determined to a reasonable degree of certainty that Alternative 3 would not result in a cumulatively considerable, incremental contribution to the significant cumulative impact of global climate change. The impacts of Alternative 3 on global climate change may be considered significant and unavoidable.
- Biological Resources: As documented in Table V-3, Alternative 3 would have the
 greatest impacts to biological resources when compared with all other alternatives,
 including the project. This alternative would have greater impacts to biological
 resources than the project, requiring a higher level of implementation of mitigation
 measures for loss of habitat and impacts to sensitive resources. As with the project,
 potentially significant impacts would be mitigated to below the level of
 significance.
- **Cultural Resources**: As documented in Table V-3, Alternative 3 would cause a substantial adverse change in the significance of a paleontological resource or site or unique geological feature. As a result, implementation of Alternative 3 would result in significant impacts related to archaeological and historical resources. This alternative would entail heavy equipment and the placement of gravel on the lake surface, resulting in significant adverse impacts to cultural resources.
- Hazards and Hazardous Materials: As documented in Table V-3, Alternative 3
 would reduce the potential impacts from release of hazards and hazardous
 materials resulting from the project. This alternative would entail reduced use of

chemicals but may still result in release of hazardous materials from construction equipment related to gravel hauling and dumping. However, potentially significant impacts related to hazards and hazardous materials resulting from Alternative 3 would be mitigated to below the level of significance.

- Hydrology and Water Quality: As documented in Table V-3, Alternative 3 would reduce some of the potential impacts associated with the project. However, this alternative may result in construction release of hazardous materials requiring construction-related mitigation measures. This alternative would reduce some of the potential impacts associated with the project due to the reduced application of water or use of chemicals. However, this alternative may result in construction-related release of hazardous materials from equipment related to gravel hauling and dumping, requiring construction-related mitigation measures.
- Land Use and Planning: As documented in Table V-3, Alternative 3 may result in significant impacts related to land use and planning. Implementation of this alternative would not be consistent with adopted plans and policies in the project area and may therefore result in a greater impact than the project in terms of land use and planning. Therefore, Alternative 3 may require additional mitigation measures to reduce these potential impacts.
- Mineral Resources: As documented in Table V-3, Gravel Cover would not result in significant impacts related to hydrologic issues of mineral resources. No water resources would be necessary for this DCM, thus the mineral lease would be protected against leakage. Therefore, this alternative would not require implementation of mitigation measures for mineral resources related to protection of the mineral lease from leakage.
- Transportation and Traffic: As documented in Table V-3, Alternative 3 would have the potential for greater impacts related to transportation and traffic than the project. Alternative 3 would be expected to increase road damage to related roadways during transport of the higher volumes of gravel to the project site. As with the project, potentially significant impacts related to transportation and traffic would be mitigated to below the level of significance.
- **Utilities and Service Systems**: As documented in Table V-3, Gravel Cover would not result in potential impacts to utilities and service systems. Unlike the project, this alternative would not require the application of water. Therefore, this alternative may utilize less water than the project and reduce those anticipated impacts from the project. Any impacts to utilities and service systems would be mitigated to below the level of significance.

Feasibility: This alternative is not feasible.

Facts: The above feasibility finding is based on the following:

The Gravel Cover Alternative would be capable of accomplishing only three of the eight objectives identified by the District:

- Implement all Owens Lake bed PM₁₀ control measures by April 1, 2010, pursuant to the revised 2008 SIP to achieve the NAAQS
- Revise the approved 2003 SIP by July 1, 2008
- Minimize the long-term consumption of natural resources

SECTION VI FINDINGS REGARDING MITIGATION MONITORING PROGRAM

VI.A REQUIREMENTS OF MITIGATION MONITORING PROGRAM

Section 21081.6 of the Public Resources Code, the California Environmental Quality Act (CEQA), requires that when a public agency is making the findings required by Sections 21081, the public agency shall adopt a mitigation reporting or monitoring program for the changes made to the project or conditions of project approval, adopted in order to mitigate or avoid significant effects on the environment.

The Great Basin Unified Air Pollution Control District (District) hereby finds that the Mitigation Monitoring Program meets the requirements of Section 21081.6 of the Public Resources Code by providing a monitoring program designed to ensure compliance during project implementation with mitigation measures adopted by the District.

SECTION VII FINDINGS REGARDING LOCATION AND CUSTODIAN OF DOCUMENTS

VII.A LOCATION AND CUSTODIAN OF DOCUMENTS

Section 15091(e) of the California Code of Regulations, State of California Environmental Quality Act (CEQA) Guidelines requires the public agency to specify the location and custodian of the documents or other materials that constitute the record of proceedings upon which the decision is based. Section 10.0 of the Environmental Impact Report (EIR) contains a list of all references used in the preparation of the environmental analysis. Unless otherwise noted, reference materials are located at the office of the Great Basin Air Pollution Control District (the District), which shall also serve as the custodian of the documents constituting the record of proceedings upon which the District has based its decision related to the project. The designated location and custodian of documents is as follows:

Great Basin Unified Air Pollution Control District Attn: Mr. Theodore D. Schade, APCO 157 Short Street, Bishop, California 93514

References not available from the District are located at Sapphos Environmental, Inc. by contacting:

Mr. Tony Barranda, Project Manager Environmental Specialist Sapphos Environmental, Inc. 133 Martin Alley Pasadena, California 91105 (626) 683-3547

SECTION VIII CERTIFICATION REGARDING INDEPENDENT JUDGMENT

Pursuant to Section 21082.1(c) of the Public Resources Code, the Governing Board of the Great Basin Unified Air Pollution Control District (District) certifies that the District has independently reviewed and analyzed the Final Subsequent Environmental Impact Report (EIR) on behalf of the District. The District and other District staff reviewed the Draft Subsequent EIR prepared by Sapphos Environmental, Inc. and required changes to that document prior to circulation for public review. The Draft Subsequent EIR circulated for public review reflected the independent judgment of the District. The Final Subsequent EIR similarly has been subject to review and revision by District staff and reflects the independent judgment of the District.

The Final Subsequent Environmental Impact Report (EIR) identified and discussed significant impacts to air quality, biological resources, cultural resources, hazards and hazardous materials, hydrology and water quality, land use and planning, mineral resources, transportation and traffic, and utilities and service systems that are expected as a result of implementing the 2008 Owens Valley PM₁₀ Planning Area Demonstration of Attainment State Implementation Plan (SIP). With the implementation of the mitigation measures specified in the Final Subsequent EIR, impacts to biological resources, cultural resources, hazards and hazardous materials, hydrology and water quality, land use and planning, mineral resources, transportation and traffic, utilities and service systems will be mitigated to below the levels of significance.

The Final Subsequent EIR determined that the project is expected to result in significant unavoidable impacts to air quality. The recommended mitigation measures reduce impacts on air quality to below the level of significance, with the exception of greenhouse gas (GHG) emissions, which would have the potential to add to the overall global GHG emissions during construction, thus causing potential impacts on global climate change. The GHG emissions during construction would be a significant unavoidable adverse impact of the project.

The Great Basin Unified Air Pollution Control District (District) Governing Board determined that the environmental benefits of implementing the project outweigh and override the unavoidable adverse effects of the project. The District Board has determined that the benefits of the project, when balanced against all adverse effects, cause those effects remaining after mitigation to be acceptable due to the following considerations:

- Achievement of the project objectives requires construction of previously approved dust control measures (DCMs) and one new DCM to meet the National Ambient Air Quality Standards (NAAQS) by 2010 of the largest single source of particulate matter (PM10) in the United States. Such improvements require the use of heavy construction equipment that generates GHG emissions. Incorporation of the recommended mitigation measures substantially reduces GHG emissions during construction. The net overall benefit of the control of PM10 for the Owens Lake bed is a far greater benefit in the end than the short-term GHG emissions resulting from implementation of the project.
- The improvements achieved through the construction of the project DCMs will provide reduced fugitive dust emissions to over 17,000 Inyo County residents, which overrides the short-term construction impacts on air quality.
- Achievement of PM₁₀ reduction to meet NAAQS by 2010 would have a widespread benefit to property and open space recreational areas and parks in close proximity to Owens Lake. Sites such as the Golden Trout Wilderness within the Inyo National Forest, Sequoia National Park, and Death Valley National Park would have better overall air quality for their recreational users, thereby enhancing the recreational availability and experience of these areas for visitors and nearby residents.
- In the absence of these additional areas of DCMs, there is no feasible way to accomplish the reduction of PM10 through implementation of all Owens Lake bed

PM₁₀ control measures by April 1, 2010, pursuant to the revised 2008 SIP to achieve the NAAQS without the addition of GHG emissions.

- The District Board has ensured that the project complies with Assembly Bill (AB) 32 goals to reduce GHG emissions to 1990 levels by estimating the GHG emissions and adopting feasible measures to avoid or reduce those emissions to the maximum extent practicable.¹
- The State Attorney General purports that neither the California Environmental Quality Act (CEQA) nor the regulations authorize a lack of agency-adopted standard as a basis for determining that a project's potential cumulative impact is not significant. The District Board's inclusion of mitigation measures for GHG emissions exceeds the State Attorney General's current regulation and expectations regarding CEQA-defined cumulative impacts related to GHG emissions.²
- CEQA requires that Lead Agencies inform decision makers and the public regarding
 potential significant environmental effects of proposed projects, feasible ways that
 environmental damage can be avoided or reduced through the use of feasible
 mitigation measures and/or project alternatives, and reasons why the Lead Agency
 approved a project if significant environmental effects are involved (State CEQA
 Guidelines §15002).
- The substantial evidence that mitigation measures Air-3, Air-4, Air-5, and Air-6 are capable of reducing GHG emissions regulated pursuant to the NAAQS is provided in the South Coast Air Quality Management District Air Quality Handbook³ and the California Climate Action Registry.⁴
- In conjunction with approval of this project, the District Board has committed to the long-term reduction of PM₁₀ emissions for the entire Owens Valley and will continue to coordinate efforts to ensure that the overall air quality of the area is greatly improved.
- Implementation of the project would provide ancillary public trust benefits to a host
 of plant communities and wildlife in the Owens Valley, including snowy plovers
 and other water foul, because of the presence of freshwater on the lake and shallow
 flood areas.

¹ Association of Environmental Professionals. 29 June 2007. *Alternative Approaches to Analyzing Greenhouse Gas Emissions and Global Climate Change in CEQA Documents*. Sacramento, CA. Available at: http://www.califaep.org/userdocuments/File/AEP Global Climate Change June 29 Final.pdf

² State of California Office of the Attorney General. 7 May 2007. Comments on the ConocoPhillips Rodeo Refinery Expansion Project and Final Environmental Impact Report (File # LP052048). Letter from Jamie Jefferson to the Contra Costa County Planning Commission. Oakland, CA.

³ South Coast Air Quality Management District. April 1993. CEQA Air Quality Handbook. Diamond Bar, CA.

⁴ California Climate Action Registry. March 2007. *California Climate Action Registry General Reporting Protocol:* Reporting Entity-wide Greenhouse Gas Emissions. Version 2.2. Los Angeles, CA. Available at: http://www.climateregistry.org/docs/PROTOCOLS/GRP%20V2-March2007_web.pdf

Based on the foregoing findings and the information contained in the record, the Great Basin Unified Air Pollution Control District (District) has made the following findings with respect to the significant impacts on the environment resulting from the 2008 Owens Valley PM₁₀ Planning Area Demonstration of Attainment State Implementation Plan (SIP) pursuant to Section 15091 of the State of California Environmental Quality Act (CEQA) Guidelines.

- Changes or alterations have been required in, or incorporated into, the project that avoid or substantially lessen the significant environmental effects as identified in the Final Subsequent Environmental Impact Report (EIR).
- The changes and alterations are within the responsibility and jurisdiction of the
 District. The District may designate an official representative, agent, or authorized
 party to implement certain measures as part of preconstruction, construction, and
 postconstruction activities. Pursuant to Section 15091(c) of the State CEQA
 Guidelines, the Mitigation Monitoring Program identifies responsible agencies for
 the mitigation measures.
- The mitigation measures identified in the Final Subsequent EIR are feasible and will be required as conditions of approval.

Based on the foregoing findings and the substantial evidence contained in the record, and as conditioned by the foregoing findings:

- All significant effects on the environment due to the project have been eliminated or substantially lessened where feasible.
- Any remaining significant effects on the environment found to be unavoidable are acceptable due to the overriding concerns set forth in the foregoing Statement of Overriding Considerations.