

BOARD ORDER 130916-01

**ORDER OF THE GOVERNING BOARD OF THE
GREAT BASIN UNIFIED AIR POLLUTION CONTROL DISTRICT
AMENDING THE 2008 OWENS VALLEY PM₁₀ PLANNING AREA
DEMONSTRATION OF ATTAINMENT STATE IMPLEMENTATION PLAN
TO INCORPORATE REVISIONS TO THE DATE REQUIRED FOR THE IMPLEMENTATION OF
BEST AVAILABLE CONTROL MEASURES FOR THE "PHASE 7A" DUST CONTROL AREAS,
MODIFYING CERTAIN BEST AVAILABLE CONTROL MEASURE DESCRIPTIONS AND
MODIFYING PROVISIONS FOR PM₁₀ CONTROL IN THE KEELER DUNES**

September 16, 2013

WHEREAS, on February 1, 2008, the Governing Board of the Great Basin Unified Air Pollution Control District ("District"), an agency organized pursuant to Division 16, Part 3, Chapter 3 of the California Health and Safety Code, approved the *2008 Owens Valley PM₁₀ Planning Area Demonstration of Attainment State Implementation Plan* ("2008 SIP") and its associated implementing Board Order No. 080128-01 ("SIP Order"). The SIP Order (without its exhibits) is attached as Attachment 1. The District certified a Supplemental Environmental Impact Report ("2008 SEIR") for the 2008 SIP and SIP Order.

WHEREAS, on May 17, 2010, the District Governing Board adopted the *2010 PM₁₀ Maintenance Plan and Redesignation Request for the Coso Junction Planning Area* ("2010 Coso Plan") which incorporated the SIP Order as a maintenance measure to ensure compliance with the federal PM₁₀ standard is maintained in the future.

WHEREAS, the 2008 SIP, SIP Order and 2010 Coso Plan describe a dust control project, which includes an area known as Phase 7a. On March 17, 2011, the District Governing Board issued Stipulated Order for Abatement, Order No. 110317-01 ("Order 110317-01"). Order 110317-01 requires LADWP to construct the Phase 7a dust control project on approximately 3.1 square miles of the Owens Lakebed, which includes six Dust Control Areas ("DCAs"), T37-1, T37-2, T1A-3, T1A-4, T-32-1 and T12-1 ("Phase 7a areas"). Order 110317-01 allows LADWP to transition approximately 3.0 square miles of existing dust control areas ("Transition Areas").

WHEREAS, Order 110317-01 requires LADWP to install Best Available Control Measures ("BACM") in DCAs T37-1, T37-2, T1A-3, T1A-4 and T-32-1 and provides for LADWP to change BACM in the Transition Areas to conserve water, by no later than December 31, 2013, and to install BACM in the T12-1 tillage test area by May 1, 2016. (*See also* Governing Board Order No. 120206-07.) Under the Original Abatement Order, all Phase 7a Areas and Transition Areas controlled by Managed Vegetation BACM are to achieve fully-compliant BACM vegetation cover by December 31, 2015. Installation of BACM on the Phase 7a DCAs and Transition Areas entails ground disturbing activities such as grading, planting, dirt moving, boring, trenching and road, berm, pipeline and other construction.

WHEREAS, the LADWP was unable to meet the October 1, 2010 extended deadline to deploy BACM on the Phase 7a areas and on March 17, 2011, the District Governing Board issued Stipulated Order for Abatement, Order No. 110317-01 to the LADWP. The Order No. 110317-01 is attached as Attachment 2. Order No. 110317-01 requires LADWP to deploy BACM on the Phase 7a areas no later than December 31, 2013, and to install BACM in the T12-1 tillage test area by May 1, 2016. (*See also* Governing Board Order No. 120206-07.) Under Order No. 110317-01, all Phase 7a Areas and Transition Areas controlled by Managed Vegetation BACM are to achieve fully-compliant BACM vegetation cover by December 31, 2015.

WHEREAS, subsequently, the LADWP determined that it would be unable to meet the deadlines set forth in Order No. 110317-01. Paragraph 5 of the Order outlines circumstances that allow LADWP to seek an extension of time to comply with the Order. In compliance with paragraph 5 of the Order, LADWP's Board of Water and Power Commissioners adopted a resolution on January 11, 2013 (Resolution No. 013-157), finding that LADWP has acted in good faith to comply with the Original Abatement Order, but has been impeded by the unexpected discovery of cultural resources in the Phase 7a areas.

WHEREAS, in compliance with paragraph 6 of the Original Abatement Order, LADWP notified the District's Air Pollution Control Officer ("APCO") of the resolution and its intention of requesting additional time to comply with the Original Abatement Order. On February 4, 2013, per paragraph 6 of the Original Abatement Order, the APCO notified the LADWP that he did not concur with LADWP's Resolution No. 013-157. Pursuant to paragraph 6 of the Original Abatement Order, LADWP requested a meeting with subcommittees of LADWP Commissioners and District Governing Board members to attempt to develop a non-binding recommendation to the full District Governing Board as to whether and under what conditions the LADWP should be granted additional time to complete the Phase 7a BACM.

WHEREAS, in accordance with Paragraph 6(c)(ii) of Order 110317-01, designated members of the LADWP and District Boards engaged in meetings ("Settlement Meetings") in April, May and June 2013 to resolve the issues related to Order 110317-01. During the Settlement Meetings, the agency representatives also agreed to recommend to their respective Boards further modifications to certain provisions of the approved BACMs and resolve a dispute related to a possible future District order requiring the LADWP to control emissions from the Keeler Dunes. WHEREAS, the Settlement Meetings resulted in the *Phase 7a and Keeler Dunes Settlement Terms* agreement dated June 25, 2013 ("Term Sheet") that was approved by LADWP's Water and Power Commissioners on June 26, 2013, and the District's Governing Board on June 27, 2013. The Term Sheet is attached as Attachment 3.

WHEREAS, the Term Sheet required the District and the LADWP to enter into a Settlement Agreement that formalizes and approves the provisions of the Term Sheet. On August 19, 2013 and [REDACTED], 2013, the District and LADWP, respectively, approved the *Settlement Agreement and Release Between the Great Basin Unified Air Pollution Control District and City of Los Angeles Acting by and Through its Department of Water and Power Concerning Modification to Phase 7a Stipulated Order for Abatement No. 110317 and Keeler*

Dunes Project (“Settlement Agreement”). The Settlement Agreement is attached as Attachment 4.

WHEREAS, the District and LADWP agreed in the Term Sheet and Settlement Agreement to, among other things, modify Order 110317-01, to extend the compliance deadlines, and also to address the discovery of cultural resources in the Phase 7a area. On [REDACTED], 2013, the Governing Board adopted Order No. 130819-01 – *Findings and Decision of District Governing Board Upon Hearing for Stipulated Modification to Stipulated Order for Abatement 110317-01* which modified Order 110317-01. Order 130819-01 is attached as Attachment 5.

WHEREAS, the Term Sheet (Section II.B.1.c.) and Settlement Agreement (Section II.b.iii.) require that “The District shall amend the 2008 SIP and Board Order 080128-01 consistent with the terms of this Agreement, ... and shall request the United States Environmental Protection Agency (“EPA”) and CARB [California Air Resources Board] to approve the amended SIP.”

THEREFORE, as required by the Term Sheet and Settlement Agreement, the District Governing Board hereby makes the following amendments to the 2008 SIP and SIP Order, and 2010 Coso Plan and directs the Board Clerk to promptly submit the amendments to the California Air Resources Board for approval and forwarding to the U.S. Environmental Protection Agency. It is the intention of the Governing Board to only make such amendments so as to implement the terms and provisions of the Term Sheet, Settlement Agreement and Abatement Order No. 130819-01. The Governing Board agrees and understands that the Term Sheet, Settlement Agreement and Order 130819-01 do not result in any waiver by the District or LADWP of arguments raised in other proceedings or disputed issues not covered in those documents, including but not limited to the District’s Supplemental Control Requirements Determination (“SCRD”) process. The District Governing Board has not made any findings or conclusions, as required by Paragraph 6.c.iv. of Order 110317-01, as to whether the LADWP has proved by a preponderance of evidence that it acted in good faith to meet the deadlines set forth in Order 110317-01. In addition, the District Governing Board has not made any findings or issued any order concluding that the Keeler Dunes are anthropogenic in nature and/or caused by LADWP’s activities in the production, diversion, storage, or conveyance of water. The District Governing Board has not made any findings or issued any order concluding that LADWP is liable for, or that LADWP’s activities in the production, diversion, storage, or conveyance of water has caused or contributed to any violations of state or federal air quality standards in the Keeler Dunes or other dunes areas, including the Swansea and Olancho Dunes, in the vicinity of Owens Lake.

The amendments to the 2008 SIP, SIP Order and 2010 Coso Plan are as follows:

A. PHASE 7a DUST CONTROLS

1. **Deadline Extensions**: All of the locations in the 2008 SIP, SIP Order and 2010 Coso Plan that discuss the deadlines for constructing dust controls in the Moat & Row Areas (now known as the Phase 7a areas) shall be revised to be consistent with the new timeframes

discussed below in subdivisions (a)-(d) and the following shall be added to both the 2008 SIP, SIP Order and 2010 Coso Plan:

- a. With the exceptions noted below, the deadline for LADWP to construct all infrastructure and install fully-compliant BACM (other than Managed Vegetation BACM) in those portions of the “2008 Dust Control Area” (SIP Sec. 7.3 and SIP Order/2010 Coso Plan Appendix C Paragraph Nos. 2-3) known as the “Phase 7a” areas, which total approximately 3.1 square miles, shall be December 31, 2015. All infrastructure and plant materials for Phase 7a areas controlled with Managed Vegetation BACM will be installed by December 31, 2015. The Phase 7a areas are a portion of the 2008 Dust Control Area referred to in the 2008 SIP as “Moat & Row Dust Control Areas” and are shown and described in Attachment 6.
 - b. The deadline to achieve fully-compliant BACM vegetation cover for those Phase 7a areas controlled by the Managed Vegetation BACM shall be December 31, 2017. (See 2008 SIP Section 7.3 SIP Order paragraph 3 and 2010 Coso Plan Appendix C paragraph 3.)
 - c. The extensions of the deadlines set forth in sections A.1.a. and A.1.b. shall be contingent upon all of the following:
 - (1) LADWP timely receiving from California State Lands Commission (“CSLC”) and all other agencies all of the required permits, approvals, or leases necessary to allow LADWP to construct BACM within the deadlines set forth in sections A.1.a. and A.1.b..
 - (2) The timely removal from the Phase 7a areas of all California Register of Historical Resources (“CRHR”)-eligible areas plus necessary buffer areas, referred to as the “Eligible Cultural Resource (“ECR”) areas.” The ECR areas initially consist of 277 acres of the Phase 7a areas (the “Initial Phase 7b Areas”). The Initial ECR areas and any newly discovered CRHR-eligible and necessary buffer areas shall comprise the “Phase 7b” areas. The Phase 7b Areas are not limited are not limited to the initial 277 acres.
 - (3) Order 110317-01 being revised to state explicitly that any newly discovered potential ECRs in the Phase 7a areas are considered a condition of force majeure under paragraph 5(d) of that Order.
 - d. If any one of the above contingencies is not met, LADWP may seek further extensions of time under the provisions of paragraph 5 of the 110317-01, as modified by the Order 130819-01, and paragraphs 6 and 22 of Order 110317-01, which shall not be unreasonably denied by the District.
2. **Removal of Phase 7b Areas:** All of the locations in the 2008 SIP and SIP Order that discuss or identify the boundaries of Moat & Row (now Phase 7a) shall be revised to

recognize that LADWP shall not be required to install dust controls in the Phase 7b areas under the provisions of the 2008 SIP, SIP Order, 2010 Coso Plan or the Orders 110317-01 and 130819-01, and the following shall be added to the 2008 SIP, SIP Order and 2010 Coso Plan:

If the District Governing Board subsequently decides to order LADWP to install dust controls in Initial Phase 7b Areas, the District Governing Board will do so by issuing a new Board order or orders. The new Board order or orders shall include deadlines for constructing dust controls that accommodate project circumstances. Any future order or orders issued by the District for Phase 7b will give due consideration to the shared goal of the District and LADWP to control air pollution and decrease the use of water as a dust control measure at Owens Lake. LADWP is not waiving its right to contest the new Board order or orders.

3. The existing figures in the 2008 SIP, including Figure 2.3 and 7.1, and SIP Order/2010 Coso Plan Appendix C Exhibit 1 shall be revised to identify the Moat & Row Areas as "Phase 7a" and the existing shallow flooding areas to be converted as part of the Phase 7a project as "transition BACM."

B. BEST AVAILABLE CONTROL MEASURE (BACM) MODIFICATIONS

1. **Reduced Thickness Gravel:** All of the locations in the 2008 SIP and SIP Order that discuss the gravel BACM shall be revised to recognize that the Governing Board approves "Reduced Thickness Gravel" as an approved type of the existing Gravel Blanket BACM. Reduced Thickness Gravel is defined per the 2008 SIP Section 5.4 and SIP Order/2010 Coso Plan Appendix C paragraph 17 except that the gravel thickness is reduced from a minimum of four inches (4") to two inches (2") and all reduced thickness gravel areas shall be underlain with geotextile fabric. All geotextile fabric shall be Class I woven or nonwoven geotextile fabric meeting the minimum specifications set forth in the National Standard Materials Specification "Material Specification 592—Geotextile" (National Engineering Handbook, Chapter 3, Part 642), or equivalent as approved by the Air Pollution Control Officer.
2. **Brine Shallow Flood:** The following shall be added to the 2008 SIP, SIP Order and 2010 Coso Plan Appendix C: The Governing Board approves "Brine Shallow Flooding BACM" as a subcategory of Shallow Flooding BACM. Brine Shallow Flooding is defined per the 2008 SIP except that the water used for dust control contains elevated levels of dissolved salts. The District and LADWP acknowledge and agree that the District's approval of Brine Shallow Flooding BACM shall not make LADWP liable for maintenance of the natural Brine Pool on Owens Lake. The existing "natural Brine Pool" is defined as those areas at Owens Lake below elevation 3,553.55 feet.
3. Remove the following from Section 2.1.1 in the 2008 SIP: "If the Moat & Row control measures cannot achieve the necessary PM₁₀ control efficiency for the indicated areas

(ranges from 50% to 99%), the unsuccessful Moat & Row areas must be converted to Shallow Flooding.”

4. The following shall be added to both the 2008 SIP and SIP Order: The District shall work with LADWP on accelerated testing schedules and BACM approval, if warranted, for Roughness Elements and Tillage in soil type areas where these controls can be applied. The District Governing Board shall consider BACM approval of these candidate measures within one year. If the accelerated testing does not result in approved BACM for the candidate measures, the District’s and LADWP’s respective Boards shall jointly assess why the accelerated testing did not result in the District Board’s BACM approval. The District and LADWP shall also work on accelerated testing schedules and BACM approvals for other forms of BACM.
5. Revise the first sentence in Section 7.9 of the 2008 SIP: “Existing BACM controls may be replaced with other BACM to help reduce implementation and operating costs and water usage. The District and LADWP shall make every effort to develop, approve and deploy high-confidence, waterless dust control measures in all areas where dust controls are ordered on Owens Lake.”

C. **KEELER DUNES**

1. **2008 SIP Section 6.4** – The third paragraph in Section 6.4 of the 2008 SIP titled “ATTAINMENT DEMONSTRATION” shall be removed and replaced with the following:

Emissions from the Keeler dunes were excluded from the simulations to assess attainment. As discussed in more detail in Section 7.5, the District will work with federal, state and local agencies to develop a plan to control dust emissions from the Keeler dunes. Any PM₁₀ control measures necessary for the Keeler dunes will be implemented by December 31, 2015.

2. **2008 SIP Section 7.5** – Section 7.5 of the 2008 SIP titled “DUST CONTROLS FOR KEELER DUNES” shall be removed and replaced with the following:

The Keeler dunes are located northwest of the town of Keeler above the 3,600-foot elevation that defines the regulatory Owens Lake shoreline (Figure 4.14). The total area covered by deep sand is about 0.64 square kilometers (157 acres). Figure 7.4 shows a sand dune about one-half mile north of Keeler in the Keeler dune field that formed across the abandoned State highway. Sensits and sand catchers have been installed in the Keeler dunes so that their PM₁₀ emissions can be modeled, and not attributed to lakebed sources.

Due to their proximity to the town of Keeler, dust emissions from the Keeler dunes contribute significantly to exceedances of the federal PM₁₀ standard in the town. After all the lakebed sources that cause or contribute to PM₁₀ standard exceedances

are controlled, the Keeler dunes area is expected to be the only significant remaining dust source that causes exceedances of the PM₁₀ standard in the planning area.

In June 2013, in an agreement with the LADWP, the District committed to implement a PM₁₀ control project on the Keeler Dunes with funding provided by the LADWP. The District will work with federal, state and local agencies to develop and implement a plan to control dust emissions from the Keeler dunes. In addition, the District forever releases LADWP from any and all liability under any and all federal, state and local laws that the District can enforce and settle, including but not limited to the Health and Safety Code, those portions of the 2008 SIP and SIP Order that can be enforced by the District, and fugitive dust emission rules, for dust emissions, regardless of origin, from the Keeler Dunes, including but not limited to portions of the Keeler Dunes owned by LADWP. The District forever agrees not to request, encourage, or join in an enforcement action by any other agency against LADWP related to dust emissions from the Keeler Dunes, regardless of origin, including but not limited to portions of the Keeler Dunes owned by LADWP. A map defining the geographical boundaries of the Keeler Dunes is attached as Attachment 7 and incorporated into the 2008 SIP, SIP Order and 2010 Coso Plan. Keeler Dunes controls will be implemented by December 31, 2015.

The other major dune area, the Olancha dunes, is shown in Figure 4.14 and was not monitored or included in the model. The Olancha dunes are believed to be primarily natural dunes. If PM₁₀ violations are attributed to the Olancha dunes, these violations will be treated as natural events and a Natural Events Action Plan will be developed and implemented in accordance with the USEPA guidance and rules on Exceptional Events (see Section 2.2.3.3). In addition, the District forever releases LADWP from any and all liability under any and all federal, state, and local laws that the District can enforce and settle, including but not limited to the Health and Safety Code, those portions of the 2008 SIP and SIP Order that can be enforced by the District, and fugitive dust emission rules, for dust emissions from the Other Dunes Areas in the vicinity of Owens Lake, regardless of origin, including but not limited to portions of the Other Dunes Areas that may be owned by LADWP. The District forever agrees not to request, encourage, or join in an enforcement action by any other agency against LADWP related to dust emissions from the Other Dunes Areas in the vicinity of Owens Lake, regardless of origin. The LADWP is not released from liability for dust emissions resulting from any future groundwater pumping by LADWP at or below the 3600-foot contour in the Owens Lake area. Maps defining the geographical boundaries of the Other Dunes Areas is attached as Attachment 7 and incorporated into the 2008 SIP, SIP Order and 2010 Coso Plan.

3. **2008 SIP Section 7.10** – The fourth paragraph in Section 7.10 of the 2008 SIP titled “IMPLEMENTATION MILESTONES AND EMISSION REDUCTIONS” shall be removed and replaced with the following:

Attainment of the federal PM₁₀ standard is expected by the end of 2017. By this time, the District expects to have at least one year of air monitoring data that show no violations of the federal standard in the planning area.

4. **2008 SIP Section 7.11** – Section 7.11 of the 2008 SIP titled “REASONABLE FURTHER PROGRESS” shall be removed and replaced with the following:

Under CAAA Section 189(c), the demonstration of attainment SIP is required to include quantitative milestones that are to be achieved every three years until the area is redesignated attainment. These milestones must demonstrate reasonable further progress toward attainment of the NAAQS by the attainment date. Table 7.1 includes the estimated emissions reductions associated with the various control strategies to achieve the emission reduction trend as shown in Figure 7.5 to demonstrate reasonable further progress toward attaining the NAAQS. Milestones associated with this 2008 SIP include, completion of Phase 7a dust controls by December 31, 2015 (with compliance full compliance of BACM Managed Vegetation areas by December 31, 2017) and control of the Keeler dunes by December 31, 2015. The contingency measures shall not be trigger against LADWP for Phase 7a extended timeframes, Phase 7b, or the District’s failure to control Keeler Dunes by December 31, 2015. As required by Section 189(c)(2) of the CAAA, the District shall submit to the USEPA, no later than 90 days after the date of each milestone, a demonstration that each milestone has been met.

5. **2008 SIP Table 7.1** – Table 7.1 titled “Control strategy milestones and estimated PM₁₀ emission reductions” shall be modified by”:
- a. Renaming the Table “Estimated PM10 emissions for control strategies.”
 - b. Replacing the “Milestone” category with “Control Strategy.”
 - c. Removing the term “Moat & Row” and replacing it with “Phase 7a.”
 - d. In the “Keeler dunes control area” row of the “1st Year in Full Operation” column, removing “2014” and replacing it with “2016.”

APPROVED, ADOPTED and ORDERED by the Governing Board of the Great Basin Unified Air Pollution Control District this 16th day of September, 2013 by the following vote:

Yes:

No:

Abstain:

John Eastman, Chair of the Governing Board

Attest:

Tori DeHaven, Clerk of the Governing Board

List of Attachments

- Attachment 1 *2008 Owens Valley PM₁₀ Planning Area Demonstration of Attainment State Implementation Plan* Board Order No. 080128-01 (without exhibits) (“SIP Order”)
- Attachment 2 Stipulated Order for Abatement, Order No. 110317-01 (without exhibits)
- Attachment 3 *Phase 7a and Keeler Dunes Settlement Terms* dated June 25, 2013 (“Term Sheet”)
- Attachment 4 *Settlement Agreement and Release Between the Great Basin Unified Air Pollution Control District and City Of Los Angeles Acting by and Through its Department of Water and Power Concerning Modification to Phase 7a Stipulated Order for Abatement No. 110317 and Keeler Dunes Project*, dated August 19, 2013 (without exhibits) (“Settlement Agreement”)
- Attachment 5 District Governing Board Order Number 130819-01 – *Findings and Decision of District Governing Board Upon Hearing for Stipulated Modification to Stipulated Order for Abatement 110317-01*, dated August 19, 2013 (without exhibits)
- Attachment 6 Map of Phase 7a areas
- Attachment 7 Map of Keeler and Other Dune Areas