# APPENDIX C

## Public Comments on the Draft SIP and District Responses

**BLANK PAGE**

## Draft 2008 Owens Valley SIP Public Comment Letters and District Responses

The District received eight comment letters regarding issues addressed in the Draft 2008 SIP. These letters are reproduced here along with the District's responses. Some of the letters contained both SIP and EIR comments. Responses to EIR comments are contained in the Final EIR. SIP comment letters were received from:

1. California Indian Legal Services – 30 October 2007
2. Lone Pine Paiute-Shoshone Reservation – 25 October 2007
3. Los Angeles Department of Water and Power – 30 October 2007
4. Michael Prather – 20 October 2007
5. Rantec Corporation – 10 October 2007
6. Sierra Club – Range of Light Group – 31 October 2007
7. Samuel R. Wasson – 29 October 2007
8. California State Lands Commission – 10 December 2007
9. Los Angeles Department of Water and Power – 24 January 2008
   -Comments received, no changes to Proposed Final SIP

**BLANK PAGE**

# CALIFORNIA INDIAN LEGAL SERVICES

**Escondido Office**

609 South Escondido Boulevard, Escondido, CA 92025 ✦ Phone 760/746-8941 ✦ Fax 760/746-1815
www.calindian.org ✦ contactCILS@calindian.org

BISHOP
EUREKA
ESCONDIDO

**Dorothy Alther, Senior Staff Attorney**
**760/746-8941, Ext. 122**
**dalther@calindian.org**

OAKLAND
SANTA ROSA
WASHINGTON, D.C.


October 30, 2007

Mr. Theodore D. Schade
Great Basin Unified Air Pollution Control District
157 Short Street
Bishop, CA 93514

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

Dear Mr. Schade,

The following comments are submitted on behalf of the Owens Valley Indian Water Commission (OVIWC), which is tribal consortium that includes the Bishop Paiute Tribe, the Big Pine Paiute Tribe of the Owens Valley, and the Lone Pine Shoshone-Paiute Tribe. The OVIWC appreciates Great Basin Unified Air Pollution Control District (Great Basin) giving this opportunity to comment on the 2008 Owens Valley PM10 Planning Area Demonstration of Attainment State Implementation Plan (2008 SIP.) This being said, it is unfortunate that attainment for the Owens Dry Lake was not achieved by December 31, 2006, the previous attainment date, and that the Environmental Protection Agency ("EPA") issued a non-attainment finding on March 23, 2007.

The primary focus of the OVIWC's comments is on Chapter 7, "Control Strategy and Attainment Demonstration." First, the dates for attainment are confusing. On page 7-1, paragraph one, it states that the 2008 control strategy must achieve at least a 5 percent reduction in PM10 emissions per year and demonstrate attainment with the federal standard by March 23, 2012, unless an extension is granted by EPA, which would move the deadline to March 23, 2017. Later on this same page, last paragraph, it states that if all the necessary dust control measures are implemented by December 31, 2013 in the Supplemental Dust Control Areas, the Planning Area can demonstrate attainment with the federal standard by 2017. These two statements for attainment seem inconsistent.

The City of Los Angeles Department of Water and Power ("City"), per the 2006 Settlement Agreement with Great Basin, has committed to have an additional 13.2 sq. miles of control on the Dry Lake by 2010. If this additional area is controlled by 2010, along with the existing 29.8 sq. miles of control, shouldn't attainment be demonstrated by 2013 (factoring in the three years of clean air quality data as required under the Clean Air Act (CAA))? The OVIWC

would like to see attainment complete before 2017 and not rely the five year extension that EPA may or may not grant.

Additionally, the OVIWC has issue with section 7.12 "Contingency Measures--- Supplemental Control." As correctly stated, the CAA requires the 2008 SIP to provide "contingency measures", which are control measures that will be implemented in case the 2008 SIP control strategy fails to bring the Planning Area into attainment or the Reasonable Further Progress Milestones cannot be met. These "contingency measures" are to become effective automatically upon a determination by Great Basin as noted above and are to require no further action by the State or Administration. 42 U.S.C. § 172(c)(9) However, the 2008 SIP provides that the City can avail itself of an administrative appeal process resulting in an appeal to the California Air Resources Board ("CARB".) A review of this administrative process, outlined in Attachment B, begins with Great Basin submitting to the City its determination that a measure has failed to make further progress or to attain the national primary ambient air quality standard by the attainment date. The City then has 60 days to submit alternative data to Great Basin, who in turn has 60days to withdraw, modify, or confirm the determination. If the City disagrees with Great Basin's modified or confirmed determination, it may proceed with the Dispute Resolution Process as described in the 2006 Settlement Agreement (which is non-binding mediation.) From Dispute Resolution, the City may then appeal to the CARB, who will act within 90 days from the date the appeal is filed. Given this appeal process, the OVIWC disagrees with Great Basin that the 2008 SIP's implementation of contingency control measures meets the requirements of the CAA that such measures be "automatic." All totaled this process could take up to a year and thus further delay attainment.

The OVIWC would like to see contingency measures that are automatically implemented upon a determination by Great Basin that a measure has failed or an attainment deadline is not being met. The City should be afforded an opportunity to challenge Great Basin's determination; however, such a challenge should not stay the implementation of the new control strategy. Such an approach would be similar to the 1998 SIP which provided for on going implementation of control measures (2 sq. miles) even if the City challenged Great Basin's determination that additional measures were needed at the Dry Lake.

Again the OVIWC appreciates this opportunity to comment on the 2008 SIP. Thank you for your time and consideration.

Sincerely yours,

Dorothy Alther

DOROTHY ALTHER

cc: Teri Cawelti, Executive Director

## Draft 2008 Owens Valley SIP Public Comment Responses

## Letter 1 – California Indian Legal Services, Dorothy Alther – 30 October 2007

### CILS SIP 1 – Inconsistent attainment date statements.

Section 7.10 and Table 7.1 provide information on the schedule for implementing control measures at Owens Lake. Dust control measures for the 13.2 square miles of the lake bed are expected to be fully operational by April 1, 2010; however dust from the Keeler Dunes is not expected be controlled until the end of 2013. Due to the longer schedule to develop control measures with the BLM and other parties responsible for the Keeler Dunes, three calendar years of air monitoring data with no violations of the PM10 standard may not be available until 2017.

The District staff believes that the schedule to implement the control measures proposed in the 2008 SIP is as expeditious as practicable. The time required to implement lake bed control measures is consistent with the 2½ years provided in the 2003 SIP to implement shallow flooding on new dust source areas. The deadline to control dust from the off-lake Keeler Dunes was extended to December 31, 2013 to provide adequate time to complete environmental planning with the responsible agencies, and to design and implement the selected control measure. If an acceptable control measure for the Keeler Dunes can be fully implemented prior to 2013, then attainment could be sooner than 2017. However, no meetings have been held to discuss the issues or to set a schedule to control dust from the Keeler Dunes. The deadline of December 31, 2013 is the final date when control measures must be implemented in the Keeler Dunes in order for the planning area to have three calendar years of air quality data with no violations prior to the extended attainment deadline of March 23, 2017.

As shown in Figure 7.5, emission reductions associated with the proposed control strategy will comply with the required 5% emission reduction rate pursuant to CAAA §179(d)(3). The District will request a 5-year extension of the attainment deadline to March 23, 2017.

### CILS SIP 2 – Attainment date by 2013.

See response to previous comment.

### CILS SIP 3 – Contingency measures.

The commentor identifies the requirements of Section 172(c)(9) of the Clean Air Act, which provide that the SIP must provide "contingency measures", which are control measures that will be implemented in case the 2008 SIP control strategy fails to bring the Planning Area into attainment or the Reasonable Further Progress Milestones cannot be met. The SIP provides for such automatic control measures as discussed in Section 7.12 and ordered in Paragraphs 10 and 13 of the incorporated Board order. However, under state law at California Health & Safety Code Section 42316, the City is given the right to appeal the control measures ordered by the District, including the automatic contingency measures. As Section 7.12 discusses, this creates a

potential conflict between Clean Air Act Section 172(c)(9) and Health & Safety Code Section 42316.

The commentor agrees that the City should be afforded an opportunity to challenge Great Basin's determination. However, the commentor asserts that such a challenge should not stay the implementation of the new control strategy. The problem is that Health & Safety Code Section 42316(b) specifically gives the City a right to such a stay. The commentor prefers an approach similar to the 1998 SIP which provided for ongoing implementation of control measures (2 square miles per year) even if the City challenged Great Basin's determination that additional measures were needed at the Dry Lake. But that provision was enacted without challenge from the City, and therefore was arguable the result of a waiver and time bar of the City's appeal right under Section 42316.

In the current circumstances, the District cannot adopt the commentor's proposal which would be in contravention of Health & Safety Code Section 42316(b). However, the commentor has raised a legitimate concern about how to reconcile federal and state law in this regard. The District has proposed to work with the U.S. EPA, the California Air Resources Board and the City to provide a limited time for the resolution of any City appeal under Section 42316, as described in detail at Section 7.12 of the SIP and ordered in Paragraphs 10 of the incorporated Board order, to limit the time period for any stay and to attain to the maximum extent feasible under state law the result required under Clean Air Act 172(c)(9). The District believes the SIP thus harmonizes the requirements of these sections. It proposes concrete additional control measures, such as further shallow flooding of additional areas of the lake bed or other BACM of the type described in the SIP.

Moreover, in discussion with U.S. EPA, the District has clarified that as discussed in Sections 2.2.2.2 and 8.1 of this 2008 SIP, under the provisions of Section 42316, the District has the authority to require the City to undertake all reasonable measures necessary to mitigate the air pollution caused in the District by the City's water-gathering activities. Nothing in this 2008 SIP or the 2006 Settlement Agreement between the District and the City limits the District's ability to order the City to take such reasonable measures that may be beyond the scope of this SIP and its incorporated Board Order. The District makes the commitment in Paragraph 13 of the Board Order (Chapter 8) to use its authority under Section 42316 to continue to ensure that the City takes all reasonable actions that may be necessary to bring the Owens Valley $PM_{10}$ Planning Area into attainment with the NAAQS.

**Lone Pine Paiute-Shoshone Reservation**
P.O. Box 747 • 975 Teya Road
Lone Pine, CA 93545
(760) 876-1034 FAX (760) 876-8302
Web Site: www.lppsr.org

OCT 26 2007

October 25, 2007

Great Basin Unified Air Pollution Control District
Attention: Mr. Theodore D. Schade
Air Pollution Control Officer
157 Short Street
Bishop, CA 93514

**Re: Draft 2008 Owens Valley PM10 Planning Area Demonstration of Attainment State Implementation Plan**

Dear Great Basin Unified Air Pollution Control District:

The Lone Pine Paiute-Shoshone Reservation (LPPSR) appreciates the opportunity the Great Basin Unified Air Pollution Control District (GBUAPCD) has given to comment and provide input on the Draft 2008 Owens Valley PM10 Planning Area Demonstration of Attainment State Implementation Plan (SIP).

On September 21, 2007 LPPSR received a copy of the Draft 2008 Owens Valley PM10 Planning area Demonstration Attainment State Implementation Plan. LPPSR would first like to thank GBUAPCD for its continued commitment to bring Owens Dry Lake into attainment for the National Ambient Air Quality Standards (NAAQS) for PM10. After thorough review of the Draft SIP LPPSR feels that this Revised Study includes the necessary components for a successful Attainment Plan. With this being said, LPPSR does have a few comments.

LPPSR is concerned with the Cultural Resources Technical Report regarding the impacts related directly to the disturbance and destruction of human remains given the ground-disturbing activities that include, but are not limited to, drilling, excavation, trenching and grading. Native American sacred sites continues to be of significance to Native American people and is an area that is central to our origins, not only on the Lake Bed itself, but the entire surrounding areas. Given that previous monitoring efforts have demonstrated that there is a high potential for unanticipated discovery of cultural resources, LPPSR requests that GBUAPCD ensure that the project follows through with all mitigation measures

described in Section 15064.5 of the CEQA Guideline in order to truly "reduce the level of impact to below the level of significance".

Secondly, LPPSR is concerned with the SIP providing for the City of Los Angeles (City) to possibly implement a new type of DCM known as "Moat & Row". LPPSR requests that GBUAPCD apply its regulatory authority in order to ensure that the City completes a sufficient analysis and hopes that the current demonstration project in T12 & T32 does provide enough data to validate this type of mitigation measure on the proposed 3 square miles. LPPSR also requests that GBUAPCD apply its regulatory authority if the "Moat & Row" measure is unsuccessful, by mandating that a proven mitigation measure be used on the 3 square miles proposed for "Moat & Row".

Lastly, given the abundance of equipment needed to construct the mitigation measures, LPPSR would appreciate the Final Environmental Impact Report to address green house gas emissions related to the four different mitigation measures. This should include emission reduction measures that will be taken in order to minimize greenhouse gas emission related to the project.

Once again, LPPSR would like to thank GBUAPCD for the opportunity to comment on the Draft 2008 Owens Valley PM10 State Implementation Plan. LPPSR commends GBUAPCD for all its continued work to bring Owens Dry Lake into attainment by 2010. LPPSR looks forward to supporting GBUAPCD in all its future endeavors.

Sincerely,

Marjianne Yonge, Tribal Chairwoman
Lone Pine Paiute-Shoshone Reservation

Cc: Mr. Larry Biland, U.S. EPA Region IX

## Draft 2008 Owens Valley SIP Public Comment Responses

## Letter 2 – Lone Pine Paiute-Shoshone Reservation, Marjianne Yonge – 25 October 2007

### LPPSR SIP 1 – Moat & Row concerns.

The 2006 Settlement Agreement between the District and the City of Los Angeles allows the City to construct up to 3.5 square miles of Moat & Row dust control on the lake bed. The draft SIP also makes this provision. Along with the LPPSR, the District is also concerned about the ability of Moat & Row to control dust emissions. That is why it is limited to about 8 percent of the total dust control area and the SIP contains provisions to ensure it is replaced with BACM, if is not successful.

In order to improve the chances of Moat & Row success, the District is requiring the City to test the concept on a small scale at two locations on the lake bed prior to any large-scale implementation. District staff is closely monitoring these tests. If the City makes the decision to implement Moat & Row on a large scale, they must first secure a lease from the California State Lands Commission. If large-scale Moat & Row is constructed, the District will monitor the measure. If Moat & Row does not adequately control dust emissions as it is first designed and implemented, the SIP allows the City to make one effort to increase its control efficiency. If there is a second exceedance caused by the Moat & Row controls, the offending areas must be removed and replaced with traditional BACM dust controls. This assures that there will be an effective dust control measure on all areas designated for Moat & Row. This procedure is detailed in Paragraph 4, on Page 4 of 16 in Attachment B of the Board Order.

**BLANK PAGE**

## Draft 2008 Owens Valley SIP Public Comment Responses

## Letter 3 – Los Angeles Department of Water and Power – 30 October 2007

The Los Angeles Department of Water and Power submitted comments in a tabular format. The District's responses immediately follow each numbered comment and are identified by the ***bold italic*** font.

**BLANK PAGE**

Department of Water and Power the City of Los Angeles

ANTONIO R. VILLARAIGOSA
Mayor

Commission
H. DAVID NAHAI, *President*
EDITH RAMIREZ, *Vice President*
MARY D. NICHOLS
NICK PATSAOURAS
FORESCEE HOGAN-ROWLES
BARBARA E. MOSCHOS, *Secretary*

RONALD F. DEATON, *General Manager*



October 30, 2007

Mr. Theodore D. Schade
Air Pollution Control Officer
Great Basin Unified Air Pollution Control District
157 Short Street
Bishop, California 93514-3537

Dear Mr. Schade:

Subject: Draft 2008 Owens Valley $PM_{10}$ Planning Area Demonstration of Attainment State Implementation Plan (Draft 2008 OVPA SIP)

Thank you for the opportunity to provide comments on the Draft 2008 OVPA SIP. The Los Angeles Department of Water and Power has reviewed the Draft 2008 OVPA SIP, and offers the enclosed comments.

If you have any questions, please contact me at (213) 367-1138.

Sincerely,

William T. Van Wagoner
Manager of Owens Lake
Regulatory Issues

Enclosure

c: Dr. Mark D. Schaaf, Air Sciences, Inc.

Great Basin UAPCD Responses to Los Angeles Department of Water & Power Comments on the
Draft 2008 Owens Valley $PM_{10}$ Planning Area Demonstration of Attainment State Implementation Plan

| DWP # | SIP | Theme | Chapter | Page | Section | Para | Line | Comment |
|---|---|---|---|---|---|---|---|---|
| 1. | X | Global | --- | --- | --- | --- | --- | Throughout the SIP, the LADWP is cited as the implementer of the control strategy. However, Section 7, Control Strategy, references the need to control off-lake sources in order to bring the planning area into attainment of the federal $PM_{10}$ standard. In particular, the Keeler dunes are referenced and stipulated for control by December 31, 2013. The SIP should make it clear that the LADWP is not responsible for implementing the off-lake portions of the control strategy. In addition, the SIP should include a reference to that part of the Settlement Agreement that acknowledges the LADWP's commitment to work jointly with other agencies.<br><br>*The proposed Board Order does not order the City to implement control measures on off-lake dust source areas at this time. If additional controls are required, the party or parties responsible for controlling dust from off-lake dust sources, including the Keeler Dunes, will be determined in the future.*<br><br>*The Keeler Dunes discussion in Chapter 7 (Sec. 7.5) will be modified to indicate that, if controls are required on the Keeler dunes, responsible parties will be ordered by the District to implement them under separate order.*<br><br>*The City did not provide any additional specific citations where the control strategy implementer is unclear.* |
| 2. | | Global | --- | --- | --- | --- | --- | In Chapters 5 and 8 in particular, stormwater, irrigation runoff, and seepage are repeatedly discussed, along with required performance and engineering. LADWP holds Waste Discharge Requirements for dust control facilities on Owens Lake, and will be required to modify them as these facilities evolve. The Waste Discharge Requirements are reasonably specific with regard to allowable water movement to and from |

Great Basin UAPCD Responses to Los Angeles Department of Water & Power Comments on the
Draft 2008 Owens Valley $PM_{10}$ Planning Area Demonstration of Attainment State Implementation Plan

| DWP # | SIP | Theme | Chapter | Page | Section | Para | Line | Comment |
|---|---|---|---|---|---|---|---|---|
| | | | | | | | | the site, and LADWP is, of course, obligated to operate in conformance with these requirements. When the Waste Discharge Requirements were developed by the Lahontan Regional Water Quality Control Board, protection of beneficial uses of surrounding waters were the guiding principle. Furthermore, water quality regulatory authority resides with the Lahontan Regional Water Quality Control Board, and other agencies and entities could and did weigh in on the Waste Discharge Requirements during the development and approval processes.<br><br>Comments on specific sections pertaining to this general issue are also included for your use. A general theme among them is that the requirements are onerous and have been developed without due consideration. The features described do not exist for facilities that have already constructed, not due to oversight, but rather because alternative water quality management approaches were employed. These approaches protect the beneficial uses the Lahontan Regional Water Quality Control Board considered during development of the Waste Discharge Requirements. For example, collection and channeling of stormwater have been specifically avoided for a variety of sound, engineering reasons, and a combination of more dispersed capture, beneficial use and attenuation, and dispersed overland flow have been employed instead.<br><br>*Lahontan issues permits for protection of water quality and preservation of beneficial uses. The California State Lands Commission and Rio Tinto/Borax are concerned about quantities of discharge and contamination of the brine pool mineral deposit. These are issues typically outside the Waste Discharge Requirements. The 2008 SIP imposes no more or less requirements with regard to* |

Great Basin UAPCD Responses to Los Angeles Department of Water & Power Comments on the Draft 2008 Owens Valley $PM_{10}$ Planning Area Demonstration of Attainment State Implementation Plan

| DWP # | SIP | Theme | Chapter | Page | Section | Para | Line | Comment |
|---|---|---|---|---|---|---|---|---|
| | | | | | | | | *stormwater and site-water control than the 1997, 1998 and 2003 SIPs. The Settlement Agreement is also silent on this issue. Recent conversations with Rio Tinto/Borax and the CSLC staff indicate they remained concerned about offsite water impacts on the brine pool and the mineral deposit.*<br><br>*Although the District will carefully evaluate and respond to any following specific comments raised on this issue, the SIP will remain essentially unchanged from the three previous versions. However, as this is not strictly an air quality issue, if the City, the CSLC and the downstream lessee agree on alternative solutions, the District will consider modifications to the SIP requirements.*<br><br>*No change to SIP at this time.* |
| 3. | | BACM | 5 | 5-11 | 5.3.1 | 8 | 9 | Please acknowledge in the 2008 SIP that, should BACM requirements be altered in the future by the GBUAPCD, these new requirements identified at the time by the GBUAPCD (not the 50% cover on every acre requirement stated here) would need to be met.<br><br>*Chapter 5 is intended to describe <u>current</u> BACM at Owens Lake. It is not appropriate to speculate as to any changes that may happen in the future. Modifications to BACM are clearly explained in Attachment D of the Board Order.*<br><br>*No change to SIP.* |

Great Basin UAPCD Responses to Los Angeles Department of Water & Power Comments on the
Draft 2008 Owens Valley $PM_{10}$ Planning Area Demonstration of Attainment State Implementation Plan

| DWP # | SIP | Theme | Chapter | Page | Section | Para | Line | Comment |
|---|---|---|---|---|---|---|---|---|
| 4. | X | BACM | 5<br><br>8 | 5-12<br><br>8-11 | 5.3.3<br><br>8.2 | 1<br><br>Order 16.C.i | 9<br><br>2 | Note that species diversity and associated habitat benefits cited here are inconsistent with the monospecific BACM requirement maintained in this SIP. Unless non-*Distichlis spp.* cover is acknowledged and counted toward compliance, these species are weeds from the narrow perspective of a dust control facility and should be removed to allow expansion of the *Distichlis spp.* cover. As GBUAPCD has indicated that LADWP may petition for expansion of this list, LADWP will do so in the near future.<br><br>*The BACM description for managed vegetation does not require only saltgrass. Managed vegetation requires locally-adapted native species and APCO approval. To date, only saltgrass has been approved. The City may request any other species at any time. Locally-adapted native species that colonize Shallow Flood and/or Managed Vegetation areas are only considered weeds if they are non-native.*<br><br>*To clarify this issue, Paragraph 16.C.i. of the Board Order in Chapter 8 will be modified to read:*<br><br>*The vegetation planted ~~used~~ for dust control shall consist only of locally-adapted native species approved by the APCO or other species approved by both the APCO and the CSLC. To date, the only approved locally-adapted native species is saltgrass (Distichlis spicata). However, other appropriate species may be approved upon written request of the City and written approval of both the APCO and CSLC.* |
| 5. | X | BACM | 8 | 8-4 | 8.2 | Order 4 | 3-5 | The Settlement Agreement states that the channel areas shall be addressed as part of the control strategy for the SDCA, acknowledging that the control strategy in this area may be |

Great Basin UAPCD Responses to Los Angeles Department of Water & Power Comments on the
Draft 2008 Owens Valley $PM_{10}$ Planning Area Demonstration of Attainment State Implementation Plan

| DWP # | SIP | Theme | Chapter | Page | Section | Para | Line | Comment |
|---|---|---|---|---|---|---|---|---|
| | | | | | | | | subject to additional regulatory constraints. This area was specifically treated separately from the SDCA because it was known that BACM would not be achievable given the area's natural resources and regulatory constraints, or necessary in portions on the areas that are vegetated or were shown not to cause or contribute to exceedances at the shoreline. The statement that indicates the LADWP shall control $PM_{10}$ emissions from the channel area by implementing and operating BACM, is not consistent with this understanding. Please replace with language that indicates that the control strategy in the channel area "may include modified BACM or non-BACM and portions of the channel area that are naturally protected or non emissive may not require controls. The mention of BACM in this area is misleading and if intended in the Settlement Agreement, these areas would not have been excluded from the SDCA.<br>*This paragraph will be modified to clarify that alternative, non-BACM approved by the APCO may be used in the channel area and that any portions that are naturally protected will not require controls.* |
| 6. | | BACM | 8 | 8-4 | 8.2 | Order 4 | 6 | It is not clear how the provisions of sections 15 through 17 apply here. This reference seems incorrect. For example, all of the requirements for the three designated BACM measures cannot reasonably be applied to the Channel Areas where, as this section states, "The LADWP shall control PM10 emissions from the Channel Area by implementing and operating either BACM, or modified-BACM that take into account the resource issues in the Channel Area..." Please consider clarifying or modifying these references.<br>*It is clear that BACM or modified-BACM (and now* |

Great Basin UAPCD Responses to Los Angeles Department of Water & Power Comments on the
Draft 2008 Owens Valley $PM_{10}$ Planning Area Demonstration of Attainment State Implementation Plan

| DWP # | SIP | Theme | Chapter | Page | Section | Para | Line | Comment |
|---|---|---|---|---|---|---|---|---|
| | | | | | | | | *alternative, non-BACM, see 5. above) may be implemented. "If BACM" are implemented in the Channel Area the requirements under paragraphs 8, 9 and 15 through 17 do apply.*<br><br>*No change to SIP.* |
| 7. | X | BACM | 8 | 8-4 | 8.2 | Order 4 | 13 | Suggest modification to: "...the LADWP shall prepare and submit to the GBUAPCD a detailed plan describing the control strategy and a monitoring and response plan to detect and address emissions that cause monitored exceedances of the Federal 24-hour $PM_{10}$ standard at the shoreline." The SIP also list several agencies in the approval process that may or may not be required. LADWP suggests changing the SIP to indicate approval by "agencies as appropriate."<br><br>*7.a. - Suggestion noted. The sentence will be revised to remove the list of specific agencies.*<br><br>The LADWP is prepared to demonstrate in advance that the channel-area control strategy will achieve the required MDCE. Conceptually, this demonstration would be based on a comparison of SWEEP-generated sand flux profiles for each channel area, with and without the control measures in place. The area-wide control efficiency would be the average ratio of the controlled and uncontrolled sand flux at multiple sample points within the channel area. The SWEEP-generated sand flux profiles would utilize site-specific information such as the meteorology and layout of soil surface conditions within each channel area stratum, including a detailed characterization of surfaces dominated by sand-flux generating and sand-flux arresting features. Sand-flux arresting surfaces would include: ponds and wet soils, vegetated "breaks," buckled or otherwise severely roughened surfaces, and constructed features such |

Great Basin UAPCD Responses to Los Angeles Department of Water & Power Comments on the
Draft 2008 Owens Valley $PM_{10}$ Planning Area Demonstration of Attainment State Implementation Plan

| DWP # | SIP | Theme | Chapter | Page | Section | Para | Line | Comment |
|---|---|---|---|---|---|---|---|---|
| | | | | | | | | as moats and rows, sand fences, or other modified BACM measures deemed suitable.<br><br>*7.b. - The Order does not specify how the demonstration plan is to be prepared. However, at this time, the District has not approved the use of the SWEEP model for use on Owens Lake.*<br><br>*No change to SIP* |
| 8. | | BACM | 8 | 8-8 | 8.8 | | | It is not clear in this section how the shallow flood coverage reductions allowed for in Section 14 of the Settlement Agreement have been incorporated. In fact, it appears that they have been forbidden. Please clarify by explicitly including these provisions, which apply to the TDCA, in this section.<br><br>*Paragraph 15 of the Order sets forth the current definition of Shallow Flooding. The wetness cover reductions provided for in Section 14 of the SA are forbidden, at this time. However, Attachment D to the Order (Modifying BACM) provides for the Section 14 adjustments to Shallow Flood BACM after one year of no monitored exceedances. As the Section 14 adjustments are modifications to the current BACM description, it is appropriate to address them in Attachment D.*<br><br>*No change to SIP.* |
| 9. | | BACM | 8 | 1 of 10 | Attachment D | 3 | 1-3 | This paragraph states: "The flexible BACM description under the terms of the Order preclude the application of the U.S. Environmental Protection Agency's Natural Events Policy for monitoring data used to make the determinations in this Attachment." If new or revised BACM are required to attain the same control objectives as existing BACM on the lakebed, the conditions associated with them should not be different. |

Great Basin UAPCD Responses to Los Angeles Department of Water & Power Comments on the Draft 2008 Owens Valley $PM_{10}$ Planning Area Demonstration of Attainment State Implementation Plan

| DWP # | SIP | Theme | Chapter | Page | Section | Para | Line | Comment |
|---|---|---|---|---|---|---|---|---|
| | | | | | | | | While it is understood that BACM must be proven effective, there should not be stipulations that discourage development of measures that are more efficient and make better use of the public resources dedicated to the Owens lake project. In particular, there should be no exceptional preconditions for consideration and approval of new BACM (after such a BACM test has been approved by the GBUAPCD). For example, consideration and approval of proposed new BACM should not be contingent on absence of modeled or actual violations at the shoreline, unless those violations constitute credible evidence that the proposed BACM is not effective in controlling dust.<br>*This provision in Attachment D is in the 2003 SIP and was not modified as a result of the Settlement Agreement. It should be noted that an exceedance of the standard may trigger a determination under the Supplemental Control Requirements, irregardless of the Natural Events Policy.*<br>*No change to SIP.* |
| 10. | | BACM | 8 | 1 of 10 | Attachment D | 3 | 6-7 | Preconditions are listed for BACM approval that require certain shoreline concentrations be met before BACM can be approved (AFTER a test has been conducted and demonstrated effectiveness). With regard to these preconditions the SIP states: "The monitored values will be used as measured, and will not be adjusted for from-the-lake and non-lake wind directions as they are for the Supplemental Control Requirements." This means that off lake sources can prevent the LADWP from using a BACM measure that has proven effective on the lake, even if on lake emissions are being controlled within requirements. This could unreasonably withhold approval for a measure that is as effective as existing |

Great Basin UAPCD Responses to Los Angeles Department of Water & Power Comments on the Draft 2008 Owens Valley $PM_{10}$ Planning Area Demonstration of Attainment State Implementation Plan

| DWP # | SIP | Theme | Chapter | Page | Section | Para | Line | Comment |
|---|---|---|---|---|---|---|---|---|
| | | | | | | | | BACM. A clear purpose of modified BACM is to allow for refinement of original BACM measures and improved efficiency in use of public resources. To place stipulations on the process for modifying BACM that disallow scientifically acceptable data analysis methods, such as evaluating emissions coming from the lake, in evaluating measure performance on the lake, clouds the intent of this provision.<br><br>*This provision in Attachment D is in the 2003 SIP and was not modified as a result of the Settlement Agreement. The monitor thresholds to allow modifications to BACM are based on having ambient air quality (not just impacts from the lake bed) that is below the standard before modifications to BACM can be tested. BACM modifications that use fewer resources necessarily involve additional risk of failure. The District is not willing to accept this risk, unless air quality in the Planning Area is well below the Standard.*<br><br>*No change to SIP.* |
| 11. | X | Construction Impacts | 7 | 7-6 | 7.6 | 2 | 1 | Starting the compliance clock in the middle of the dust season (on April 1st; immediately after construction activity ends) could result in many new areas being flagged for dust control unless the impacts from construction activities are properly accounted for in the Dust ID model. The 2006 Settlement Agreement (paragraph 9.C.vi) requires the GBUAPCD to make "…reasonable efforts to account for impacts of DCM construction activities." The Draft 2008 SIP should mention this requirement as well as outline steps that could be taken to address the potential movement of sand within and away from construction areas.<br><br>*The April 1, 2010 compliance deadline is specified in* |

Great Basin UAPCD Responses to Los Angeles Department of Water & Power Comments on the Draft 2008 Owens Valley $PM_{10}$ Planning Area Demonstration of Attainment State Implementation Plan

| DWP # | SIP | Theme | Chapter | Page | Section | Para | Line | Comment |
|---|---|---|---|---|---|---|---|---|
| | | | | | | | | *paragraph 1.D.(ii) of the Settlement Agreement. This date was agreed to after extensive negotiations. The City will be required to apply BACM to control air emissions from its construction/implementation activities pursuant to District Rule 401 and proposed Board Order paragraph 23.C.*<br><br>*The District will make reasonable efforts to account for impacts of construction activities. However, specific procedures to account for construction impacts have not been developed. Development of these procedures was expected to be done jointly with the City and an expert panel as part of an overall effort to improve the Dust ID Program pursuant to paragraph 9 of the Settlement Agreement. To date, no joint meetings have been held for this purpose.*<br><br>*However, the SIP's General SCR Determination Procedure (Order, Attachment B, Page 3) and Dust ID Program Protocol (Attachment C, Page 1) will be modified to include a specific commitment to make reasonable efforts to account for DCM construction activities.* |
| 12. | | Construction Impacts | 8 | 8-5 | 8.2 | Order 8 | 1 | Provisions for needed maintenance and improvements of dust control facilities are essential but inefficiently outlined in the Draft SIP. LADWP understands that the variance process may be employed, and that dust control must be incorporated into any variance petition. Please consider expanding and/or clarifying the associated provisions in the SIP.<br><br>*The City is required to maintain the DCM infrastructure to operate control measures continuously during the dust control season, October 1 through June 30. It is up to the City to determine if maintenance or improvement tasks* |

Great Basin UAPCD Responses to Los Angeles Department of Water & Power Comments on the Draft 2008 Owens Valley $PM_{10}$ Planning Area Demonstration of Attainment State Implementation Plan

| DWP # | SIP | Theme | Chapter | Page | Section | Para | Line | Comment |
|---|---|---|---|---|---|---|---|---|
| | | | | | | | | *can be done during the dust control season or should be postponed. There can be no specific exceptions or provisions for reduced dust control due to maintenance needs.*<br><br>*No change to the SIP.* |
| 13. | X | Construction Impacts | 8 | 8-6 | 8.2 | Order 10.B | 1 | While there are provisions for construction variance with regard to dust emissions, there are no provisions to account for facility construction, repair or maintenance impacts on data collection. The LADWP requests addition of language stating: "Sand flux data collected within or near (within 200 feet from) ongoing construction, repair or maintenance activities needed for sustained operation of dust control facilities will be omitted from SCR determination procedures, provided that the LADWP notifies the GBUAPCD in writing of significant construction activities, durations and locations by the end of each dust season (June 30) with a given calendar year. This is of particular concern for Study areas that are directly adjacent to SDCA areas that will be undergoing extensive construction activity in the coming 2 years. While construction dust is controlled to the extent possible, some effects of land disturbance, including increase of loose mobile sand, are unavoidable and temporary and should be accounted for in sand flux data collected very nearby.<br><br>*As required by the SA, the District will make reasonable efforts to account for impacts of construction activities. However, specific procedures to account for construction impacts have not been developed. Development of these procedures was expected to be done jointly with the City and an expert panel as part of an overall effort to improve the Dust ID Program pursuant to paragraph 9 of the* |

Great Basin UAPCD Responses to Los Angeles Department of Water & Power Comments on the Draft 2008 Owens Valley $PM_{10}$ Planning Area Demonstration of Attainment State Implementation Plan

| DWP # | SIP | Theme | Chapter | Page | Section | Para | Line | Comment |
|---|---|---|---|---|---|---|---|---|
| | | | | | | | | *Settlement Agreement. To date, no joint meetings have been held for this purpose.*<br><br>*See response to Comment 11, above. Attachments B and C will include a specific commitment to account for construction impacts in any SCR determinations.* |
| 14. | X | Construction Impacts | 8<br><br>8<br><br>8 | 8-6<br><br>8-6<br><br>8-7 | 8.2<br><br>8.2<br><br>8.2 | Order 10.B<br><br>Order . 11<br><br>Order 12 | 3<br><br>1<br><br>1 | As part of the Dust ID methodology refinement process, LADWP proposes a joint effort with the GBUAPCD to monitor and understand the relationship between construction disturbance of the lake bed and lakebed conditions. The details of the monitoring program would be worked out later, but would likely include locating multiple sand flux monitoring devices on transects through, and extending well outside of, one or more constructed areas. Sampling would occur before, during, and after the construction.<br><br>Although future data collection on which supplemental control requirements will be based (taken from April 1, 2010 on) will likely be less impacted by construction than in the past, this relationship needs to be understood so that lakebed data can be properly interpreted relative to needs for future dust control. A main focus of the results would be a better understanding of the potential construction impacts on nearby study areas.<br><br>*See responses to Comments 11 and 13, above. Attachments B and C will include a specific commitment to account for construction impacts in any SCR determinations.* |
| 15. | X | Construction Impacts | 8 | | Attachment C | | | Paragraph 9.C.vi states the GBUAPCD should "…make reasonable efforts to account for impacts of DCM construction activities." This language should be added to the Dust ID |

Great Basin UAPCD Responses to Los Angeles Department of Water & Power Comments on the Draft 2008 Owens Valley $PM_{10}$ Planning Area Demonstration of Attainment State Implementation Plan

| DWP # | SIP | Theme | Chapter | Page | Section | Para | Line | Comment |
|---|---|---|---|---|---|---|---|---|
| | | | | | | | | program.<br>*See responses to Comments 11, 13 and 14, above. Attachments B and C will include a specific commitment to account for construction impacts in any SCR determinations.* |
| 16. | X | Control Efficiency | 5<br>8 | 5-4<br>1 of 1 | 5.2.2<br>Exhibit 3 | | Fig. 5.8 | Note that the Shallow Flood control efficiency curve (Figure 5.8) is based on only three data points. Because so little is known about the shallow flood control efficiency versus wetness cover, additional research is needed to refine this curve. The 2008 SIP should acknowledge Section 29 of the Settlement Agreement, which provides for collaborate development of "…control efficiency relationships, and compliance specifications."<br>*This provision is included as paragraph 19 of the proposed Board Order.*<br>*A discussion will be added to SIP Section 7.13 Implementation Monitoring and Enforcement.* |
| 17. | X | Control Efficiency | 5 | 5-9 | 5.3.1 | 1 | 6 | In addition to saltgrass meadows, other areas of natural vegetation limit dust emissions from land surfaces. For example, areas with relatively dense stands of other native plants (including shrubs) have been observed to significantly reduced emissions rates. The requirements for managed vegetation should not arbitrarily be limited to one species or plant community, unless there is evidence that other plant communities could not provide the needed control.<br>*Comment noted. The discussion in the SIP is intended to provide a description of the managed vegetation control measure that has been approved by the District and California State Lands Commission for implementation* |

Great Basin UAPCD Responses to Los Angeles Department of Water & Power Comments on the
Draft 2008 Owens Valley $PM_{10}$ Planning Area Demonstration of Attainment State Implementation Plan

| DWP # | SIP | Theme | Chapter | Page | Section | Para | Line | Comment |
|---|---|---|---|---|---|---|---|---|
| | | | | | | | | *on the lake bed.*<br><br>*See response to Comment 4 and SIP revision to Paragraph 16.C.i. of the Order.* |
| 18. | X | Control Efficiency | 5 | 5-10 | 5.3.1 | 4 | 7-11 | There is no support for the statement: "due to a number of possible factors that provide additional surface protection beyond that provided by the vegetation cover, such as the site's location on primarily clay soils, the soil moisture supplied by the irrigation system and the durable salt crusts that are present in many of the poorly vegetated areas, the 3.5 square mile site, as a whole, has achieved a high level of PM10 control." The LADWP request that the above reference to other factors be removed. On the contrary, the site is located and has been successful on 3.5 square miles that contain a wide range of soils, including significant areas of sandy, loamy and clayey textured soils. Further, the LADWP has monitored both crust durability and soil moisture on and off the managed vegetation site and has shown that these factors, while important, are not much different within MV to patterns observed on adjacent open playa. In fact, for a large part of the dust season the site is in dormancy and is not being irrigated at all. The condition that provides the site's control efficiency relative to the open playa is vegetative cover and the reason for success given lower cover levels in some areas is more likely the overall distribution of cover on the MV site.<br><br>*The District does not agree with all the City's conclusions, but the statement regarding possible factors that could provide surface protection will be removed from Section 5.3.1.* |
| 19. | X | Control Efficiency | 5 | 5-10 | 5.3.1 | 4-5 | | The SIP states on page 5-10 that: "…the 3.5 square mile site, |

Great Basin UAPCD Responses to Los Angeles Department of Water & Power Comments on the Draft 2008 Owens Valley $PM_{10}$ Planning Area Demonstration of Attainment State Implementation Plan

| DWP # | SIP | Theme | Chapter | Page | Section | Para | Line | Comment |
|---|---|---|---|---|---|---|---|---|
| | | | 5 | 5-11 | 5.3.2 | 1-2 | | as a whole, has achieved a high level of $PM_{10}$ control." However, the SIP has all but ignored the 2006 Managed Vegetation Control Efficiency (MVCE) Study and its finding that 99 percent control of sand motion occurs at 20 percent saltgrass cover. The MVCE Study was the most comprehensive study of its kind ever conducted on Owens Lake, yet the results have not been seriously considered by the GBUAPCD for new MV sites nor were they incorporated into the Draft 2008 SIP. The Draft 2008 SIP contains the same language as the 2003 Revised SIP, requiring an average of 50 percent saltgrass cover on every acre in order to achieve 99 percent control of sand motion and $PM_{10}$ emissions. The 2008 SIP should be revised in incorporate the findings of the LADWP's MV CE study. A copy of this report was sent to the GBUAPCD under separate cover on October 25, 2007.<br>*Section 5.3 will be modified to include reference to the LADWP's MV CE study. However, the requirement for 50 percent cover on all new MV areas will remain until the BACM modification procedures in Attachment D of the order are followed.* |
| 20. | | Control Efficiency<br>Facilities<br>Facilities<br>Facilities | 5<br>1<br>8<br>8 | 5-10<br>1-3<br>8-11<br>8-11 | 5.3.1<br>1.2<br>8.2<br>8.2 | 5<br>5<br>Order 16.B<br>Order 16.B | 4<br>1<br>1<br>4 | The SIP should state that: "Achievement of these performance criteria has proven infeasible, but the lower levels of vegetative cover and uniformity that LADWP has achieved on 2,100 acres has proven effective. Performance criteria are being modified to reflect this result." LADWP designed, constructed, and operated a 2,400-acre managed vegetation site on Owens Lake. Extremely conservative design criteria, including a novel combination of subsurface drip irrigation and artificial drainage, drain water blending and treatment, large-scale native seed production and |

Great Basin UAPCD Responses to Los Angeles Department of Water & Power Comments on the Draft 2008 Owens Valley $PM_{10}$ Planning Area Demonstration of Attainment State Implementation Plan

| DWP # | SIP | Theme | Chapter | Page | Section | Para | Line | Comment |
|---|---|---|---|---|---|---|---|---|
| | | | | | | | | multiplication, accelerated (40-day) soil reclamation, and tailored irrigation scheduling to address site drainage limitations. All of this was achieved with the goal of achieving 50% vegetative cover during the summer and fall period in which the GBUAPCD demonstrated feasibility on small areas within larger plots that were themselves about 1% of the size of this facility. Saltgrass aboveground biomass becomes dormant during the winter, declining over 50% in the level of ground cover. Nevertheless, GBUAPCD subsequently opted to enforce the same cover levels achieved during the summer on dormant, wintertime saltgrass in the LADWP facility. The combination of this decision and the far more extensive site scale and variability rendered managed vegetation, as currently described in the SIP, infeasible. Indeed, although average cover levels over 50% were achieved during summer and fall from 2005 onward, wintertime levels remain at about half of the regulatory requirement. Furthermore, no site of any significant size on Owens Lake could be farmed such that no individual acre would be without 50% cover. The soils are just too challenging to plant growth and difficult to drain and reclaim. No greater evidence than this massive effort and failure is needed to demonstrate the infeasibility of managed vegetation criteria contained in this SIP. Furthermore, LADWP knows of no such land surface (with comparable levels of salinity, drainage, aridity) that has ever been vegetated in the manner required by this SIP.<br><br>*The District has not verified many of the City's claims regarding the existing MV site and the District does not agree with many of the statements made by the City in the above comment. The draft SIP test provides an appropriate description of the current situation. In* |

Great Basin UAPCD Responses to Los Angeles Department of Water & Power Comments on the
Draft 2008 Owens Valley $PM_{10}$ Planning Area Demonstration of Attainment State Implementation Plan

| DWP # | SIP | Theme | Chapter | Page | Section | Para | Line | Comment |
|---|---|---|---|---|---|---|---|---|
| | | | | | | | | *addition, both the 2003 SIP and the draft 2008 SIP provide a formal procedure to modify BACM (Attachment D of the draft Order). The City has not initiated the procedure.*<br><br>*No change to SIP.* |
| 21. | | Control Efficiency | 5 | 5-10 | 5.3.1 | 4 | 7-11 | There is no support for the statement: "…due to a number of possible factors that provide additional surface protection beyond that provided by the vegetation cover, such as the site's location on primarily clay soils, the soil moisture supplied by the irrigation system and the durable salt crusts that are present in many of the poorly vegetated areas, the 3.5 square mile site, as a whole, has achieved a high level of $PM_{10}$ control." On the contrary, the site is located and has been successful on 3.5 square miles that contain a wide range of soils, including significant areas of sandy, loamy and clayey textured soils. Further, the LADWP has monitored both crust durability and soil moisture on and off the managed vegetation site and has shown that these factors, while important, are not much different within MV to patterns observed on adjacent open playa. In fact, for a large part of the dust season the site is in dormancy and is not being irrigated at all. The condition that provides the site's control efficiency relative to the open playa is vegetative cover and the reason for success given lower cover levels in some areas is more likely the overall distribution of cover on the MV site. The LADWP requests that the above reference to other factors be removed.<br><br>*The SIP provides the opinion of the District staff and consultants based on observations. Professional disagreement on possible factors that could affect vegetation growth is noted.* |

Great Basin UAPCD Responses to Los Angeles Department of Water & Power Comments on the Draft 2008 Owens Valley $PM_{10}$ Planning Area Demonstration of Attainment State Implementation Plan

| DWP # | SIP | Theme | Chapter | Page | Section | Para | Line | Comment |
|---|---|---|---|---|---|---|---|---|
| | | | | | | | | *See above responses for modifications to the SIP.*<br>*No additional changes to SIP.* |
| 22. | X | Control Efficiency | 5 | 5-11 | 5.3.2 | 2 | | The literature review (including Table 5.1) should be revised to include the findings of the 2006 MV CE study (Air Sciences 2006). A copy of the study report has been submitted to the GBUAPCD.<br>*Although the Air Science MV CE study has not been thoroughly reviewed by the District, it will be included in Table 5.1. Reference: Air Science, 2006*<br>*Surface Cover Characteristics: 20% salt grass cover at Owens Lake on clay and sandy soil.*<br>*Wind Speed: NA*<br>*% Control: 99%* |
| 23. | X | Cost | 7 | 7-13 | 7.14 | 3 | 1 | The LADWP does not agree with this cost calculation for several reasons. First, the amount of dust emitted from the additional 13.2 square miles is the only benefit to accrue from the proposed additional dust control, and dust emitted from other areas (previously controlled or not slated for control) is not relevant. For example, were the LADWP, perhaps 10 years hence, to implement yet another dust control project to control a rather small but significant tonnage of dust, the unit cost of control for that control achieved by the associated project would evidently be higher than for the initial 42 square miles of control. Second, the estimate of emissions for these areas is based on years when the lakebed was under intensive construction of the previous 29.8 square miles of dust control, and was calculated by the Dust ID model and source area delineations that the LADWP believes falsely |

Great Basin UAPCD Responses to Los Angeles Department of Water & Power Comments on the Draft 2008 Owens Valley $PM_{10}$ Planning Area Demonstration of Attainment State Implementation Plan

| DWP # | SIP | Theme | Chapter | Page | Section | Para | Line | Comment |
|---|---|---|---|---|---|---|---|---|
| | | | | | | | | inflates actual emissions rates from these areas. The LADWP has previously provided GBUAPCD with calculations indicating that costs of dust control (exclusive of water and operations) for a smaller area would have been in excess of $22,000/ton. An equivalent calculation for the 13.2-square-mile area would yield a higher cost per ton.<br><br>*It is appropriate to calculate the incremental cost of the 13.2 square miles ordered in the 2008 SIP, as well as the overall cost of the 43 square miles. The SIP will be modified to include both these costs. However, the City's calculations leading to a cost per ton of $22,000 are suspect. The SIP will be revised using the cost information provided by the City and the official emission reductions in Table 7.1. The incremental annual cost of the 13.2 square miles is $125 million for construction and $21.8 million in annual costs. This results in a cost per ton of $716 versus $736 for the entire 43 square miles. This is between 6 and 80 times less than the cost per ton in other California air basins (including the South Coast AQMD).* |
| 24. | | Cost | 7 | 7-13 | 7.15 | 1 | 1 | LADWP appreciates GBUAPCD's openness to reduction of implementation costs through learning, innovation, and changes that are consistent with achievement of required levels of dust control. This is an urgent and legitimate activity for both agencies. LADWP looks forward to working productively with GBUAPCD to make progress on such fronts as compliance monitoring and refinement of effectiveness relationships, along with the all-important refinement of the Dust ID methodologies.<br><br>*Comment noted. No change to SIP.* |

Great Basin UAPCD Responses to Los Angeles Department of Water & Power Comments on the
Draft 2008 Owens Valley $PM_{10}$ Planning Area Demonstration of Attainment State Implementation Plan

| DWP # | SIP | Theme | Chapter | Page | Section | Para | Line | Comment |
|---|---|---|---|---|---|---|---|---|
| 25. | | EI | 4 | 4-1 | 4.2 | All | | It would be helpful for the assumptions, input values, and calculations presented in this section to be supported by a technical support document. Many of the assumptions and input values are not supported in Chapter 4 and do not appear to be supported in the SIP Appendices.<br>*References are cited for all methodologies and input values. Any assumptions are stated as such if there is no source of accurate information, such as for the number of vehicle miles traveled on unpaved roads.*<br>*No change to SIP* |
| 26. | | EI | 4 | 4-2 | 4.2.1 | 3 | 2 | The annual rate of increase in total vehicle miles traveled (1% per year per CDOT forecasts) in the planning area is less than half the rate of increase (2.3% per year per *2005 Traffic Volumes on California State Highways* publication) assumed in the Traffic Analysis). Support for the latter increase may be found in the Traffic Analysis, Section 7.2.<br>*Different references from the California Department of Transportation were used for the Traffic Analysis and the SIP emission inventory. Since the Traffic Analysis only projects traffic volume from 2007 to 2010, it would be presumptuous to apply the same growth rate to the period from 2010 to 2017. The traffic estimates provided by CalTrans for the SIP were forecast from 2005 to 2020, so it covers the period for the emissions inventory from 2005 through 2017.*<br>*No change to the SIP.* |

Great Basin UAPCD Responses to Los Angeles Department of Water & Power Comments on the
Draft 2008 Owens Valley $PM_{10}$ Planning Area Demonstration of Attainment State Implementation Plan

| DWP # | SIP | Theme | Chapter | Page | Section | Para | Line | Comment |
|---|---|---|---|---|---|---|---|---|
| 27. | | EI | 4 | 4-3 | 4.2.2 | 2 | 3-5 | The traffic levels (20 vehicles per day) assumed for LADWP operations are *7 times* the traffic levels assumed during operations for the Traffic Analysis submitted in Volume 2 of the SIP (see Traffic Analysis, Section 5.2). Which is correct?<br><br>*Both traffic levels may be considered valid estimates of future conditions. The Traffic Analysis in Volume 2 of the EIR was for average daily traffic associated with the project. The traffic estimate used for the SIP in Section 4.2.2 was intended to provide an upper estimate of traffic on unpaved roads due to non-City vehicles and from City vehicles on lake bed roads and City operations of the nearby LORP. Since the unpaved road emissions are less than 0.1% of the total annual emissions inventory, the relative emissions difference between average and peak traffic estimates is insignificant at this time. After lake bed emissions are controlled in the future, a refinement of the emissions inventory for all source categories will be done as part of the SIP maintenance plan.*<br><br>*No change to the SIP.* |
| 28. | | EI | 4 | 4-3 | 4.2.4 | 1 | | The SIP (or a Technical Support Document) should include the inputs used to estimate emissions from prescribed fire [including acres burned (acres), fuel consumption (tons), dates of the burn season, and location of the burning events].<br><br>*Annual reports for prescribed burning are available from the District upon request. Actual prescribed burning emissions for 2005 were 54 tons of $PM_{10}$ for the planning area, which is substantially less than the 2,532 tons indicated in the emissions inventory. Emissions for prescribed burning are based on the annual amount of emissions that are allowed by the District in the planning* |

Great Basin UAPCD Responses to Los Angeles Department of Water & Power Comments on the
Draft 2008 Owens Valley $PM_{10}$ Planning Area Demonstration of Attainment State Implementation Plan

| DWP # | SIP | Theme | Chapter | Page | Section | Para | Line | Comment |
|---|---|---|---|---|---|---|---|---|
| | | | | | | | | *area, and not on actual emissions. The inclusion of prescribed burning emissions is necessary to demonstrate compliance with regulations for General Conformity for federal projects.*<br><br>*No change to the SIP.* |
| 29. | X | EI | 4 | 4-10 | 4.3.5 | 2 | 5 | The emission inventory should include emissions from construction-related activities on the lake bed. Construction emissions are no less transient than prescribed fire emissions (which are included in the inventory) and are expected to occur throughout much of the SIP planning period. Care should be taken to avoid double-counting construction emissions with uncontrolled wind-blown dust emissions from the same areas.<br><br>*Construction related emissions are included in the EIR at 59.5 lbs per day of $PM_{10}$ or 10.4 tons per year (350 days of operation). This will be reflected in the discussion in Section 4.3.5, which shows the previous construction emissions estimate for the 2003 SIP area. In contrast to the construction emissions, the 13.2 square mile area where most of the construction activities will take place emits around 38,750 tons of $PM_{10}$ per year from wind blown dust, which is more than 3,000 times higher.*<br><br>*Modify Section 4.3.5 to indicate that construction related emissions are included in the EIR at 59.5 lbs per day of $PM_{10}$ or 10.4 tons per year (350 days of operation).* |
| 30. | | EI | 5 | 5-17 | 5.7 | 2 | 2-3 | This paragraph is in conflict with the acknowledged and growing relative importance of off-lake sources such as the Keeler dunes. The contribution of Keeler dunes is significant relative to the 13.2-square-mile SDCA. The data in Table 4.2 |

Great Basin UAPCD Responses to Los Angeles Department of Water & Power Comments on the Draft 2008 Owens Valley $PM_{10}$ Planning Area Demonstration of Attainment State Implementation Plan

| DWP # | SIP | Theme | Chapter | Page | Section | Para | Line | Comment |
|---|---|---|---|---|---|---|---|---|
| | | | | | | | | show that just the combination of emissions inventoried for Keeler dunes and Olancha dunes comprises emissions nearly 30% of that for the entire 13.2-square-mile SDCA. Please consider modifying this statement to read: "Since a significant portion of the $PM_{10}$ emissions in the Planning Area originate from the dry playa of Owens Lake..."<br><br>*The comment implies that the City has no responsibility for controlling dust from off-lake sources, such as the Keeler Dunes. The responsibility for implementing dust controls at the Keeler dunes is still to be determined. The statement in the SIP is accurate since dust from the off-lake dunes, whether they formed 500 years ago or yesterday have their origins from the lake bed.*<br><br>*No change to SIP.* |
| 31. | X | Facilities | 5 | 5-2 | 5.2.1 | 1 | 9 | The characterization of shallow flooding provided in this section of the SIP seems to be somewhat misleading (for example, the words "..with minimal infrastructure'), providing the reader with an unrealistic and falsely simplistic image of what is really being required. Shallow flooding costs range from 7 to more than 10 million dollars per square mile, with infrastructure including rock-armored berms, miles of distribution piping, thousands of valves and outlets, drainage capture and recirculation piping and pumps, roads, instrumentation and control, and bi-monthly satellite imagery to identify areas requiring more water. Operationally it has proven relatively complex, particularly since GBUAPCD has interpreted salt crust that naturally forms atop wetted areas as dry area making no contribution toward compliance. LADWP suggests that this paragraph be revised.<br><br>*The phrase will be modified to read "with reasonably* |

Great Basin UAPCD Responses to Los Angeles Department of Water & Power Comments on the Draft 2008 Owens Valley $PM_{10}$ Planning Area Demonstration of Attainment State Implementation Plan

| DWP # | SIP | Theme | Chapter | Page | Section | Para | Line | Comment |
|---|---|---|---|---|---|---|---|---|
| | | | | | | | | *minimal and cost-effective infrastructure."* |
| 32. | | Facilities | 5 | 5-2 | 5.2.1 | 2 | 8 | Note that the characterization of the lakebed as "very flat" is not appropriate for the relatively steep areas near the shoreline that are identified in the Settlement Agreement and this SIP as requiring control.<br>*The dried bed of Owens Lake can certainly be characterized as "typically very flat."*<br>*No change to SIP.* |
| 33. | X | Facilities | 5 | 5-3 | 5.2.2 | 3 | 5 | Because emissions after implementation were also estimated, LADWP suggests that this be rephrased as follows: "…reduced to an estimated 60 tons…" (added text is underlined).<br>*The sentence will be revised as suggested.* |
| 34. | | Facilities | 5 | 5-15 | 5.5.1 | 2 | 7 | The serpentine layout is only one of several possible configurations. Significant non-principal wind vectors can be addressed by other means, including the placement of perpendicular Moat and Row, sand fences, or other sand breaks.<br>*The description of Moat & Row as a serpentine layout is specifically stated in the Settlement Agreement and corresponds to the schematic diagram. A serpentine layout is also used in the SIP EIR.*<br>*No change to the SIP* |
| 35. | | Facilities | 5 | 5-15 | 5.5.1 | 3 | | Please reference the source of the preliminary Moat and Row spacings of "250 to 1000 feet." Note that the SWEEP-generated spacings for the T-32 and T-12 Moat and Row demonstration areas were 65 meters (213 feet) and 80 meters |

Great Basin UAPCD Responses to Los Angeles Department of Water & Power Comments on the Draft 2008 Owens Valley $PM_{10}$ Planning Area Demonstration of Attainment State Implementation Plan

| DWP # | SIP | Theme | Chapter | Page | Section | Para | Line | Comment |
|---|---|---|---|---|---|---|---|---|
| | | | | | | | | (262 feet), respectively.<br>*The description of the Moat & Row control measure was provided by the City as Exhibit 4 of the Settlement Agreement. This information was also used as the basis of the environmental impacts analysis in the SIP EIR. Information on the City's pre-test modeling using SWEEP was not provided to the District for review or as a reference. The City should provide an engineering analysis of the Moat & Row project, along with a description of the monitoring plan and protocol for measuring the control efficiency on the two test sites.*<br>*If a Moat & Row engineering analysis, monitoring plan and test protocol are provided they will be included in an appendix to the SIP.*<br>*No change to the SIP.* |
| 36. | X | Facilities | 5 | 5-16 | 5.5.1 | 1 | 5-7 | The SIP should clarify what it means for a Moat and Row area to "…contribute to a NAAQS exceedance."<br>Several alternative definitions are possible. LADWP and GBUAPCD are currently working together to develop a mutually acceptable definition.<br>In a similar vein, the SIP should define what is meant by a Moat and Row area being "…the cause of a NAAQS exceedance."<br>*"Cause an exceedance" means that $PM_{10}$ emissions from a particulate matter source or source area is associated with a modeled or monitored $PM_{10}$ impact at, or above, a shoreline receptor of greater than 130 µg/m³ for a 24-hour average, not including a background concentration.* |

Great Basin UAPCD Responses to Los Angeles Department of Water & Power Comments on the
Draft 2008 Owens Valley $PM_{10}$ Planning Area Demonstration of Attainment State Implementation Plan

| DWP # | SIP | Theme | Chapter | Page | Section | Para | Line | Comment |
|---|---|---|---|---|---|---|---|---|
| | | | | | | | | *"Contribute to an exceedance" means that $PM_{10}$ emissions from a particulate matter source or source area, when combined with other particulate matter source(s) or source area(s), is associated with a modeled or monitored $PM_{10}$ impact at or above a shoreline receptor of greater than 130 µg/m³ for a 24-hour average, not including a background concentration. In cases of two or more $PM_{10}$ sources contributing to an exceedance, $PM_{10}$ emissions from one or more of the sources may be controlled in order to reduce combined impacts to a concentration below 130 µg/m³.*<br><br>*These definitions will be added to the Glossary in Chapter 10 of the SIP.* |
| 37. | X | Facilities | 7 | 7-3 | 7.3.3 | 5 | 2 | The channel area is approximately 320 acres and contains significant portions (greater than 20 acres) that are not vegetated. It is therefore unlikely that there are about 300 acres of wetland habitat. A reference to actual acreage should be verified by site specific survey. Please change to indicate the area contains "significant portions" of sensitive wetland habitat.<br><br>*The Channel Area was surveyed as part of the EIR analysis. This sentence should read: "The City will implement DCMs in the 0.5 square mile (320 acre) Channel Area shown in Figure 7.1. This is a natural drainage channel on the southern portion of the lake bed that contains about 300 acres of sensitive wetland habitat and delineated water channel and therefore has significant resource issues and regulatory constraints.* |

Great Basin UAPCD Responses to Los Angeles Department of Water & Power Comments on the
Draft 2008 Owens Valley $PM_{10}$ Planning Area Demonstration of Attainment State Implementation Plan

| DWP # | SIP | Theme | Chapter | Page | Section | Para | Line | Comment |
|---|---|---|---|---|---|---|---|---|
| 38. | | Facilities | 8 | 8-11 | 8.2 | Order 16.B | 4 | This decision, in combination with the extensive site scale and variability, rendered managed vegetation, as currently described in the SIP, infeasible. Indeed, although average cover levels over 50% were achieved during summer and fall after several years, wintertime levels are about half of the regulatory requirement. Furthermore, no site of any significant size on Owens Lake could be farmed such that no individual acre would be without 50% cover. The soils are just too challenging to plant growth and difficult to drain and reclaim. No greater evidence than this massive effort and failure is needed to demonstrate the infeasibility of managed vegetation criteria contained in this SIP. However, if further evidence were needed, we know of no such land surface (with comparable levels of salinity, drainage, aridity) has been vegetated in the manner required by this SIP.<br><br>*The Settlement Agreement allows the City to operate the existing managed vegetation DCM with less than 50% cover if they follow the Managed Vegetation Operation and Management Plan in Attachment E of the Board Order.*<br><br>*Many of the challenges of meeting the 50% cover requirement at in the MV DCA are the result of the selection of a site with particularly poor soil and drainage characteristics. The feasibility of meeting the 50% target has been demonstrated by the City on large areas of the existing Managed Vegetation site, as well as at other lake bed sites through tests conducted by the District.*<br><br>*No change to the SIP.* |
| 39. | | Facilities | 8 | 8-11 | 8.2 | Order 16.C.v | 4 | The requirement for lateral or boundary edge berms or drains was shown by piezometer data collected during the SURF test |

Great Basin UAPCD Responses to Los Angeles Department of Water & Power Comments on the
Draft 2008 Owens Valley $PM_{10}$ Planning Area Demonstration of Attainment State Implementation Plan

| DWP # | SIP | Theme | Chapter | Page | Section | Para | Line | Comment |
|---|---|---|---|---|---|---|---|---|
| | | | | | | | | to be unnecessary. As a result, the requirement for lateral drains was removed by the GBUAPCD at that time (before the NSS project). To date, observations of surface and subsurface conditions at the margins of existing shallow flooding facilities have been generally consistent with this finding. Where exceptional conditions have caused seepage or off-site issues with shallow groundwater, additional perimeter drainage or cutoff features can be retrofit. Encircling all facilities with generally over-designed cutoff and drainage facilities (as specified in this draft SIP) would be an extremely costly and overly conservative approach to avoiding unwanted off-site hydrologic impacts. The further requirements in the section to avoid impacts from such off-site influence on shallow groundwater is appropriate and sufficient. Where management adjustments or facilities modifications are necessary to avoid these impacts, LADWP can apply them. Two other inconsistencies appear in this section. These requirements seem to assume surface irrigation of vegetation. LADWP currently does not have any such facilities. Also, ponded shallow flood areas, which are extensive, retain rather than re-circulate water. LADWP requests that these requirements be rephrased to the effect that, "…water applied for dust control should be retained within the dust control area or otherwise lawfully discharged in a manner consistent with applicable Waste Discharge Requirements".<br><br>*This comment appears to conflate the requirements for Shallow Flooding and Managed Vegetation. However, the District's response will address both control measures. The language presented in Board Order Section 16.C.v is exactly the same as that in the 2003 SIP (top paragraph on page 8-8). No changes to these provisions of the 2003* |

Great Basin UAPCD Responses to Los Angeles Department of Water & Power Comments on the Draft 2008 Owens Valley $PM_{10}$ Planning Area Demonstration of Attainment State Implementation Plan

| DWP # | SIP | Theme | Chapter | Page | Section | Para | Line | Comment |
|---|---|---|---|---|---|---|---|---|
| | | | | | | | | *SIP were addressed in the Settlement Agreement. Therefore, no change is required.*<br><br>*There is no assumption by the District on the method of irrigation of Managed Vegetation. Surface waters have been observed on the existing Managed Vegetation area during periods of heavy irrigation as well as during heavy precipitation events. The language used in the SIP accounts for this and reasonably requires their control and either recirculation or lawful discharge.*<br><br>*With respect to lateral berms for the Shallow Flooding areas, both the 2003 SIP (Board Order page 8-7) and the 2008 SIP (Board Order 15.H., page 8-10) have identical language: "The dust control measure areas shall have lateral boundary edge berms and/or drains as necessary to contain excess waters in the control areas and to isolate the dust control measure areas from each other and from areas not controlled. If drains are used, they shall be designed and constructed so that they may be regulated such that groundwater levels, surface water extent and wetlands in adjacent uncontrolled areas are not impacted." The District never "removed" the requirement for lateral drain from the Shallow Flood areas. Again, no changes to these provisions of the 2003 SIP were addressed in the Settlement Agreement. Therefore, no change is required.*<br><br>*The District's Shallow Flood research project known as the SURF test conducted by the District in 1999-2000 showed that there was a lateral effect of about 250 feet away from the side boundaries from the shallow flood area. This was also observed in shallow piezometer data* |

Great Basin UAPCD Responses to Los Angeles Department of Water & Power Comments on the Draft 2008 Owens Valley $PM_{10}$ Planning Area Demonstration of Attainment State Implementation Plan

| DWP # | SIP | Theme | Chapter | Page | Section | Para | Line | Comment |
|---|---|---|---|---|---|---|---|---|
| | | | | | | | | *from the NFIP test in 1994-1995. The down-slope edge of the SURF test area had three drains (two open drains and one tile drain) to prevent water loss down-gradient of the test area. The lower end of the NFIP test did not have and drains and the monitored effect of the flooding on the down-slope edge extended well below the lower end of the flooded area.*<br><br>*Shallow groundwater monitoring sites, operated by the District since 1992 and located adjacent to City Shallow Flooding areas, have shown that there are clear affects from upslope shallow flooding. Monitoring sites located near Shallow Flooding boundaries with operational drains are observed to have water levels that are lower than those measured before the flood areas began operation. Other monitoring sites that are located adjacent to Shallow Flooding boundaries without drains have observed water levels that are consistently higher than before flooding operation. In fact, in some area downstream of existing Shallow Flood areas (e.g., T-11), the berms themselves leak and there are significant overland flows across the lake bed toward the brine pool.*<br><br>*No change to SIP.* |
| 40. | X | Facilities | 5<br><br>8<br><br>8 | 5-16<br><br>8-11<br><br>8-13 | 5.6<br><br>8.2<br><br>8.2 | 1<br><br>Order 16.C.vi<br><br>Order 20 | 6<br><br>2<br><br>1 | In general, stormwater management planning is for dispersal of concentrated flows up gradient of the site, and then routing of dispersed flood flows over the site. No de-silting is required, and no other facilities are needed. Irrigation and drainage facilities are designed to resist stormwater damage. In shallow flooding, stormwater is generally captured. If the facilities exceed the capture capacity, water is released down gradient through weirs. This approach has proven workable, and is in |

Great Basin UAPCD Responses to Los Angeles Department of Water & Power Comments on the Draft 2008 Owens Valley $PM_{10}$ Planning Area Demonstration of Attainment State Implementation Plan

| DWP # | SIP | Theme | Chapter | Page | Section | Para | Line | Comment |
|---|---|---|---|---|---|---|---|---|
| | | | | | | | | keeping with existing permits from the Regional Water Quality Control Board. Please alter language to reflect this approach rather than to imply other types of facilities.<br><br>*The 1997, 1998 and 2003 SIPs contained identical requirements to protect DCM areas from damage caused by flooding and alluvial deposits. In addition, this issue was not addressed in the Settlement Agreement; therefore, no change to the SIP is required. However, over the past few decades, District staff has observed significant changes to the lake bed caused by stormwater flows and material deposition. The SIP requires DCMs to be protected from such damage. If such protection is not adequately provided and the DCMs are subsequently damaged, such they are rendered inoperable, District staff is unlikely to support any variance request from the City.*<br><br>*The SIP must require the City to design protection measures into the DCMs; it does not need to specify how the City is to provide such protection. Paragraph 16.C.vi. of the Order will be modified to remove reference to specific methods of protection or types facilities.* |
| 41. | | Modeling | 3 | 3-6 | Fig 3.5 | | | Figure 3.5 is presented in the 2008 SIP to illustrate the fact that the Owens lake concentrations have "…consistently dwarfed values reported from the rest of the nation since 2000." However, no explanation is offered as to why there is such a dramatic increase in the maximum $PM_{10}$ concentrations on the Owens playa beginning in the year 2000. The text mentions that the Dirty Socks monitor was installed in 1999, but this explanation occurred in Figure 3.4. To help the reader, a similar explanation should be added to |

Great Basin UAPCD Responses to Los Angeles Department of Water & Power Comments on the Draft 2008 Owens Valley $PM_{10}$ Planning Area Demonstration of Attainment State Implementation Plan

| DWP # | SIP | Theme | Chapter | Page | Section | Para | Line | Comment |
|---|---|---|---|---|---|---|---|---|
| | | | | | | | | the description for Figure 3.5.<br><br>*The increase in the maximum $PM_{10}$ concentrations starting in 2000 is due to the addition of the Dirty Socks monitor site in summer 1999. This site routinely recorded the highest concentration after it was installed (see section 3.3.4.1.).*<br><br>*No change to SIP.* |
| 42. | X | Modeling | 3 | 3-6 | 3.3.4.3 | 1 | 3-4 | The SIP states that: "…$PM_{10}$ concentrations exceeding 20,000 g/$m^3$ have been measured at the Dirty Socks monitor site. This is more than 133 times higher than the 24-hour NAAQS of 150 g/$m^3$…" However, Table 3.2 of the SIP shows the maximum 24-hour average at the Dirty Socks monitor was 12,153 g/$m^3$ in 2001. LADWP suspects that the 20,000-g/$m^3$ figure is a generalized one-hour peak concentration, not a 24-hour average concentration.<br><br>The SIP should be reworded as follows: "…$PM_{10}$ concentrations exceeding 12,000 g/$m^3$ have been measured at the Dirty Socks monitor site. This is more than 80 times higher than the 24-hour NAAQS of 150 g/$m^3$…"<br><br>*The Dirty Socks monitor site had two collocated monitors operating from its initial set-up in June 1999 until the end of June 2007. These were a TEOM continuous monitor and a Partisol sequential filter-based monitor. On 2 May, 2001, the TEOM measured a 24-hour concentration of 12,038 µg/$m^3$, whereas the collocated Partisol measured a 24-hour concentration of 20,754 µg/$m^3$. This is not a "generalized one-hour peak concentration" as suggested by LADWP, but is a valid measurement by a Federal Reference Method monitor. Table 3.2 summarizes $PM_{10}$* |

Great Basin UAPCD Responses to Los Angeles Department of Water & Power Comments on the
Draft 2008 Owens Valley $PM_{10}$ Planning Area Demonstration of Attainment State Implementation Plan

| DWP # | SIP | Theme | Chapter | Page | Section | Para | Line | Comment |
|---|---|---|---|---|---|---|---|---|
| | | | | | | | | *data collected at Dirty Socks using the TEOM during periods when it was collocated with the Partisol. TEOM measurements are collected daily and provide a better trend analysis than the Partisol monitors, which normally collect samples once every third day.*<br><br>*The following clarifying language will be inserted into Section 3.3.4.3.:*<br><br>*"$PM_{10}$ concentrations exceeding 20,000 µg/$m^3$ have been measured at the Dirty Socks monitor site using a Partisol $PM_{10}$ monitor. This is more than 133 times higher than the 24-hour NAAQS of 150 µg/$m^3$. Partisols are Federal Reference Method monitors that collect samples on a filter that are weighed in the lab and are operated once every third day. However, note that most of the $PM_{10}$ data shown in Table 3.2 are based on automated TEOM $PM_{10}$ measurements which provide hourly and daily concentrations and are another federally approved $PM_{10}$ monitor."* |
| 43. | | Modeling | 4 | 4-9 | 4.3.4 | | | The statement is made that: "Because the edge of a dust plume has a very high concentration gradient a few degrees error in the plume direction could greatly affect the calculated K-factor." The LADWP has requested many times over the years, both orally and in writing, that the GBUAPCD add a concentration gradient screen to the Dust ID protocol. The GBUAPCD has denied these requests, citing unreasonable complexity or that it would not make a difference in the modeling results. LADWP requests again that a concentration gradient k-factor screen be added to the Dust ID protocol and that this be acknowledge in the 2008 SIP. |

Great Basin UAPCD Responses to Los Angeles Department of Water & Power Comments on the Draft 2008 Owens Valley $PM_{10}$ Planning Area Demonstration of Attainment State Implementation Plan

| DWP # | SIP | Theme | Chapter | Page | Section | Para | Line | Comment |
|---|---|---|---|---|---|---|---|---|
| | | | | | | | | *Section 7.6 discusses the District's commitment to replace or modify the current Dust ID program, which includes the method to calculate K-factors. Development of these procedures is expected to be done jointly with the City and an expert panel as part of an overall effort to improve the Dust ID Program pursuant to paragraph 9 of the Settlement Agreement. To date, no joint meetings have been held for this purpose.*<br><br>*The City's inclusion of comments on the SIP related to K-factor calculations shows disregard for the Settlement Agreement between the District and the City in which they agreed not to re-visit these previously addressed issues so that we could move forward with dust control efforts at Owens Lake. The following is an excerpt from the Settlement Agreement (December 4, 2006) paragraph 18.B.(iv):*<br><br>*"Based on the foregoing, the City stipulates and agrees that all of the provisions and determinations, including the measures and procedures, contained in the 2003 SIP, the provisions of this Agreement to be included in the modifications to the 2003 SIP pursuant to this Agreement, and the SCR determination dated April 4, 2006, which the City in good faith disputed, shall be deemed to be valid and reasonable, and that the City will not challenge those provisions or determinations by appeal under Section 42316 or in any other proceeding, including any other administrative or judicial forum. Subject to this Paragraph, the City may challenge any future SCR determination under Section 42316; however any arguments or challenges must be based on data* |

Great Basin UAPCD Responses to Los Angeles Department of Water & Power Comments on the
Draft 2008 Owens Valley $PM_{10}$ Planning Area Demonstration of Attainment State Implementation Plan

| DWP # | SIP | Theme | Chapter | Page | Section | Para | Line | Comment |
|---|---|---|---|---|---|---|---|---|
| | | | | | | | | *and information that do not currently exist, but that exist after the execution of this Agreement."*<br><br>*No change to the SIP.* |
| 44. | | Modeling | 4 | 4-9 | 4.3.4 | | | The SIP states that: "While the K-factors may change by a factor of two or three, their consistency is in contrast to the large shifts in the hourly sand flux rates, which often change by three orders of magnitude and drive the emissions using Equation 4.2." There are often systematic errors and inconsistencies in the K-factors that the GBUAPCD does not acknowledge to be important. These systematic errors are readily apparent when more than one shoreline monitor is used to derive the K-factors for the same dust event. For example, during the 2/1/2003 event, the Dirty Socks-derived K-factor was 7 times higher than the Olancha-derived K-factor. During the 3/14/2003 storm that affected a large part of the Central Area, the average K-factors at Keeler and Shellcut were 46.6 and 6.4, respectively. In most cases, there is no way to assess the extent of the error because the storm-specific K-factors are usually calculated based on a single monitoring location. The GBUAPCD should acknowledge in the SIP that these differences occur, and should press for modeling refinements that reduce or eliminate any artificial differences in K-factors based on monitoring location.<br><br>*The use of event-specific K-factor is discussed in Attachments B and C of the Board Order and is the preferred alternative when available. Section 7.6 discusses the District's commitment to replace or modify the current Dust ID program, which includes the method to calculate K-factors for use in the model. Development of these procedures is expected to be done jointly with* |

Great Basin UAPCD Responses to Los Angeles Department of Water & Power Comments on the Draft 2008 Owens Valley $PM_{10}$ Planning Area Demonstration of Attainment State Implementation Plan

| DWP # | SIP | Theme | Chapter | Page | Section | Para | Line | Comment |
|---|---|---|---|---|---|---|---|---|
| | | | | | | | | *the City and an expert panel as part of an overall effort to improve the Dust ID Program pursuant to paragraph 9 of the Settlement Agreement. To date, no joint meetings have been held for this purpose.*<br><br>*The City's inclusion of comments on the SIP related to K-factor calculations shows disregard for the Settlement Agreement between the District and the City in which they agreed not to re-visit these previously addressed issues so that we could move forward with dust control efforts at Owens Lake. The following is an excerpt from the Settlement Agreement (December 4, 2006) paragraph 18.B.(iv):*<br><br>*"Based on the foregoing, the City stipulates and agrees that all of the provisions and determinations, including the measures and procedures, contained in the 2003 SIP, the provisions of this Agreement to be included in the modifications to the 2003 SIP pursuant to this Agreement, and the SCR determination dated April 4, 2006, which the City in good faith disputed, shall be deemed to be valid and reasonable, and that the City will not challenge those provisions or determinations by appeal under Section 42316 or in any other proceeding, including any other administrative or judicial forum. Subject to this Paragraph, the City may challenge any future SCR determination under Section 42316; however any arguments or challenges must be based on data and information that do not currently exist, but that exist after the execution of this Agreement."*<br><br>*No change to the SIP.* |

Great Basin UAPCD Responses to Los Angeles Department of Water & Power Comments on the Draft 2008 Owens Valley $PM_{10}$ Planning Area Demonstration of Attainment State Implementation Plan

| DWP # | SIP | Theme | Chapter | Page | Section | Para | Line | Comment |
|---|---|---|---|---|---|---|---|---|
| 45. | | Modeling | 4 | 4-9 | 4.3.4 | 4 | | The SIP states that "The results show scatter in the hourly values, but as predicted by the PM10 to sand flux theory, there appears to be a fairly constant average K-factor for each storm during certain periods of the year." This statement is not correct. The storm on 2/1/2003 had an average K-factor of 24.4. This was followed by another storm on 2/19/2003 that had an average K-factor of 2.8, which is well outside the factor of 2 or 3 cited in the 2008 SIP. The LADWP can produce other examples of large differences in the average K-factors over relatively short time periods. Please remove or modify this statement.<br><br>*The terms "fairly constant average K-factor" and "large differences in the average K-factor" are both subjective views that could be drawn from the same data set. The K-factors mentioned in the comment were discussed in meetings with the City prior to making a determination under the SCR procedures, which was later challenged by the City.*<br><br>*The City's inclusion of comments on the SIP related to K-factors shows disregard for the Settlement Agreement between the District and the City in which they agreed not to re-visit these previously addressed issues so that we could move forward with dust control efforts at Owens Lake. Once again, the following is an excerpt from the Settlement Agreement (December 4, 2006) paragraph 18.B.(iv):*<br><br>*"Based on the foregoing, the City stipulates and agrees that all of the provisions and determinations, including the measures and procedures, contained in the 2003 SIP, the provisions of this Agreement to be* |

Great Basin UAPCD Responses to Los Angeles Department of Water & Power Comments on the
Draft 2008 Owens Valley $PM_{10}$ Planning Area Demonstration of Attainment State Implementation Plan

| DWP # | SIP | Theme | Chapter | Page | Section | Para | Line | Comment |
|---|---|---|---|---|---|---|---|---|
| | | | | | | | | *included in the modifications to the 2003 SIP pursuant to this Agreement, and the SCR determination dated April 4, 2006, which the City in good faith disputed, shall be deemed to be valid and reasonable, and that the City will not challenge those provisions or determinations by appeal under Section 42316 or in any other proceeding, including any other administrative or judicial forum. Subject to this Paragraph, the City may challenge any future SCR determination under Section 42316; however any arguments or challenges must be based on data and information that do not currently exist, but that exist after the execution of this Agreement."*<br><br>*Section 7.6 discusses the District's commitment to replace or modify the current Dust ID program, which includes the method to calculate K-factors for use in the model. Development of these procedures is expected to be done jointly with the City and an expert panel as part of an overall effort to improve the Dust ID Program pursuant to paragraph 9 of the Settlement Agreement. To date, no joint meetings have been held for this purpose.*<br><br>*No change to SIP.* |
| 46. | | Modeling | 4 | 4-9 | 4.3.4 | 4 | | The text states that the average K-factors are fairly constant within dust storms, varying by a factor of 2 to 3. However, based the associated figures this is an incorrect interpretation of the data. Figures 4.10 through 4.13 indicate that within dust storms K-factors vary by at least one and up to more than 2 orders of magnitude. A more accurate statement would be that K-factors are highly variable over all time scales. Mathematically it is logical that the "average" values |

Great Basin UAPCD Responses to Los Angeles Department of Water & Power Comments on the Draft 2008 Owens Valley $PM_{10}$ Planning Area Demonstration of Attainment State Implementation Plan

| DWP # | SIP | Theme | Chapter | Page | Section | Para | Line | Comment |
|---|---|---|---|---|---|---|---|---|
| | | | | | | | | would be less variable because the averaging process represents smoothing (see next comment). But even the smoothed values vary by more than a factor or two or three as the preceding comment pointed out.<br><br>*The method to calculate K-factors is discussed in Attachments B and C of the Board Order. Section 7.6 discusses the District's commitment to replace or modify the current Dust ID program, which includes the method to calculate K-factors for use in the model. Development of these procedures is expected to be done jointly with the City and an expert panel as part of an overall effort to improve the Dust ID Program pursuant to paragraph 9 of the Settlement Agreement. To date, no joint meetings have been held for this purpose.*<br><br>*The City's inclusion of comments on the SIP related to K-factor calculations shows disregard for the Settlement Agreement between the District and the City in which they agreed not to re-visit these previously addressed issues so that we could move forward with dust control efforts at Owens Lake. The following is an excerpt from the Settlement Agreement (December 4, 2006) paragraph 18.B.(iv):*<br><br>*"Based on the foregoing, the City stipulates and agrees that all of the provisions and determinations, including the measures and procedures, contained in the 2003 SIP, the provisions of this Agreement to be included in the modifications to the 2003 SIP pursuant to this Agreement, and the SCR determination dated April 4, 2006, which the City in good faith disputed, shall be deemed to be valid and* |

Great Basin UAPCD Responses to Los Angeles Department of Water & Power Comments on the Draft 2008 Owens Valley $PM_{10}$ Planning Area Demonstration of Attainment State Implementation Plan

| DWP # | SIP | Theme | Chapter | Page | Section | Para | Line | Comment |
|---|---|---|---|---|---|---|---|---|
| | | | | | | | | *reasonable, and that the City will not challenge those provisions or determinations by appeal under Section 42316 or in any other proceeding, including any other administrative or judicial forum. Subject to this Paragraph, the City may challenge any future SCR determination under Section 42316; however any arguments or challenges must be based on data and information that do not currently exist, but that exist after the execution of this Agreement."*<br>*No change to SIP.* |
| 47. | X | Modeling | 4 | | 4.3.4 | 4 | | The text states that the "average K-factors" are relatively constant within dust storms. However, the solid lines in Figure 4-10 to 4-13 are 75th percentile K-factors, not average K-factors. It would be more correct to say that "the 75th percentile K-factors" are relatively constant within storms. However, as LADWP has commented elsewhere in this document, the evidence does not support the statement that the K-factors are "relatively constant" over any time period.<br>*The 2nd sentence of paragraph 4 will be changed to:"The results show scatter in the hourly values, but the 75th percentile K-factors values (blue line) are relatively consistent during certain periods of the year."* |
| 48. | | Modeling | 4 | 4-12 | Figure 4.14 | | | Although the Keeler dunes have been included in the Dust ID modeling analysis, the modeled area is considerably larger than the area delineated in Figure 4.14. If the delineated source area is the actual emissive area, then the modeling would greatly *overestimate* the $PM_{10}$ contribution from the dunes and greatly *underestimate* the K-factors. If the Keeler dunes are deflating as the GBUAPCD hypothesizes, then the decrease in Keeler dunes K-factors may be an artifact of |

Great Basin UAPCD Responses to Los Angeles Department of Water & Power Comments on the
Draft 2008 Owens Valley $PM_{10}$ Planning Area Demonstration of Attainment State Implementation Plan

| DWP # | SIP | Theme | Chapter | Page | Section | Para | Line | Comment |
|---|---|---|---|---|---|---|---|---|
| | | | | | | | | using the incorrect source size rather than reflecting a change in the surface emission potential.<br><br>*The source area that was modeled for the Keeler Dunes is shown in Figure 6.4. The Keeler Dune area shown in Figure 4.14 was used for the year 2000 emissions inventory in the 2003 SIP. The area size of the Keeler Dunes in 2000 was used to estimate emissions for the Olancha Dunes from 2000 on. Because the lake bed area adjacent to the Keeler Dunes was shallow flooded in 2002, the emissions characteristics may have been modified because of the nearby dust controls. Although annual emissions from the Keeler Dunes were estimated after 2000, the relative changes in annual emissions may not reflect the same changes in the Olancha Dunes. Therefore, the Olancha Dunes emission estimate was kept constant for all years.*<br><br>*The Dust ID Method uses $PM_{10}$ monitor data to determine the contribution from the Keeler Dunes. The Keeler Dune K-factors are adjusted so that the model predicts the monitored concentration. The area size was kept constant in the model for all the model years. So although the dunes might be shrinking in size, the Dust ID Method makes up for the change in the area size by adjusting the K-factor to yield the correct model prediction for the $PM_{10}$ contribution.*<br><br>*The slight downward trend in K-factor values (see Table 4.1) may be a result of depleting the relative concentration of $PM_{10}$ sized particles from the Keeler Dunes, or an artifact of <u>possibly</u> overestimating the sand flux. Future studies of the Keeler Dunes as part of efforts* |

Great Basin UAPCD Responses to Los Angeles Department of Water & Power Comments on the
Draft 2008 Owens Valley $PM_{10}$ Planning Area Demonstration of Attainment State Implementation Plan

| DWP # | SIP | Theme | Chapter | Page | Section | Para | Line | Comment |
|---|---|---|---|---|---|---|---|---|
| | | | | | | | | *to better characterize off-lake sources should help to determine if the observed downward trend in the K-factor is real.*<br><br>*No change to SIP.* |
| 49. | | Modeling | 4 | 4-12 | Figure 4.14 | | | The GBUAPCD is not consistent in its handling of the Keeler dunes. The area presented in Figure 4.14 is different than the area presented in the [internal screen-check (editor's note)] draft SIP, which in turn is different than the area used in the modeling analysis. The GBUAPCD should present the area that was assumed in the emission inventory. Note that in a previous version of Figure 4-14, the GBUAPCD included the Flat Rock dunes. In over six year of the Dust ID modeling this area has never been considered by the GBUAPCD, yet its location is critical since it is between the lake-bed and the Flat Rocks $PM_{10}$ monitor. If this area was emissive, those concentrations would be incorrectly allocated back to the on-lake sources. Note that the one storm in which Flat Rock and Shell Cut both jointly sampled the Central Area, the Flat Rock K-factors were higher (44 versus 33).<br><br>*See response to previous Comment 48 on the differences in the Figure 4.14.*<br><br>*Dust storm observers have not seen dust plumes from the Flat Rock Dune area shown in the former Figure 4.14 since dust source area mapping started in 1999. The map may have been from a response to the City's previous issues in their Alternative Analysis and was included by error. If dust from that area was causing the District to incorrectly allocate $PM_{10}$ to on-lake sources, the Flat Rock K-factor would be significantly higher than K-factors generated at Shell Cut for the Central Area. However, Flat* |

Great Basin UAPCD Responses to Los Angeles Department of Water & Power Comments on the Draft 2008 Owens Valley $PM_{10}$ Planning Area Demonstration of Attainment State Implementation Plan

| DWP # | SIP | Theme | Chapter | Page | Section | Para | Line | Comment |
|---|---|---|---|---|---|---|---|---|
| | | | | | | | | *Rock K-factors are within the range of K-factors generated at Shell Cut for the Central Area. See Figure 4.12.*<br><br>*There is no evidence that the Flat Rock Dune area indicated in the screen check/administrative draft version of Figure 4.14 is influencing the allocation of $PM_{10}$ to lake bed dust source areas. District field experts believe this area is a deposition area and not a significant source of dust.*<br><br>*The City's inclusion of comments on the SIP related to off-lake sources and K-factor calculations shows disregard for the Settlement Agreement between the District and the City in which they agreed not to re-visit these previously addressed issues so that we could move forward with dust control efforts at Owens Lake. The following is an excerpt from the Settlement Agreement (December 4, 2006) paragraph 18.B.(iv):*<br><br>*"Based on the foregoing, the City stipulates and agrees that all of the provisions and determinations, including the measures and procedures, contained in the 2003 SIP, the provisions of this Agreement to be included in the modifications to the 2003 SIP pursuant to this Agreement, and the SCR determination dated April 4, 2006, which the City in good faith disputed, shall be deemed to be valid and reasonable, and that the City will not challenge those provisions or determinations by appeal under Section 42316 or in any other proceeding, including any other administrative or judicial forum. Subject to this Paragraph, the City may challenge any future SCR* |

Great Basin UAPCD Responses to Los Angeles Department of Water & Power Comments on the
Draft 2008 Owens Valley $PM_{10}$ Planning Area Demonstration of Attainment State Implementation Plan

| DWP # | SIP | Theme | Chapter | Page | Section | Para | Line | Comment |
|---|---|---|---|---|---|---|---|---|
| | | | | | | | | *determination under Section 42316; however any arguments or challenges must be based on data and information that do not currently exist, but that exist after the execution of this Agreement."*<br><br>*No change to SIP.* |
| 50. | | Modeling | 4 | 4-12 | Table 4.2 | | | According to Table 4-2, the emissions for Keeler dunes increased significantly in 2006 (from less than 3,000 to over 8,000 tons per year). No explanation for this dramatic increase was given in the Draft 2008 SIP. In our review of the data, LADWP found that the highest $PM_{10}$ concentration in Keeler in 2006 (from the direction of the Keeler dunes) was associated with the highest observed wind speed. The high wind speed resulted in high sand motion which in turn resulted in a high emission rate for the Keeler dunes. If the Keeler dune emissions are a function of wind speed, then wouldn't the same be true for the Olancha dunes (which according to Table 4.2 are constant in time)? LADWP recommends that the Olancha dune emissions be scaled to the Keeler dune emissions on a year-by-year basis.<br><br>*See responses to previous comments [48 & 49] on the differences in Figure 4.14.*<br><br>*No change to SIP.* |
| 51. | | Modeling | 6 | 6-4 | 6.3.2 | 3 | 1 | The text states that: "Experimental and theoretical evidence suggest Kf is a property associated with the binding energies of the soil and is relatively independent of the surface stress induced by wind speed." However, the K-factors are not independent of the wind speed or measured $PM_{10}$ concentration. The LADWP has exhaustively reviewed the data and found that, generally, the higher the wind speed (and |

Great Basin UAPCD Responses to Los Angeles Department of Water & Power Comments on the Draft 2008 Owens Valley $PM_{10}$ Planning Area Demonstration of Attainment State Implementation Plan

| DWP # | SIP | Theme | Chapter | Page | Section | Para | Line | Comment |
|---|---|---|---|---|---|---|---|---|
| | | | | | | | | thus the higher the $PM_{10}$ concentration), the higher the K-factor. The seasonal increase in K-factor may be due in part to the higher wind speeds and $PM_{10}$ concentrations during those periods.<br><br>*In the 2006 Settlement Agreement between the District and the City, both parties agreed to work together on unresolved technical issues. However, once again, the City's inclusion of comments on the SIP related to K-factor calculations shows disregard for the Settlement Agreement in which they agreed not to re-visit these previously addressed issues so that we could move forward with dust control efforts at Owens Lake. The following is an excerpt from the Settlement Agreement (December 4, 2006) paragraph 18.B.(iv):*<br><br>*"Based on the foregoing, the City stipulates and agrees that all of the provisions and determinations, including the measures and procedures, contained in the 2003 SIP, the provisions of this Agreement to be included in the modifications to the 2003 SIP pursuant to this Agreement, and the SCR determination dated April 4, 2006, which the City in good faith disputed, shall be deemed to be valid and reasonable, and that the City will not challenge those provisions or determinations by appeal under Section 42316 or in any other proceeding, including any other administrative or judicial forum. Subject to this Paragraph, the City may challenge any future SCR determination under Section 42316; however any arguments or challenges must be based on data and information that do not currently exist, but that exist* |

Great Basin UAPCD Responses to Los Angeles Department of Water & Power Comments on the
Draft 2008 Owens Valley $PM_{10}$ Planning Area Demonstration of Attainment State Implementation Plan

| DWP # | SIP | Theme | Chapter | Page | Section | Para | Line | Comment |
|---|---|---|---|---|---|---|---|---|
| | | | | | | | | *after the execution of this Agreement."*<br>*No change to SIP.* |
| 52. | | Modeling | 8 | 8-1 | | | | The GBUAPCD is planning to measure sand masses down as low as 0.1 grams (the lower limit was 5 grams in the 2003 Revised SIP). For masses less than 5 grams, the GBUAPCD should verify that a statistically significant relationship between the CSC mass and Sensit exists before using these data in the Dust ID model. See comments pertaining to Figure 4.5, which follows page 4-8 of the Draft 2008 SIP.<br>*See response to Comment 53*<br>*No change to SIP.* |
| 53. | | Modeling | 8 | 15 of 45 | Attachment C | 5 | | Measuring sand masses to as low as one gram is not appropriate. When the collected sand masses are small (nominally less than 5 grams), they cannot be accurately apportioned over time because the Sensit kinetic energy cannot be separated from the baseline instrument "noise." At low sand masses, even the Sensit particle counts may not be well correlated with sand mass because of small-scale spatial differences between the Sensit and sand mass collection points. This source of error is one of many in the overall modeling analysis that can be avoided by screening out low sand masses. LADWP requests that the sand mass threshold be changed from one gram to five grams consistent with the 2003 Revised SIP.<br>*The SIP requires 99% control efficiency in most DCAs on the lake bed. Since many of the source areas had total sand catches less than 100 grams, a catch of less than 1 gram would be needed to demonstrate 99% control efficiency had been achieved. It is also possible that* |

Great Basin UAPCD Responses to Los Angeles Department of Water & Power Comments on the
Draft 2008 Owens Valley $PM_{10}$ Planning Area Demonstration of Attainment State Implementation Plan

| DWP # | SIP | Theme | Chapter | Page | Section | Para | Line | Comment |
|---|---|---|---|---|---|---|---|---|
| | | | | | | | | *even a less than 5 gram catch could represent an exceedance at a shoreline receptor. Without evidence, the City speculates that there is unacceptable error in the sand flux measurements at sand catches less than 5 grams. This should be analyzed in the future as a joint effort with the District, City and the expert panel.*<br><br>*Section 7.6 discusses the District's commitment to replace or modify the current Dust ID program. Development of these procedures is expected to be done jointly with the City and an expert panel as part of an overall effort to improve the Dust ID Program pursuant to paragraph 9 of the Settlement Agreement. To date, no joint meetings have been held for this purpose.*<br><br>*No change to SIP.* |
| 54. | | Modeling | Appendix B | 1 | | | | The Air Quality Modeling Report in Appendix B does not address how model performance will be evaluated. In response to a comment on the [internal (editor's note)] screen check version of the Draft 2008 SIP, the GBUAPCD stated that "…model performance is discussed in the modeling report in Appendix B." LADWP cannot find this discussion in Appendix B.<br><br>The Settlement Agreement (paragraph 9.C.v) states that both the LADWP and GBUAPCD will work to "…establish mutually agreeable model performance measures…" LADWP understands that this was not completed in time to include in the Draft 2008 SIP. Nonetheless, it was recognized by both parties as a high priority and the 2008 SIP should recognize this effort. The Settlement Agreement also states that although minimum model performance standards aren't required, they "may" be included based on the agreement |

Great Basin UAPCD Responses to Los Angeles Department of Water & Power Comments on the Draft 2008 Owens Valley $PM_{10}$ Planning Area Demonstration of Attainment State Implementation Plan

| DWP # | SIP | Theme | Chapter | Page | Section | Para | Line | Comment |
|---|---|---|---|---|---|---|---|---|
| | | | | | | | | between the GBUAPCD and the LADWP to mutually explore the possibility of establishing model performance standards.<br><br>*The modeling report in Appendix B of the 2003 SIP includes a detailed model performance analysis. An updated model performance evaluation was not done for the modeling for the period from July 2002 through June 2006.*<br><br>*The District staff supports using model performance measurements as an objective way to compare different model assumptions to see if they improve the model's precision and accuracy. However, setting minimum acceptable performance criteria can be considered but is not required by the Settlement Agreement. Minimum model performance criteria that are too strict could create a situation where the model can never be used to determine if new areas are causing or contributing to exceedances of the standard. This could also restrict the District from identifying areas that contributed to monitored exceedances, since the model would have to be used if more than one dust source area was contributing.*<br><br>*Section 7.6 discusses the District's commitment to replace or modify the current Dust ID program. Development of these procedures is expected to be done jointly with the City and an expert panel as part of an overall effort to improve the Dust ID Program pursuant to paragraph 9 of the Settlement Agreement. To date, no joint meetings have been held for this purpose.*<br><br>*No change to SIP.* |

Great Basin UAPCD Responses to Los Angeles Department of Water & Power Comments on the
Draft 2008 Owens Valley $PM_{10}$ Planning Area Demonstration of Attainment State Implementation Plan

| DWP # | SIP | Theme | Chapter | Page | Section | Para | Line | Comment |
|---|---|---|---|---|---|---|---|---|
| 55. | | Off-lake sources | 4 | 4-1 | 4.1 | 1 | 2-5 | LADWP recommends revising this sentence to read: "Other off-lake wind erosion sources in the Owens Valley Planning Area include: sand dunes; undisturbed sandy desert soil areas; small mining facilities such as the Dolomite Mine; off-road vehicle areas near Lone Pine, Keeler, Independence, and Olancha; and Inyo County's Lone Pine Landfill."<br><br>*With regard to off-lake dust sources other than the Keeler and Olancha Dunes, these are discussed in Chapter 4, and Section 7.5 and the Off-lake Report (Kiddoo, et al., 2007). For example from Section 4.3.6:*<br><br>*"There are additional off-lake source areas present along the east and southeastern portion of the lakeshore. <u>These sources consist of natural alluvial fan sand deposits on the lower slopes of the Inyo and Coso Mountains mixed with secondary source material blown up from the exposed Owens Lake playa.</u> The boundaries of these areas are diffuse and poorly defined and the $PM_{10}$ emission rates associated with these areas are unknown."*<br><br>*In paragraph 9.C.(iii) of the Settlement Agreement the District agreed to make reasonable attempts to account for non-lake bed sources that affect the monitors.*<br><br>*No change to SIP.* |
| 56. | | Off-lake sources | 4 | 4-1 | 4.1 | 1 | 2 | The phrase "off-lake sources of lakebed dust" suggests that these off-lake sources originated exclusively from the Owens playa. This statement cannot be supported by any quantitative scientific data. The dry desert soils that predominate the Owens Valley are inherently dusty. The Owens playa is not the only source of fine particles found in |

Great Basin UAPCD Responses to Los Angeles Department of Water & Power Comments on the
Draft 2008 Owens Valley $PM_{10}$ Planning Area Demonstration of Attainment State Implementation Plan

| DWP # | SIP | Theme | Chapter | Page | Section | Para | Line | Comment |
|---|---|---|---|---|---|---|---|---|
| | | | | | | | | the Owens Valley.<br>*District observers have spent many hundreds of hours observing dust emissions in the southern Owens Valley during high wind events. The dry desert soils in the vast majority of the Owens Valley are not inherently dusty. The dried Owens Lake bed is inherently dusty. The Owens playa is not the only source of dust in the Owens Valley, but it is responsible for the vast majority of the dust emissions. See Chapter 4 of the 1997, 1998, 2003 and draft 2008 SIPs for the emissions inventory.*<br>*In paragraph 9.C.(iii) of the Settlement Agreement the District agreed to make reasonable attempts to account for non-lake bed sources that affect the monitors.*<br>*No change to SIP.* |
| 57. | | Off-lake sources | 4 | 4-1 | 4.1 | 3 | 4-5 | As the Owens Lake Dust mitigation project moves toward its clear attainment goal in this SIP, the statement that other wind erosion sources "…are usually sporadic and are very small in comparison to dust from the Owens Lake bed…" will become less and less true. There are several recorded exceedances from off-lake sources annually and ANY exceedances should be considered significant by the GBUAPCD, particularly given the fact that this 2008 SIP places restrictions on advancement of dust control technologies on Owens Lake if any off-lake exceedances occur. This fact should be acknowledged in the SIP. The SIP states elsewhere that the Keeler dunes area is expected to continue to cause exceedances of the standard after the lake bed sources in the 2003 and 2008 dust control areas are controlled. It is important to include all other sources of dust in the emissions inventory. |

Great Basin UAPCD Responses to Los Angeles Department of Water & Power Comments on the
Draft 2008 Owens Valley $PM_{10}$ Planning Area Demonstration of Attainment State Implementation Plan

| DWP # | SIP | Theme | Chapter | Page | Section | Para | Line | Comment |
|---|---|---|---|---|---|---|---|---|
| | | | | | | | | *In paragraph 9.C.(iii) of the Settlement Agreement the District agreed to make reasonable attempts to account for non-lake bed sources that affect the monitors.*<br><br>*No change to SIP.* |
| 58. | | Off-lake sources | 4 | 4-1 | 4.1 | 3 | | Although the small off-lake area sources may be sporadically emissive, they still can have an important impact on the observed $PM_{10}$ concentrations. For this reason, it is critical to properly delineate these small sources and account for them in the attainment modeling.<br><br>*In paragraph 9.C.(iii) of the Settlement Agreement the District agreed to make reasonable attempts to account for non-lake bed sources that affect the monitors.*<br><br>*Currently, these small source areas are assumed to contribute to the 20 $\mu g/m^3$ background concentration in the model. When the District has adequate spatial and temporal information on these small off-lake sources we will incorporate them in the model to replace the background concentration.*<br><br>*No change to SIP.* |
| 59. | | Off-lake sources | 4 | 4-11 | 4.3.6 | | | The emissions estimate for the Olancha dunes is likely underestimated because Equation 4.4 does not account for the difference in wind speeds between the two sites. Often, plumes are visible on the Olancha dunes when the Keeler dunes are inactive.<br><br>*In paragraph 9.C.(iii) of the Settlement Agreement the District agreed to make reasonable attempts to account for non-lake bed sources that affect the monitors.*<br><br>*The emissions estimate for the Olancha Dunes is* |

Great Basin UAPCD Responses to Los Angeles Department of Water & Power Comments on the
Draft 2008 Owens Valley $PM_{10}$ Planning Area Demonstration of Attainment State Implementation Plan

| DWP # | SIP | Theme | Chapter | Page | Section | Para | Line | Comment |
|---|---|---|---|---|---|---|---|---|
| | | | | | | | | *included in the emission inventory, but it is not included as a source in the model. Modeled exceedances at the shoreline are only determined based on emissions from lake bed source areas, plus 20 $\mu g/m^3$ for a regional background concentration.*<br><br>*Although the emissions estimate for the Olancha Dunes could be modified based on a difference in wind speeds at each site, it would be added to a couple more estimated factors, such as the effective size of the two dune areas, the differences in the K-factors and trends and the similarity of the Olancha Dune sand flux to the Keeler Dune sand flux. Accounting for the difference in wind speeds at the two sites may not improve the accuracy of the emissions estimate.*<br><br>*No change to SIP.* |
| 60. | | Off-lake sources | 4 | 4-11 | 4.3.6 | 4 | 1-2 | Quantitative scientific data are not available to support the statement that "Most of these off-lake sources of wind-blown dust were formed by material that was initially entrained from the exposed playa and then deposited in areas off the lake bed." The cited source (Holder, 1997) contains no quantitative data to support this statement. Rather, it states that the sands in off-lake source areas are "thought to have originated on Owens Lake." LADWP recommends that speculative statements about the origin of the Keeler dunes be removed from the 2008 SIP pending further study by independent experts. The SIP should cite Section 30 of the Settlement Agreement regarding the Keeler dunes, which states: “The GBUAPCD and LADWP agree to cooperate with other federal, state and local agencies and experts as necessary to develop a plan to reduce dust emissions from the Keeler |

Great Basin UAPCD Responses to Los Angeles Department of Water & Power Comments on the
Draft 2008 Owens Valley $PM_{10}$ Planning Area Demonstration of Attainment State Implementation Plan

| DWP # | SIP | Theme | Chapter | Page | Section | Para | Line | Comment |
|---|---|---|---|---|---|---|---|---|
| | | | | | | | | dunes."<br><br>*There are several lines of physical evidence that support that the Keeler dunes are a geologically very recent formation: burial of the Southern Pacific railroad grade, deposition of the dunes on top of old State Highway 136, burial of the stable desert pavement on the Keeler alluvial fan, and sedimentological data from the North Sand Sheet. The formation of all dune fields occurs when loose sand supply is enhanced. As in the case of other dune fields in the Mojave Desert and the Great Basin valleys, this occurred at Owens Lake and the Keeler dunes in response to a change in the local conditions in which the adjacent lake bed became exposed during drying. In the case of the Owens Lake and the resultant formation of the Keeler dunes, the drying resulted from the desiccation of Owens Lake through the diversion of surface waters within the Owens Valley into the Los Angeles Aqueduct.*<br><br>*Prior to desiccation of Owens Lake there was not an exposed sand supply sufficient for the development of the Keeler dunes. Along the edge of Owens Lake there are a set of vegetated sand deposits that are present in a long linear array that parallels the historic shoreline from the Swansea Bay southward toward Keeler. These dunes are typical shoreline features and are not related to the development of the current Keeler dune field. Features present above the historic shoreline such as the Southern Pacific Railroad grade and the location of the old State Hwy 136 have been locally buried by sands within the Keeler dune area. These sands did not originate from the vegetated dunes along the historic shoreline but rather from the exposed bed of Owens* |

Great Basin UAPCD Responses to Los Angeles Department of Water & Power Comments on the Draft 2008 Owens Valley $PM_{10}$ Planning Area Demonstration of Attainment State Implementation Plan

| DWP # | SIP | Theme | Chapter | Page | Section | Para | Line | Comment |
|---|---|---|---|---|---|---|---|---|
| | | | | | | | | *Lake.*<br><br>*Sedimentological evidence in support of the statement in the 2008 SIP that the Keeler dunes formed from material from the exposed playa includes:*<br><br>1. *The presence of the desert pavement surface of the Keeler fan now buried by the Keeler dune deposits. The processes that create a desert pavement take several hundred to several thousand years and cannot act in the presence of a large mobile sand field. The desert pavement surfaces underneath and within the Keeler dunes represent a fan surface that was exposed for a long time in a relatively stable environment without the presence of vast quantities of loose dune sand.*<br><br>2. *The sand deposits on the lake bed within the North Sand Sheet (prior to construction of the Zone 2 Shallow Flooding area) had developed a lag deposit layer of coarse sand and fine gravel in the upper 2-3 inches of the sediment column indicating that the finer grained sands and silts were being removed through winnowing. The prevailing wind direction for sand motion within the North Sand Sheet transported this material to the southeast both on the playa as well as off-lake onto the Keeler fan. The dominant southeastward transportation of sand on the North Sand Sheet is evident in the gradual textural change in the sand deposits on the lake bed in which there is a progressive fining of material from the northern portion of the sand sheet southward towards the* |

| DWP # | SIP | Theme | Chapter | Page | Section | Para | Line | Comment |
|---|---|---|---|---|---|---|---|---|
| | | | | | | | | *former location of the Agrarian Farm. Large dune deposits formed near the southern end of the North Sand Sheet on the lake bed in the vicinity of obstacles such as the Keeler Sand Fence and the "old wooden pipeline" attests to the large volumes of sand transport and sand migration from the exposed playa. These on-lake dune features were present (they were removed by the City during Shallow Flood project construction) in a comparable position down the length of the sand transport corridor as the Keeler dunes on the alluvial fan. The Keeler dunes formed in an analogous manner as the dunes on the lake bed except that they were deposited on the adjacent alluvial fan surface above the historic shoreline.*<br><br>*Further evidence on the origin and chronological development of the Keeler dunes include a search of old maps of the eastern portion of Owens Lake. Topographic surveys conducted by the U.S.G.S. in 1905-1906 and 1910-1911 (published in 1913 and reprinted in 1927 and 1947) do not show the presence of the Keeler dunes. However, information from the Southern Pacific Railroad mention that following World War II and before 1960 (when the narrow gauge line was shut down) that the trains going into and out of Keeler had to be careful of drifting sands on the track between Keeler and the Dolomite siding.*<br><br>*It is clear from multiple lines of evidence that the Keeler dunes formed from material transported from the exposed Owens Lake playa. The District is currently working on a project on the Keeler dunes to better* |

Great Basin UAPCD Responses to Los Angeles Department of Water & Power Comments on the Draft 2008 Owens Valley $PM_{10}$ Planning Area Demonstration of Attainment State Implementation Plan

| DWP # | SIP | Theme | Chapter | Page | Section | Para | Line | Comment |
|---|---|---|---|---|---|---|---|---|
| | | | | | | | | *understand their detailed development over time, to determine the location of and contribution of sand movement as related to dust emissions, any physical changes that can be identified since the implementation of dust controls on the northeast portion of the playa, and possible methods for control of PM-10 emissions. As per Section 30 of the Settlement Agreement, this effort will be a cooperative effort between the City, District, federal, state, and local agencies. The Settlement Agreement is included as part of the 2008 SIP (Attachment A) such that the language requested by the City in their comment is present within the document and does not need to be cited in Chapter 4.*<br><br>*No change to SIP.* |
| 61. | | Off-lake sources | 4 | 4-11 | 4.3.6 Figure 4.14 | 1 | | The emission inventory includes only two off-lake source areas: the Keeler dunes (1.84 sq. km), and the Olancha dunes (3.04 sq. km.). The delineations shown in Figure 4.14 appear to be from Niemeyer and Niemeyer (1995), later reproduced in Holder (1997) and cited in the 1998 SIP. Because both dune areas have changed considerably in recent years, an updated delineation and area estimate should be included in the 2008 SIP.<br><br>*See response to Comment 48 on the differences in the Figure 4.14.*<br><br>*No change to SIP.* |
| 62. | | Off-lake sources | 4 | 4-11 | 4.3.6 Figure 4.14 | 1 | | In addition to the Keeler and Olancha dunes, the Niemeyer and Niemeyer (1995) and Holder (1997) reports show two other dust source areas just south of the current Shell Cut TEOM. These two areas, totaling roughly 3 sq. km., |

Great Basin UAPCD Responses to Los Angeles Department of Water & Power Comments on the Draft 2008 Owens Valley $PM_{10}$ Planning Area Demonstration of Attainment State Implementation Plan

| DWP # | SIP | Theme | Chapter | Page | Section | Para | Line | Comment |
|---|---|---|---|---|---|---|---|---|
| | | | | | | | | should either be included in the emission inventory or an explanation given as to why they are not included. At least one of these two areas is still active (see next comment).<br><br>*In paragraph 9.C.(iii) of the Settlement Agreement the District agreed to make reasonable attempts to account for non-lake bed sources that affect the monitors.*<br><br>*When the District has adequate spatial and temporal information on these small off-lake sources we will include them in the emission estimates and incorporate them in the model.*<br><br>*No change to SIP.* |
| 63. | | Off-lake sources | 4 | 4-11 | 4.3.6 Figure 4.14 | 1 | | The GBUAPCD's plume observations for the period from 2002-2006 show that dust emissions have occurred over a much larger area than is indicated in Figure 4.14. Using a composite delineation enveloping the GBUAPCD's plume observations (no GPS delineations are available for these areas), the following area estimates were generated: Keeler dunes, 5.05 sq. km.; Olancha dunes and corridor along the shore south of the Managed Vegetation site, 11.1 sq. km; other miscellaneous areas south of the playa and east of the town of Olancha, 1.98 sq. km. The 2008 SIP should use the GBUAPCD's off-lake plume observations to quantify the emissions from off-lake source areas.<br><br>*See response to Comment 62.*<br><br>*No change to SIP.* |
| 64. | | Off-lake sources | 4 | 4-11 | 4.3.6 Figure 4.14 | 5 | | The Department is concerned that the on-lake controls may not be enough by themselves to bring the OVPA into attainment. The 2008 SIP should acknowledge this possibility |

Great Basin UAPCD Responses to Los Angeles Department of Water & Power Comments on the
Draft 2008 Owens Valley $PM_{10}$ Planning Area Demonstration of Attainment State Implementation Plan

| DWP # | SIP | Theme | Chapter | Page | Section | Para | Line | Comment |
|---|---|---|---|---|---|---|---|---|
| | | | | | | | | and address the off-lake sources that are currently producing exceedances of the standards.<br><br>In its own report on off-lake sources (Kiddoo, 2006), the GBUAPCD acknowledges that "…off-lake sources of particulate matter can result in exceedances of the $PM_{10}$ NAAQS at Owens Lake shoreline monitors." The GBUAPCD's monitoring data for the period from January 2000 through June 2007 shows that off-lake sources at Owens Lake produced a total of 131 exceedances (Exhibit 1 of this document). Of these 131 exceedances, 52 occurred at Keeler, 41 at Dirty Socks, 18 at Shell Cut, 7 at Flat Rock, 6 at Lone Pine, 6 at Olancha, and one at Bill Stanley. The fewest exceedances occurred in the year 2007, however the 2007 data represents only a six-month period. Exceedances could still occur during the remainder of the year. According to the LADWP's analysis, there does not appear to be any systematic reduction in the number or the magnitude of off-lake exceedances at any of the shoreline monitors over the period from 2000-2007, which is consistent with the off-lake sources remaining essentially the same during this period.<br><br>In our meeting on October 18, 2007, LADWP discussed the possibility that construction of on-lake dust controls in an area immediately south of the Dirty Socks monitor (in the direction of the off-lake winds) caused the number of off-lake exceedances at Dirty Socks to drop to zero. This construction may indeed have controlled the dust source area that caused the earlier exceedances, but it is too early to tell. The number of exceedances at Lone Pine and Olancha also dropped to zero in 2007, but both of these areas are too far away, and in the wrong wind directions, to be affected by the dust control efforts around Dirty Socks. The sharp reduction in the number |

Great Basin UAPCD Responses to Los Angeles Department of Water & Power Comments on the Draft 2008 Owens Valley $PM_{10}$ Planning Area Demonstration of Attainment State Implementation Plan

| DWP # | SIP | Theme | Chapter | Page | Section | Para | Line | Comment |
|---|---|---|---|---|---|---|---|---|
| | | | | | | | | of exceedances at Dirty Socks may also have been a result of the weather conditions that occurred during the first half of 2007.<br><br>*Comment noted. See response to comment 65. See US EPA's Natural Events Policy. See Off-lake Report (Kiddoo, et al., 2007).*<br><br>*No change to SIP.* |
| 65. | | Off-lake Sources | 6 | 6-6 | 6.4 | 4 | | The emissions from the Keeler dunes and other off-lake sources were excluded from the attainment demonstration modeling analysis. While this might be appropriate for demonstrating the effectiveness of the control strategy on the Owens playa, the EPA will assess the attainment status of the OVPA on the basis of the observed concentrations. For this reason, it is appropriate to include all major off-lake dust sources in the attainment demonstration.<br><br>*Some of the off-lake source areas may be categorized as natural sources if they were formed prior to the exposure of the lake bed. If they are natural sources, the USEPA Natural Events Policy may treat exceedances caused by those areas differently. See Section 7.5.*<br><br>*No change to SIP.* |
| 66. | X | Off-lake Sources | 7 | 7-1 | 7.1 | 4 | 1-3 | It is not true that "...if all the necessary dust control measures are implemented by December 31, 2013 in the Supplemental Dust Control Areas (SDCAs) (GBUAPCD, 2006b), the planning area can demonstrate attainment with the federal standard by 2017." The GBUAPCD acknowledges elsewhere (e.g., Table 4.2, Section 7.5) that dust emissions from the Keeler dunes—which are not part of any SDCA—must be controlled in order to bring the entire planning area into |

Great Basin UAPCD Responses to Los Angeles Department of Water & Power Comments on the
Draft 2008 Owens Valley $PM_{10}$ Planning Area Demonstration of Attainment State Implementation Plan

| DWP # | SIP | Theme | Chapter | Page | Section | Para | Line | Comment |
|---|---|---|---|---|---|---|---|---|
| | | | | | | | | compliance with the federal $PM_{10}$ standard. The GBUAPCD should insert language that acknowledges that off-lake source areas will also need to be controlled in order to bring the OVPA into attainment.<br>*The following revision will be made: "...if all the necessary dust control measures are implemented by December 31, 2013 in the Keeler dunes and in the Supplemental Dust Control Areas (SDCAs) (GBUAPCD, 2006b), the planning area can demonstrate attainment with the federal standard by 2017..."* |
| 67. | | Off-lake Sources | 7 | 7-14 | 7.16 | 1 | 1 | Due to the historic predominance of dust sources on Owens Lake, limited attention has been paid to the off-lake sources mentioned in this section. As the on-lake sources are brought under control (i.e., within the timeframe in this SIP), it is imperative that the off-lake sources are addressed more thoroughly and quantitatively so that dust emissions from these sources are not wrongly attributed to the lakebed. The LADWP does not agree that these sources have been adequately addressed in the past. There is abundant evidence for the existence and importance of several off-lake source areas as noted in the comments above on SIP page 4-11. This evidence includes the GBUAPCD's dust plume observations and the GBUAPCD's TEOM concentrations for off-lake wind directions. Despite the available evidence, sand flux monitors have not been installed in any off-lake source areas except Keeler. These data are needed to properly characterize these sources and address them in the modeling and SIP control strategy.<br>*In paragraph 9.C.(iii) of the Settlement Agreement the District agreed to make reasonable attempts to account* |

Great Basin UAPCD Responses to Los Angeles Department of Water & Power Comments on the Draft 2008 Owens Valley $PM_{10}$ Planning Area Demonstration of Attainment State Implementation Plan

| DWP # | SIP | Theme | Chapter | Page | Section | Para | Line | Comment |
|---|---|---|---|---|---|---|---|---|
| | | | | | | | | *for non-lake bed sources that affect the monitors.*<br>*No change to SIP.* |
| 68. | X | Other | 4 | 4-2 | 4.2.2 | 1 | | Typo. "AP-4" should be "AP-42"<br>*Typographic error will be corrected.* |
| 69. | X | Other | 5 | 5-7 | 5.2.4 | 5 | 10 | Please consider, "…the respective 130/120…" as clarification.<br>*Will add clarification. The last sentence in the paragraph will read,*<br>*"These adjustments may continue until monitored/ modeled $PM_{10}$ values exceed the respective 130/120 $\mu g/m^3$ limits discussed above."* |
| 70. | X | Other | 5 | 5-8 | 5.2.6 | 2 | 10 | Please strike sentence beginning with, "Every effort…".<br>*Requested change will be made.* |
| 71. | | Regulations | 6 | 6-1 | 6.1 | 3 | | Implementation of the attainment test over four years is inconsistent with how the NAAQS are implemented. While mathematically correct (i.e., 5 exceedances over 4 years is equivalent to 4 exceedances over 3 years), a more consistent methodology would evaluate attainment over two consecutive 3-year periods. See also bottom of page 6-6.<br>*To demonstrate compliance with the federal $PM_{10}$ standard, $PM_{10}$ monitoring data from the last three consecutive calendar years are used. To provide assurance that the proposed control strategy will result in attainment with the standard, however, four years of air quality data were modeled to demonstrate that the strategy would likely result in no more than 1 exceedance per year at each receptor site. Combined with the modeling for the 2003 SIP, 6.5 years were modeled to* |

Great Basin UAPCD Responses to Los Angeles Department of Water & Power Comments on the Draft 2008 Owens Valley $PM_{10}$ Planning Area Demonstration of Attainment State Implementation Plan

| DWP # | SIP | Theme | Chapter | Page | Section | Para | Line | Comment |
|---|---|---|---|---|---|---|---|---|
| | | | | | | | | *ensure that the control strategy would result in compliance. As shown by the 2.5 years modeled for the 2003 SIP, some dust source areas that can cause exceedances of the standard can be missed by using a shorter modeling period.*<br><br>*No change to SIP.* |
| 72. | X | Regulations | 7 | 7-7 | 7.7 | 3 | | The GBUAPCD previously has stated that: "…violations of the state standard will not be based on the Dust ID model" (GBUAPCD Rule 401). However, Rule 401 states that it "will require the LADWP to implement dust control measures in lake bed areas that cause or contribute to monitored violations of the state PM10 standard in any community surrounding Owens Lake". What method(s) will be used to determine whether contributions from potential dust sources on the playa contribute to observed exceedances of the state standard?<br><br>*After a violation of the state standard has been monitored in a community, the District will use the Dust ID protocol (whatever its future form may be, see Section 9 of the SA) to determine if a lake bed dust source area caused or contributed to that monitored violation. The Dust ID model will not be used to determine if a violation of the state standard occurred in a community in the absence of a monitored violation.*<br><br>*Section 7.7 will be modified to clarify that the Dust ID model will only be used to determine if lake bed dust source areas contributed to monitored violations of the state $PM_{10}$ standard. The following will be added to Section 7.7.:*<br><br>*For the purpose of applying District Rule 401.D, the* |

Great Basin UAPCD Responses to Los Angeles Department of Water & Power Comments on the
Draft 2008 Owens Valley $PM_{10}$ Planning Area Demonstration of Attainment State Implementation Plan

| DWP # | SIP | Theme | Chapter | Page | Section | Para | Line | Comment |
|---|---|---|---|---|---|---|---|---|
| | | | | | | | | *Dust ID model results will only be used to determine if any lake bed dust source area(s) caused or contributed to a state $PM_{10}$ standard violation after that violation is monitored at a community-based monitor site.* |
| 73. | | Regulations | 7 | 7-7 | 7.8 | 4 | | This section suggests that modeled attainment demonstration will be based on "the number of years in the analysis." This demonstration should be based only on a 3-year period as prescribed in the NAAQS. Applying the demonstration to a different time period (either shorter or longer) than prescribed in the NAAQS is inappropriate. Mathematically, attainment could be achieved over a 3-year period (but not over a 4-year period) if the number of exceedances was highest in the first year of the 4-year period.<br><br>*To demonstrate compliance with the federal $PM_{10}$ standard, $PM_{10}$ monitoring data from the last three consecutive calendar years are used. However, for the 2008 SIP, to provide assurance that the proposed control strategy will result in attainment with the standard, four years of air quality data were modeled to demonstrate that the strategy would likely result in no more than 1 exceedance per year at each receptor site. Combined with the modeling for the 2003 SIP, 6.5 years were modeled to ensure that the control strategy would result in compliance. As shown by the 2.5 years modeled for the 2003 SIP, some dust source areas that can cause exceedances of the standard can be missed by using a shorter modeling period.*<br><br>*No change to SIP.* |

Great Basin UAPCD Responses to Los Angeles Department of Water & Power Comments on the
Draft 2008 Owens Valley $PM_{10}$ Planning Area Demonstration of Attainment State Implementation Plan

| DWP # | SIP | Theme | Chapter | Page | Section | Para | Line | Comment |
|---|---|---|---|---|---|---|---|---|
| 74. | | SDCA | 2 | 2-1 | 2.1.1 | 3 | 12-13 | In order to clarify the range of controls to be considered within the resource-sensitive channel areas, LADWP requests that you replace "…the LADWP will implement dust controls…" with "…the LADWP will implement non-BACM or modified BACM dust controls…". Please see comments relating to page 8-2, Order No. 3.<br>*The phrase "the City will implement dust controls" is more inclusive than the City's requested modification. Request denied.*<br>*No change to SIP.* |
| 75. | | SDCA | 4<br>8 | 4-8<br>27 of 45 | 4.3.3<br>Attachment C, 4.2.3.2 | 4<br>1 | 5-6<br>8-9 | In defining a wind damaged surface, please replace "…wind erosion evidence and/or Aeolian deposition…" with "…wind erosion evidence or wind erosion and Aeolian deposition…" Aeolian deposition alone is not a definite indicator of erosion or emissions (e.g., mobile sand areas that have no evidence of emissions; non-erosive surfaces where sand is deposited). This change makes it clear that erosion evidence is part of the definition of a wind-damaged surface.<br>*The suggested change to require evidence of a wind damaged surface in a sand deposition area would likely result in any active sand deposition area, for example the Keeler Dunes, as being classified as non-dust source areas. The suggested change is not appropriate for mapping active dust source areas.*<br>*No change to SIP.* |
| 76. | | SDCA | 4 | 4-8 | 4.3.3 | 6 | 3-5 | LADWP suggests adding a sentence at the end of the paragraph under "Mapping using Sand Flux Monitors" to clarify that the Sensits will not be used to represent detached, remote areas. Suggested addition: "However, the sand flux |

Great Basin UAPCD Responses to Los Angeles Department of Water & Power Comments on the
Draft 2008 Owens Valley $PM_{10}$ Planning Area Demonstration of Attainment State Implementation Plan

| DWP # | SIP | Theme | Chapter | Page | Section | Para | Line | Comment |
|---|---|---|---|---|---|---|---|---|
| | | | | | | | | monitor must reside within the contiguous re-shaped cell that it is meant to represent."<br><br>*The delineation of the source area boundaries and which sand flux site should be associated with the source area should be discussed on a case-by-case basis.*<br><br>*Section 7.6 discusses the District's commitment to replace or modify the current Dust ID program. Development of these procedures is expected to be done jointly with the City and an expert panel as part of an overall effort to improve the Dust ID Program pursuant to paragraph 9 of the Settlement Agreement. To date, no joint meetings have been held for this purpose.*<br><br>*No change to SIP.* |
| 77. | | SDCA | 7 | 7-6 | 7.6 | 4 | 1 | LADWP suggests revising the sentence to read: "…analyses demonstrate that emissions from new dust source areas or existing control areas cause or…"<br><br>*This paragraph refers to <u>lake bed dust source areas</u> that the District will order the City to control if they cause or contribute to an exceedance at the shoreline. Making the suggested change would modify the meaning to indicate that the District will also order the City to control <u>off-lake dust source areas</u> pursuant to the SCR procedures. Whether or not the City will be ordered to control dust from off-lake dust source areas, such as the Keeler Dunes, will be considered on a case-by-case basis.*<br><br>*No change to SIP.* |
| 78. | | SDCA | 8 | 3 of 16 | Attachment B | 6 | 5 | Please include language to indicate how the SCR will change once the project has attained the NAAQS for $PM_{10}$ at the |

Great Basin UAPCD Responses to Los Angeles Department of Water & Power Comments on the Draft 2008 Owens Valley $PM_{10}$ Planning Area Demonstration of Attainment State Implementation Plan

| DWP # | SIP | Theme | Chapter | Page | Section | Para | Line | Comment |
|---|---|---|---|---|---|---|---|---|
| | | | | | | | | shoreline. The Draft SIP requires annual SCR determinations, which would become unnecessary under these conditions.<br><br>*SCR determinations will continue to be made at least annually, even after the project has attained the state and federal particulate matter standards in the Owens Valley. If no new PM source areas are identified for control, a determination that compliance with the SIP requirements has been maintained will be issued to the City. The District will continue to monitor the planning area to assess the compliance status of the dust control measures as long as they are needed to protect air quality.*<br><br>*No change to SIP.* |
| 79. | | SDCA | 8 | 7 of 16 | Attachment B | 3 | | The assignment of a one-square-kilometer default source area is a carry-over from the 2003 Revised SIP. Because the emissive areas are much smaller now than they were prior to implementation of the 2003 SIP, it no longer seems reasonable to assign a default area of one square kilometer for dust control if no GPS boundary or other physical evidence is available to identify the on-lake source area. For monitored exceedances, LADWP favors having the GBUAPCD make a scientifically based, good-faith effort to identify the on-lake source area that produced the monitored violation at the shoreline.<br><br>*Currently, the delineation of source area boundaries in the absence of survey data is discussed on a case-by-case basis. Although the square kilometer default area has not been used in recent years because discussions have led to mutually agreeable source area delineations, it serves as an alternative for delineating the source area* |

Great Basin UAPCD Responses to Los Angeles Department of Water & Power Comments on the
Draft 2008 Owens Valley $PM_{10}$ Planning Area Demonstration of Attainment State Implementation Plan

| DWP # | SIP | Theme | Chapter | Page | Section | Para | Line | Comment |
|---|---|---|---|---|---|---|---|---|
| | | | | | | | | *if no agreement can be reached based on the evidence available. Site-specific default source area boundaries should be discussed for each sand flux site as an alternative to the square kilometer default source area. However, this should be discussed in a future meeting with the Dust ID Program participants as part of the District's commitment to replace or modify the current Dust ID program pursuant to paragraph 9 of the Settlement Agreement.*<br>*No change to SIP* |
| 80. | | SDCA | 8 | 10 of 16 | Attachment B | 3 | | This comment is the same as the preceding one on monitored exceedances. LADWP believes that a scientifically based, good faith effort by the GBUAPCD to identify the area of dust emissions is superior to assigning a default source area.<br>*See response to comment 79.*<br>*No change to SIP* |
| 81. | | SDCA | 8 | 27 of 45 | Attachment C, 4.2.3.2 | 3 | 1-10 | There is no mention of a maximum size of delineated GPS polygon. Some measure for interior observation should be added for polygons with a size such that adequate visual assessment of the interior is impossible from the perimeter. The GBUAPCD has responded to previous discussions of this LADWP concern by stating that surveys were conducted following procedures in the SIP. For this reason, the LADWP requests that this procedure be revisited in this revision process to account for the maximum observable size of a delineated area, given the other procedures defined in this protocol.<br>*The methods used to delineate source areas and boundaries should be discussed as part of a future* |

Great Basin UAPCD Responses to Los Angeles Department of Water & Power Comments on the Draft 2008 Owens Valley $PM_{10}$ Planning Area Demonstration of Attainment State Implementation Plan

| DWP # | SIP | Theme | Chapter | Page | Section | Para | Line | Comment |
|---|---|---|---|---|---|---|---|---|
| | | | | | | | | *meeting with Dust ID Program participants. Section 7.6 discusses the District's commitment to replace or modify the current Dust ID program. Development of these procedures is expected to be done jointly with the City and an expert panel as part of an overall effort to improve the Dust ID Program pursuant to paragraph 9 of the Settlement Agreement. To date, no joint meetings have been held for this purpose.*<br>*No change to SIP* |
| 82. | | SDCA | 8 | 4 of 10 | Attachment D | B | 1 | The SIP should describe what role, if any, the SCR determination has after the OVPA has attained the NAAQS standard at the shoreline.<br>*See response to Comment 78.*<br>*No change to SIP.* |
| 83. | X | Settlement Agreement | 2 | 2-1 | 2.1.1 | 3 | 7 | This passage is in conflict with Section 8 of the Settlement Agreement, in the sense that "the LADWP in its sole discretion may decide which DCMs to implement in the areas designated for Moat and Row in Section 2 and Exhibit 3 of this Agreement." Moat and Row does not have to be "shown to be successful" before it can be implemented on the playa. Suggested change: "Moat & Row may be implemented by LADWP on at most 3.5 square miles as shown. If the Moat & Row...".<br>*This paragraph does not reflect the provisions of the Settlement Agreement and will be modified.*<br>*However, the City should have a reasonable belief that Moat & Row will be successful before it is implemented at Owens Lake. Although the City has the sole discretion to* |

Great Basin UAPCD Responses to Los Angeles Department of Water & Power Comments on the
Draft 2008 Owens Valley $PM_{10}$ Planning Area Demonstration of Attainment State Implementation Plan

| DWP # | SIP | Theme | Chapter | Page | Section | Para | Line | Comment |
|---|---|---|---|---|---|---|---|---|
| | | | | | | | | *decide if Moat & Row will meet the target MDCEs for each area, paragraph 8.B of the Settlement Agreement states:*<br><br>*"The Moat & Row configuration required to achieve these Target MDCEs will be decided solely by the City, after consultation with and written notification to the District."*<br><br>*Through the consultation process, the District will provide the City with an evaluation of the proposed Moat & Row design with regard to its ability to meet the target MDCEs. Whether or not the City chooses to consider the District's comments and recommendations, is solely at their discretion. District staff recognizes that the District's recommendation on implementing the Moat & Row DCM can be overridden by the City (with the concurrence of the State Lands Commission on state lands).*<br><br>*In addition to the requirement for the City to consult with the District prior to deciding whether or not to proceed with the implementation of Moat & Row DCMs, the City is required to consult with the District on the Moat & Row Demonstration Projects that are currently being conducted at two sites on the lake bed (see Settlement Agreement, paragraph 7). Although the District has seen the constructed Moat & Row test projects, the District has not been provided with requested documentation on the engineering analysis supporting the height and spacing of the Moat & Row structures, or the test protocol for determining the control efficiency of the demonstration project. This information will be needed for the District to make a recommendation to the City (and the State Lands Commission) regarding whether or not to implement Moat* |

Great Basin UAPCD Responses to Los Angeles Department of Water & Power Comments on the Draft 2008 Owens Valley $PM_{10}$ Planning Area Demonstration of Attainment State Implementation Plan

| DWP # | SIP | Theme | Chapter | Page | Section | Para | Line | Comment |
|---|---|---|---|---|---|---|---|---|
| | | | | | | | | *& Row on the 3.5 square miles of the lake bed.* |
| 84. | X | Settlement Agreement | 5 | 5-6 | 5.2.4 | 3 | 8 | Through line 7, this paragraph is consistent with the Settlement Agreement. Thereafter, the correspondence breaks down. First, accepted results of tests performed under Section 13 of the Settlement Agreement can be applied to areas requiring 99% control immediately and without restriction. This should be clearly stated, and this paragraph brought to a close. The conditions described in Section 14 of the Settlement Agreement, which are described here as preconditions for application of the results from Section 13, must be disassociated from this paragraph, as they were in the Settlement Agreement. Second, the provision for annual, 10% reductions in SF cover provided for in Section 14 should be stated before the preconditions are listed, in a separate paragraph following this one. Only then should the preconditions for this reduction be listed. Again, the pre-conditions from Section 14 are wrongly characterized in this draft as pre-conditions for Section 13. This is wrong because it is inconsistent with the text and intent of these two sections of the Settlement Agreement.<br><br>*This section will be clarified by separately discussing the two types of allowed Shallow Flood refinement: 1) the 1.5 square mile test that has no pre-conditions and 2) the 10% reduction test with pre-conditions.* |
| 85. | X | Settlement Agreement | 7 | 7-1 | 7.1 | 3 | 6 | Not all of the 12.7-sq.-mi. SDCA was found to "cause or contribute" to an exceedance. At least three separate areas were added to the SDCA that did not meet this criterion. Numerous other smaller areas that did not cause or contribute were also included; for example, the saw-toothed eastern boundary of the T-13 shallow flood area. |

Great Basin UAPCD Responses to Los Angeles Department of Water & Power Comments on the Draft 2008 Owens Valley $PM_{10}$ Planning Area Demonstration of Attainment State Implementation Plan

| DWP # | SIP | Theme | Chapter | Page | Section | Para | Line | Comment |
|---|---|---|---|---|---|---|---|---|
| | | | | | | | | The first paragraph of section 7.3 states this correctly and should be repeated here.<br><br>*The District is only requiring an additional 13.2 square miles of lake bed to be controlled. There is ample evidence that additional areas contributed to exceedances (e.g., the four Study Areas).However, the language in Section 7.1 will be modified to be similar to Section 7.3.* |
| 86. | | Settlement Agreement | 7 | 7-1 | 7.1 | 3 | 6 | The 13.2-square-mile delineation was intentionally extended to take in areas that were not emissive during this period but that were nevertheless considered a potential future threat. As noted in above comment, several areas were found specifically to not cause or contribute to any exceedances. Further, the area includes extensive areas that were emissive only during a limited monitoring period when intensive construction was ongoing and likely influenced emissions estimates from these areas. The LADWP requests that this passage be altered to read: "the LADWP and GBUAPCD worked jointly to delineate not only areas for which there was compelling evidence that the area could contribute to or cause violations at the Owens Lake shoreline, but also other areas the posed a significant risk of becoming such sources. Therefore, the 13.2-square-mile delineation is conservative in that it takes in more area than could be justified with certainty at the time of the Settlement Agreement."<br><br>*The levels of emissivity of the various lake bed areas to be controlled are clearly shown in the TDCA Minimum Dust Control Efficiency map (Figure 7.2). This map shows that there are a few small areas with no control efficiency requirement. However, the City's inclusion of comments* |

Great Basin UAPCD Responses to Los Angeles Department of Water & Power Comments on the Draft 2008 Owens Valley $PM_{10}$ Planning Area Demonstration of Attainment State Implementation Plan

| DWP # | SIP | Theme | Chapter | Page | Section | Para | Line | Comment |
|---|---|---|---|---|---|---|---|---|
| | | | | | | | | *on the SIP related to construction activities shows disregard for the Settlement Agreement between the District and the City in which they agreed not to re-visit these previously addressed issues so that we could move forward with dust control efforts at Owens Lake. The following is an excerpt from the Settlement Agreement (December 4, 2006) paragraph 18.B.(iv):*<br><br>*"Based on the foregoing, the City stipulates and agrees that all of the provisions and determinations, including the measures and procedures, contained in the 2003 SIP, the provisions of this Agreement to be included in the modifications to the 2003 SIP pursuant to this Agreement, and the SCR determination dated April 4, 2006, which the City in good faith disputed, shall be deemed to be valid and reasonable, and that the City will not challenge those provisions or determinations by appeal under Section 42316 or in any other proceeding, including any other administrative or judicial forum. Subject to this Paragraph, the City may challenge any future SCR determination under Section 42316; however any arguments or challenges must be based on data and information that do not currently exist, but that exist after the execution of this Agreement."*<br><br>*No change to the SIP.* |
| 87. | | Settlement Agreement | 7 | 7-4 | 7.3.4 | 3 | | According to the modeling conducted by LADWP, Sensit 7522 requires a minimum control efficiency of 96 percent. This equates to roughly 66 percent wetness cover according to Exhibit 7 of the Settlement Agreement. The table that precedes Figure 7.3 should be revised to reflect a required |

Great Basin UAPCD Responses to Los Angeles Department of Water & Power Comments on the Draft 2008 Owens Valley $PM_{10}$ Planning Area Demonstration of Attainment State Implementation Plan

| DWP # | SIP | Theme | Chapter | Page | Section | Para | Line | Comment |
|---|---|---|---|---|---|---|---|---|
| | | | | | | | | wetness cover of 66 percent at Sensit 7522, not 70 percent.<br><br>Note that there is nothing in the Settlement Agreement that precludes the GBUAPCD from establishing the wetness cover requirement in the "non-ramped" shallow flood cells in one-percent increments rather than rounding to the next-higher five percent level. Also note that the attainment demonstration modeling is performed in one-percent increments, not five percent.<br><br>*The wetness cover levels allowed during the shallow flood ramping period are at 70%, 65%, and 60%. The air quality modeling analysis shows that at 95.6% $PM_{10}$ control will cause impacts that are at the level of the $PM_{10}$ standard with no margin for safety. The suggested level of 96% $PM_{10}$ control at 66% wetness cover provides less than a half percent margin for safety.*<br><br>*No change to the SIP.* |
| 88. | | Settlement Agreement | 7 | 7-5 | 7.4 | 1 | 1 | The study areas were excluded from the proposed 2008 control area due not just to uncertainty about the actual boundaries of the emissive areas but also general uncertainty regarding the accuracy and representativeness of the data, including the k factors, used in the Dust ID modeling for these areas.<br><br>*The Study Areas were excluded based on the negotiated Settlement Agreement between the District and the City. The District is complying with the terms of the Settlement Agreement, but is unwilling to make any additional statements regarding the Study Areas beyond what is in the draft SIP.* |

Great Basin UAPCD Responses to Los Angeles Department of Water & Power Comments on the Draft 2008 Owens Valley $PM_{10}$ Planning Area Demonstration of Attainment State Implementation Plan

| DWP # | SIP | Theme | Chapter | Page | Section | Para | Line | Comment |
|---|---|---|---|---|---|---|---|---|
| | | | | | | | | *No change to SIP.* |
| 89. | | Settlement Agreement | 7 | 7-8 | 7.8.2 | 2 | 6 | LADWP suggests changing this statement to read: "The modeled exceedances at the most frequently impacted shoreline receptor were attributed to wind blown dust from Study Area 1 in the northwest area of the lake bed. However, because of questions about the quality and quantity of the model input data, this area was set aside for additional study. Until the study is complete, the GBUAPCD cannot conclude that this area is causing or contributing to $PM_{10}$ exceedances at the shoreline."<br>*The Study Areas were excluded based on the negotiated Settlement Agreement between the District and the City. The District is complying with the terms of the Settlement Agreement, but is unwilling to make any additional statements regarding the Study Areas beyond what is in the draft SIP.*<br>*No change to SIP.* |
| 90. | X | Settlement Agreement | 8 | 8-6 | 10 | C | | Section 18 B.(iv) of the Settlement Agreement expressly preserved the LADWP's right to appeal future SCR determinations to the California Air Resources Board under the terms of Health and Safety Code section 42316. The language in this section of the SIP appears to convey powers to the California Air Resources Board to order the LADWP to undertake alternative supplemental control measures if CARB does not affirm the orders of Great Basin. The current SIP language could also be interpreted to require CARB to order the LADWP to undertake alternative supplemental control measures even if it found the supplemental control measures |

Great Basin UAPCD Responses to Los Angeles Department of Water & Power Comments on the
Draft 2008 Owens Valley $PM_{10}$ Planning Area Demonstration of Attainment State Implementation Plan

| DWP # | SIP | Theme | Chapter | Page | Section | Para | Line | Comment |
|---|---|---|---|---|---|---|---|---|
| | | | | | | | | ordered by Great Basin to be unreasonable. LADWP understands that such a result is not the intention of Great Basin and suggests that the section could be corrected to read: "In the event the LADWP appeals the supplemental control determination under Health and Safety Code section 42316, and pending a decision of the California Air Resources Control Board (CARB), the LADWP is not required to comply with any measure imposed by the supplemental control determination. In such circumstances where automatic control measures are required under Sections 172(c)(1) or 182 (c)(9) of the federal Clean Air Act, 42 U.S.C. Sections 7502(c)(9) and 7511a(c)(9), the GBUAPCD relies upon action by CARB to issue its decision on the LADWP's appeal within 90 days." This language would comply with the terms of the Settlement Agreement and would meet the terms of the federal Clean Air Act in the same way that the current language in the SIP meets the federal Clean Air Act's requirements for automatic control measures.<br><br>*The City is correct in its understanding that it is not the District's intention to convey additional powers to the California Air Resources Board. In order to clarify our mutual understanding, the following sentence will be added to the end of Paragraph 10.C.:*<br><br>*The foregoing is not intended to provide the CARB with any authority other than its authority under state law.* |
| 91. | X | Settlement Agreement | 8 | 8-13 | 18 | C.i,ii,iii | | Section 18C should be modified. The 2006 Settlement Agreement (Section 8.A) states that the LADWP shall design and construct the Moat and Row to achieve the target MDCEs and that the configuration required to achieve these targets |

Great Basin UAPCD Responses to Los Angeles Department of Water & Power Comments on the Draft 2008 Owens Valley $PM_{10}$ Planning Area Demonstration of Attainment State Implementation Plan

| DWP # | SIP | Theme | Chapter | Page | Section | Para | Line | Comment |
|---|---|---|---|---|---|---|---|---|
| | | | | | | | | will be decided solely by the LADWP in consultation with, and after notification of, the GBUAPCD. LADWP suggests replacing the opening paragraph of C with the following words: "Final design of the Moat and Row control measure will be determined solely by the LADWP. However, the LADWP will consider the following elements in its final design:…"<br><br>*To be consistent with paragraph 8.B of the Settlement Agreement paragraph 18.C. of the Board Order will be modified to:*<br><br>*"Final design of the Moat & Row control measure will be determined solely by the City after consultation with and written notification to the District. The City shall consider the following elements in its final design: …"* |
| 92. | X | Settlement Agreement | 8 | 3 of 16 | Attachment B | 3.A | | In the event of a modeled or monitored exceedance at or above the historic shoreline, paragraph 3.A of the Draft 2008 SIP provides for the APCO to assess: "1) …the need for controls on new areas …", "2) …the need to increase the minimum dust control efficiency (MDCE) on existing areas…", and/or "3) … the need for additional monitoring." This SIP section expands the language in Section 18.A of the Settlement Agreement, which states only that the APCO "…will identify the need for additional controls, monitoring, or both." The GBUAPCD interprets the phrase "additional controls" to mean higher MDCEs, dust controls on new areas, or both. While LADWP agrees with this interpretation, we believe that the 2008 SIP should state clearly that the APCO is responsible for *identifying the need* but the LADWP is responsible for proposing a Remedial Action Plan (RAP) (Settlement Agreement, Section 18.C) that addresses the |

Great Basin UAPCD Responses to Los Angeles Department of Water & Power Comments on the
Draft 2008 Owens Valley $PM_{10}$ Planning Area Demonstration of Attainment State Implementation Plan

| DWP # | SIP | Theme | Chapter | Page | Section | Para | Line | Comment |
|---|---|---|---|---|---|---|---|---|
| | | | | | | | | standard exceedances. In the RAP, the LADWP may propose modified MDCEs (higher or lower in specific areas depending on the circumstances), dust controls in new areas, or both.<br><br>*Paragraph 3 does not preclude the possibility that the RAP may result in a lowering of control efficiency in some areas, while increasing control efficiency in other areas to control areas that contributed to an exceedance. However, lowering the control efficiency in an area that didn't contribute $PM_{10}$ during a particular dust event must be considered very carefully. To lower the control efficiency in any area would require the City to demonstrate that the revised MDCE strategy in the RAP will control dust sources to the extent that there are no modeled exceedances at the shoreline based on:*<br><br>*1) new dust event(s) that caused or contributed to a modeled or monitored exceedance, and*<br><br>*2) dust events that took place from July 2002 through June 2006 based on the results of the MDCE Selection Process Spreadsheet as set forth in the 2006 Settlement Agreement.*<br><br>*An analysis of the effect of a change to the MDCE strategy on both new and historic events is essential. New dust events may indicate that there is no dust activity in areas that were historically active. Therefore, solely basing a revised MDCE strategy on a new event could result in eliminating control requirements in areas that were historically active. This could cause those areas where the control level was lowered or eliminated to become active in the future, which may then trigger* |

Great Basin UAPCD Responses to Los Angeles Department of Water & Power Comments on the Draft 2008 Owens Valley $PM_{10}$ Planning Area Demonstration of Attainment State Implementation Plan

| DWP # | SIP | Theme | Chapter | Page | Section | Para | Line | Comment |
|---|---|---|---|---|---|---|---|---|
| | | | | | | | | *another SCR determination.*<br><br>*The following will be added to Paragraph 3.B. of Attachment B to the Board Order:*<br><br>*"If the City proposes in their Remedial Action Plan to decrease the control efficiency in any previously controlled dust source area, the City must demonstrate that the proposed strategy will control dust sources to the extent that there are no modeled exceedances at the shoreline based on:*<br><br>*(i) new dust event(s) that caused or contributed to a modeled or monitored exceedance, and*<br><br>*(ii) dust events that took place from July 2002 through June 2006 based on the results of the MDCE Selection Process Spreadsheet as set forth in the 2006 Settlement Agreement."* |
| 93. | X | Settlement Agreement | 8 | 10 of 16 | Attachment B | B.3 | | Section B.3 of the SCR Determination Procedure requires the LADWP to commence the preparation of environmental impact analyses, design, and permitting if the modeled concentration is greater than 100 μg/m$^3$ but less than 150 μg/m$^3$. This requirement is inconsistent with the Settlement Agreement, which states that a Remedial Action Plan (RAP) will be prepared after the APCO identifies the need for additional controls, monitoring, or both. We believe that if the modeled concentration is less than 150 μg/m$^3$, then there is no need for additional control according to the terms of the Settlement Agreement. In the event of higher concentrations and resulting SCRs, the RAP will identify the requirements for subsequent environmental impact analysis, design, and permitting. In that case, design and CEQA would reasonably |

Great Basin UAPCD Responses to Los Angeles Department of Water & Power Comments on the
Draft 2008 Owens Valley $PM_{10}$ Planning Area Demonstration of Attainment State Implementation Plan

| DWP # | SIP | Theme | Chapter | Page | Section | Para | Line | Comment |
|---|---|---|---|---|---|---|---|---|
| | | | | | | | | follow (not precede).<br><br>More globally, the Settlement Agreement stated that a 2008 SIP would be developed to reflect the provisions in the Settlement Agreement. Since many aspects of the Settlement Agreement conflict with provisions in the 2003 SIP, by implication, these portions of the 2003 SIP are superseded by the Settlement Agreement.<br><br>However, to resolve this matter expeditiously and in keeping with LADWP's desire to pro-actively plan for dust control at Owens Lake, the following is proposed to result from a 100 g/m$^3$ modeled event:<br><br>LADWP will develop a scope of work for the identified potential source areas, including: (1) a summary of the sites pertinent conditions, features, and location, (2) appropriate control alternatives and approach, including a conceptual layout of dust control and integration into the TDCA (roads, water supply, drainage, and power), (3) standard and site-specific permitting considerations, (4) anticipated environmental documentation considerations and approach, and (5) an approximate timetable for implementation beginning at an undefined start date that might coincide with a future SCR determination.<br><br>*City proposal is accepted. Recommended change will be made to Attachment B.* |
| 94. | X | Settlement Agreement | 8 | 4 of 10 | Attachment D | B | | Even if already tested and proven effective, BACM can only be become part of the SIP if over a three-year period: (1) there are no modeled shoreline concentrations >140 g/m$^3$ and (2) there are no observed concentrations >140 g/m$^3$. These pre-conditions are unnecessary and should be |

Great Basin UAPCD Responses to Los Angeles Department of Water & Power Comments on the Draft 2008 Owens Valley $PM_{10}$ Planning Area Demonstration of Attainment State Implementation Plan

| DWP # | SIP | Theme | Chapter | Page | Section | Para | Line | Comment |
|---|---|---|---|---|---|---|---|---|
| | | | | | | | | eliminated. New BACM approval should be based solely on demonstration that the measure provides adequate control efficiency, just as existing BACM measures have been. Further, off-lake sources that are out of the control of the Owens Lake dust control facilities could make the second condition impossible to achieve, essentially preventing a new measure from being implemented even if it is demonstrated to be effective through study on the Playa. These preconditions allow for possible inefficient and unnecessary use of public resources despite a known more efficient alternative. No additional protection of public health or the environment is achieved in exchange for this unreasonable requirement.<br><br>*The monitoring limitations for testing discussed in section 1. B. of the procedures to modify BACM only apply to tests performed in a 1 or 2 square mile test area that is located within DCAs where BACM has been implemented (see Step One on Test Areas). These limitations are necessary because a potentially active dust source area that is required to be controlled with BACM is being taken out of its requirements. If the modification is less effective than BACM, then the resulting emissions could potentially cause an exceedance.*<br><br>*The City should note that the monitoring limitations in Section 1.B. do not apply to tests that are done outside of the Total Dust Control Area. Locations where BACM testing can be done without the monitoring limitations include:*<br><br>*1) areas that are not within the 2003 or 2008 SIP dust control area, unless Supplemental Control Requirements* |

Great Basin UAPCD Responses to Los Angeles Department of Water & Power Comments on the Draft 2008 Owens Valley $PM_{10}$ Planning Area Demonstration of Attainment State Implementation Plan

| DWP # | SIP | Theme | Chapter | Page | Section | Para | Line | Comment |
|---|---|---|---|---|---|---|---|---|
| | | | | | | | | *make them subject to control,*<br><br>*2) Study Areas identified in the 2008 SIP, unless Supplemental Control Requirements make them subject to control and*<br><br>*3) locations outside of the Owens Lake bed.*<br><br>*Tests that are done outside of the current DCAs may be conducted more simply and results for a new BACM determination may be available sooner than for tests done in the DCAs. The only location in the world where the monitoring limitations apply is for BACM tests performed in the 1 or 2 sq. mi. test area in the TDCA.*<br><br>*To clarify that the limitations in 1.B do not apply in areas outside the TDCA the title will be changed to:*<br><br>*B. BACM Adjustment to Measures Other than Shallow Flooding <u>within Existing Dust Control Areas</u>.* |
| 95. | X | Settlement Agreement | 8 | 8 of 10 | Attachment D | 2 | 1 | The statement that "...within the 43.0 square-mile 2008 Total Dust Control Area footprint where BACM must be implemented by April 1, 2010…" is not entirely correct. The Moat and Row measure is not BACM and may be applied on up to 3.5 square miles of playa designated in the Settlement Agreement. LADWP suggests the following insertion: "..within the 43.0 square-mile 2008 Total Dust Control Area footprint where BACM <u>(or on up to 3.5 square miles, the non-BACM dust control known as Moat and Row)</u> must be implemented by April 1, 2010…".<br><br>*Suggested change made to Attachment D.* |

Great Basin UAPCD Responses to Los Angeles Department of Water & Power Comments on the
Draft 2008 Owens Valley $PM_{10}$ Planning Area Demonstration of Attainment State Implementation Plan

| DWP # | SIP | Theme | Chapter | Page | Section | Para | Line | Comment |
|---|---|---|---|---|---|---|---|---|
| 96. | X | Water and Labor | 5 | 5-8 | 5.2.7 | 1 | 4 | Actual water use in shallow flooding on Owens Lake ranges from 3.1 to 4.2 ft/year, depending on the extent of flooding and climate and water use on MV ranges from 1.0 to 1.3 ft/year, depending on the extent of irrigation and climate.<br>*This information has been added to Sections 5.2.7 and 5.3.4.* |
| 97. | X | Water and labor | 5 | 5-9 | 5.2.7 | 2 | 7 | Actual labor requirements for shallow flooding on Owens Lake average about 1 FTE/580 acres.<br>*Change made to Section 5.2.7.* |
| 98. | X | Water and Labor | 5 | 5-9 | 5.3.1 | 3 | 16 | Please insert the following underlined words: "…a target applied water salinity of 9 dS/m…"<br>*Change made to Section 5.3.1.* |
| 99. | X | Water and Labor | 5 | 5-13 | 5.3.4 | 1 | 2 | The 2,400-acre MV site was established with closer to 2.5 feet of water (most of which went to leaching, since the tiny plants used little water). The 7-foot figure arose from experience at the DIVIT site and may not be representative of other sites.<br>*This information has been added to Section 5.3.4.* |
| 100. | X | Water and Labor | 5 | 5-13 | 5.3.4 | 2 | 3 | Other activities include monitoring of drainage and vegetation conditions, on which irrigation scheduling is generally based.<br>*This information has been added to Section 5.3.4.* |
| 101. | X | Water and Labor | 5 | 5-13 | 5.3.4 | 2 | 6 | Actual labor requirements for managed vegetation on Owens Lake average about 1 FTE/230 acres.<br>*This information has been added to Section 5.3.4.* |
| 102. | X | Water and Labor | 5 | 5-13 | 5.3.4 | 1 | 7 | LADWP does not anticipate significant water use for weed control. |

Great Basin UAPCD Responses to Los Angeles Department of Water & Power Comments on the
Draft 2008 Owens Valley $PM_{10}$ Planning Area Demonstration of Attainment State Implementation Plan

| DWP # | SIP | Theme | Chapter | Page | Section | Para | Line | Comment |
|---|---|---|---|---|---|---|---|---|
| | | | | | | | | *"Weed control" has been eliminated.* |
| 103. | | Water and Labor | 5 | 5-13 | 5.3.4 | 1 | 9 | The main reason for variable levels of applied water is spatially variable soil drainage limitations (internal drainage and topographic, surface drainage).<br>*Comment noted. No change to SIP.* |

Theodore Schade, Air Pollution Control Officer
Great Basin Unified Air Pollution Control District
157 Short Street
Bishop, CA 93514-3537

October 20, 2007

The comments below address the:
1.) Draft 2008 Owens Valley PM10 Planning Area Demonstration of Attainment State Implementation Plan
2.) Draft Subsequent Environmental Impact Statement
3.) Biological Resources Technical Report, Appendix D

DRAFT 2008 SIP

p.5-2 Shallow flooding for PM10 Control

The document's statement that, "[runoff and ponding have created ]…habitat conditions for insects and shorebirds." is important. This statement recognizes that habitat has been created throughout the project that supports a large public trust wildlife resource.

p.5-8 Shallow Flooding Habitat

Tamarisk has invaded T29 and T 36 dust control cells adjacent to Lower Owens River Delta. Much of the nearest seed source is on State Lands in the Lower Owens River Delta Waterfowl Area. Removal of that tamarisk population would lessen the invasion threat into the dust control zone and lessen the future expense of continual removal of invasive seedlings.

p.5-8 Shallow Flooding Operation and Maintenance

An observation is made here that "Drains installed near naturally occurring wetlands would be operated so as not to cause significant groundwater drawdown or loss of surface water extent in the adjacent areas." Please specify how drains near naturally occurring wetlands around the lake will not impact those resources. How will operations be managed to prevent impacts? How will "significant" be defined? Will there be monitoring to ensure no impacts? If so, what sorts of observations will be made, what thresholds will be set, what actions will be taken – and how often – to prevent such impacts? Are there monitoring wells? If so, where? Will vegetation be monitored? If so, how? What measurements will be used to determine impacts on surface water extent? What level of damage will require a response, and how rapid will the response be?

p.5-15 Moat and Row

Moats near naturally occurring wetlands around the lake may impact those resources. Where are monitoring wells, what are the 'triggers' and what vegetation monitoring will govern the operation of moats.

Moats represent a potential hazard to ground nesting bird chicks and mammals and herpetofauna. Moats have the potential to be 'pit traps' that physically trap chicks and other animals. Water quality in the ditches may be a hazard and therefore a fatal attraction to wildlife. What monitoring is proposed during the test to look for wildlife impacts and the prevention of those impacts?

DRAFT SUBSEQUENT EIR VOLUME 1

p.2-7 Existing Mitigation Areas

Table 2.4.4-1 and Figure 4.4.4-1 do not show the large Zone 2 Habitat Shallow Flood Area, the largest bird habitat mitigation at Owens Lake. LADWP and CDFG can provide a copy of *Zone 2 Shallow Flood Shorebird Habitat Management Plan, July 2004* (prepared by LADWP). Preparation of this document was a previous requirement for LADWP during their request for a Stream Alteration permit. LADWP was provided a

deadline by CDFG which was not met. CDFG granted a one year extension to LADWP that was also not met. An Inyo County Superior Court order, on a complaint brought by the Owens Valley Committee and Sierra Club, caused the plan to be completed. It is meant to be the management document for the largest wildlife mitigation project at Owens Lake.

p.2-14 Channel Areas

This is an excellent dust control component for 0.5 square mile that enhances native vegetation and habitat along natural drainages from two shoreline wetlands - Cartago Springs (204 CDFG owned acres) and the Cabin Bar Ranch (owned by Anheiser-Busch). This control measure is immediately adjacent to the Cartago Springs CDFG property and Cabin Bar Ranch. Careful mapping of property lines should be undertaken. The Cartago Springs property is being considered for wildlife enhancement and visitor interpretation. This should be taken into consideration in relation to nearby work on the dust control project – particularly with regard to the proposal of moat and row nearby which is a visual impairment in an area where the view shed is important.

p.3.2-41 Biology 14, Wildlife Management Plan

This request by CSLC is an excellent component of the dust control project as a whole. It recognizes the large public trust wildlife resource that has returned to Owens Lake as a result of the shallow flooding dust control measures.

Deadlines for the plan's completion should be carefully monitored and enforced in order to avoid delay as experienced in the efforts to complete the *Zone 2 Shallow Flood Shorebird Habitat Management Plan*. The plan should incorporate the Shallow Flood Habitats in Zone 2 and at Dirty Socks, the channel area and the Sulfate Well wetlands as well as any others. The delta can be included, at least by reference, due to its physical and biological connection to Owens Lake. Options should be left open for CSLC to lease Owens Lake lands to CDFG for a wildlife management area if so decided in the future.

BIOLOGICAL RESOURCES TECHNICAL REPORT

p.1.2 – Project Objectives

- Be consistent with the State of California's obligation to preserve and enhance the public trust values associated with Owens Lake.

This objective is critically important in regard to wildlife and esthetics.

a. Wildlife populations, particularly birds, at Owens Lake have re-established themselves to historic levels. Tens of thousands of waterfowl and shorebirds are intensively using the lake's food resources in enormous numbers during migration and wintering. Owens Lake is the largest nesting site for snowy plovers in California. The National Audubon Society has designated Owens Lake an Important Bird Area. Audubon-California plans to direct resources on its behalf. Public access for wildlife viewing and interpretation are needed and plans are underway seeking funding through grants for interpretation sites within the dust control areas and elsewhere around the lake.

   Public Trust wildlife values at Owens Lake can be enhanced and provided additional protection with the following measures:

   i. Adoption of alternatives for the Moat and Row dust control method, or establishment of a protocol that includes monitoring and immediate responses to reduce the impacts of the method. The Moat and Row dust control method poses biological hazards which include the exposure of particularly low quality water in the open moats and the danger to chicks of birds species which nest on the ground and can fall into the moats and be trapped or harmed by the poor quality water. Reptiles are also vulnerable to the 'pit trap' nature of the moats.

ii. Creation of islands for waterfowl and shorebirds in the ponded areas where there are currently no such protections and where the existing soil islands are quickly being eroded by wave action.

iii. Provisions for balancing the Public Trust wildlife values at Owens Lake with the water needs of the City of Los Angeles should be provided for within the SIP and EIR and discussions between CSLC, CDFG and LADWP should be scheduled rather than postponing the inevitable negotiations. This will save time, uncertainty and much future expense.

b. Esthetics of Moat and Row control method (currently not an approved dust control method)–

i. Moat and Row control methods should not be used within sight of Hwy 395 due to their unnatural appearance and the visual dissonance created when contrasted with the natural lake bed and the use of water or vegetation for dust control. In particular, moat and row should not be permitted next to the channel area and adjacent to the CDFG Cartago Springs property where enhancement and visitor facilities are currently being planned.

ii. If, after testing, Moat and Row becomes an approved dust control method, then the color of fencing should be matched to surroundings, and predator perch deterrents should be installed on fencing.

Figure 2.1-1

DVNP boundaries should show the 1994 Desert Protection Act additions of Eureka and Saline valleys and Inyo Mountains Wilderness (BLM and Inyo NF).

Coso Mountains, Malpais Mesa Wilderness and White Mountains name labels are incorrectly placed.

p.2-3 The SIP says ~2.5 AF for dust control and the EIR says 4 AF. Which is the correct value?

p.4-22 Thousands of horned larks are found at Owens Lake. However, the subspecies that is sensitive in California is not present.

p.5-2 Wildlife Corridors

Moat and Row creates potential barriers to herpetofauna moving on the lake bed as well as ground nesting bird chicks.

p.5-2 Noxious Weeds

i. Removal of tamarisk infestations on State Lands at Ash Creek, Cottonwood Creek delta and Bartlett/Carroll Creek that will result in more flowing water into native habitat and also reducing the potential invasion of the dust project by tamarisk (an aggressive invader). Requiring this as a mitigation for vegetation and wildlife impacts should be considered.

p.5-3 Federal Wetlands

The project proposes to allow natural flows and vegetation to control dust emissions at the Sulfate Well area, thus allowing habitat values to continue there. Excellent idea.

p.5-4 Mitigation Measures

The enhancement of the ‘channel’ area in Cartago is an excellent plan that treats dust emissions and promotes habitat and wildlife. Moat and Row should not be permitted in the future on lands adjacent to this site because of visual impacts and potential wildlife impacts.

p.5-22

Speed limit – Limiting speed limits in snowy plover nesting areas is critical. The 15 mph limit is appropriate and reasonable. An increase to 30 mph in non-nesting areas should apply only to the Mainline Road and not to any of the lateral routes.

Lighting – Shielding lights at permanent facilities such as the Sulfate Road LADWP HQ and Dirty Socks Yard help protect the night sky in the southern Owens Valley.

p.5-25 Corvid monitoring – Ravens are the primary predator of snowy plover nests. The corvid management plan should be continued indefinitely and should include education of citizens and businesses in local communities asking them to help preserve wildlife by keeping all dumpsters and garbage containers closed at all times. Try a local school art project to, "Protect the Plovers."

p..5-27 Resident or Migratory Birds

Thank you for stating that Owens Lake is an Audubon Important Bird Area and that it is part of the U.S. Shorebird Conservation Plan. Please research the nearly complete list of birds to be found in the Owens Lake area at www.ovcweb.org /Owens Valley/Owens Valley.html

p.5-29 The text for Resident or Migratory Birds refers to herpetofauna, not to resident or migratory birds. Was this a cut and paste mistake? (please correct)

p.5-30 Habitat Conservation Plans and Natural Community Conservation Plan

Does the Owens Valley Multi-species Recovery Plan (USFWS) which covers the western portion of Owens Lake extend into some of the project area? If so, how is it being dealt with?

ADDITIONAL COMMENTS

The Great Basin Unified Air Pollution district is the lead agency for this environmental impact report. Others agencies such as California State Lands Commission and California Department of fish and Game may 'tier' off of this document in the future.

1.) Provisions for future anticipated public access for wildlife viewing must be described and drafted immediately. Waiting until the project construction is completed by April 1, 2010 prevents meaningful planning for public access and for seeking grant ahead of the 2010 completion date. At a minimum public access for wildlife viewing should be allowed along the entire Mainline Road from Highway 395 to the Lower Owens River Project pump station and along the entire Sulfate Road the three miles to the Sulfate Well. In addition access should be allowed along the Dirty Socks Yard haul road to where it connects with the Mainline Road. This access will allow the public to view wildlife in most of the dust control area and to specifically visit the wildlife habitat mitigation at Dirty Sock Habitat Shallow Flood Area, Sulfate Well and the Zone 2 Habitat Shallow Flood Area along both sides of the Sulfate Road. Access along lateral road from the Mainline should be considered. All of the roads in the project are of similar or better quality than roads in National Wildlife Refuges. Public safety should only be a problem when large maintenance work is being conducted and at which time roads can be temporarily closed and visitors rerouted. Speed limits can be as they are on the lake currently.

   Seasonal closures of access will be needed during snowy plover nesting. As part of the Wildlife Management Plan, biologists can be employed as they are now to locate nests and to temporarily close those routes. Presently a crew works from March through August each year surveying for nests.

2.) Insects in Keeler are mentioned as a problem each year and LADWP has provided window screens to citizens who asked for them. The Inyo Mosquito Abatement Office has not found mosquitoes to be a problem in the dust control areas. If biting insects of any type are a problem in Keeler then a rigorous survey should be conducted to determine the nature of the problem – what species are present? What

are the sources of the insects? Recommendations for control should be proposed and adopted, if necessary.

This concludes my comments,
Michael Prather
Drawer D
Lone Pine, CA 93545
760.876.5807
mprather@lonepinetv.com

## Draft 2008 Owens Valley SIP Public Comment Responses

## Letter 4 – Michael Prather – 20 October 2007

**PRA SIP 1 –** p.5-2 Shallow flooding for PM10 Control
Comment: *The document's statement that, "[runoff and ponding have created ]…habitat conditions for insects and shorebirds." is important. This statement recognizes that habitat has been created throughout the project that supports a large public trust wildlife resource.*

Response: Comment noted. No response required.

**PRA SIP 2 –** p.5-8 Shallow Flooding Habitat
Comment: *Tamarisk has invaded T29 and T36 dust control cells adjacent to Lower Owens River Delta. Much of the nearest seed source is on State Lands in the Lower Owens River Delta Waterfowl Area. Removal of that tamarisk population would lessen the invasion threat into the dust control zone and lessen the future expense of continual removal of invasive seedlings.*

Response: Paragraphs 15.I and 16.C.vii. of the proposed Board Order in Chapter 8 require the City to "remove all exotic pest plants, including salt cedar (*Tamarix ramosissma*) that invade any of the areas designated for control…." This requirement applies to all existing and proposed dust control areas. District field staff routinely report occurrences of tamarisk to the City and request immediately removal. Members of the public that observe tamarisk within the boundaries of dust control areas are encouraged to report such to the District.

**PRA SIP 3 –** p.5-8 Shallow Flooding Operation and Maintenance
Comment: *An observation is made here that "Drains installed near naturally occurring wetlands would be operated so as not to cause significant groundwater drawdown or loss of surface water extent in the adjacent areas." Please specify how drains near naturally occurring wetlands around the lake will not impact those resources. How will operations be managed to prevent impacts? How will "significant" be defined? Will there be monitoring to ensure no impacts? If so, what sorts of observations will be made, what thresholds will be set, what actions will be taken – and how often – to prevent such impacts? Are there monitoring wells? If so, where? Will vegetation be monitored? If so, how? What measurements will be used to determine impacts on surface water extent? What level of damage will require a response, and how rapid will the response be?*

Response: The District has had a formal program to monitor the hydrology and vegetation in the Owens Lake wetlands since 1994. The data collected from these sites have established the baseline conditions within the wetlands before DCM implementation. In addition to baseline monitoring, the wetland sites have been monitored regularly since initial DCM implementation and will continue to be monitored during the next phase of dust control projects as well as after 2010. Data collected will be evaluated with respect to the baseline conditions to determine if there are measurable changes to the wetlands. Data from sites adjacent to DCM projects as well as data from sites away from DCM projects will be evaluated in order to determine if observed changes are related to the proximity of the DCM area and can be attributed to their operation or are part of a region-wide trend unrelated to DCM activity. Parameters that are evaluated include

wetland plant species composition, plant vigor, water levels of shallow groundwater, salinity and chemistry of shallow groundwater and spring flow, flow rates at springs, and surface water extent.

In addition to the ongoing District monitoring, described above, the 2008 EIR describes two mitigation measures that monitor for and take care of potential impacts to Owens Lake wetlands. Biology Measure-6 and Hydrology Measure-2 are present to mitigate the potential direct and indirect impacts from operation and maintenance of dust control projects to the Owens Lake wetlands to below the level of significance.

**PRA SIP 4 –** p.5-15 Moat and Row
Comment: *Moats near naturally occurring wetlands around the lake may impact those resources. Where are monitoring wells, what are the 'triggers' and what vegetation monitoring will govern the operation of moats.*

*Moats represent a potential hazard to ground nesting bird chicks and mammals and herpetofauna. Moats have the potential to be 'pit traps' that physically trap chicks and other animals. Water quality in the ditches may be a hazard and therefore a fatal attraction to wildlife. What monitoring is proposed during the test to look for wildlife impacts and the prevention of those impacts?*

Response: See response to EIR comments on this issue.

**BLANK PAGE**

# RANTEC CORPORATION

PO Box 729
HWY 14 West
Ranchester, WY 82839
ph 307-655-9565 fax 307-655-9528
email lwm@ranteccorp.com


**Date: 10 October 2007**

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

**FROM: Lloyd Marsden**

**RE: Comments, Draft 2008 Owens Valley $PM_{10}$ Planning Area Demonstration of Attainment State Implementation Plan**

**Our company and I would like to offer comments and suggestions that may lead to reducing costs and increasing effectiveness of air pollution in the GBUAPC District.**

**We are attaching a technical report regarding the treatment of areas such as the Owens Lake bed, "Control of Wind-borne Dust from Alkaline Tailings Ponds and Playas". The report offers information regarding the use of chemical control means that have demonstrated effectiveness in the same type of environment.**

**Rantec Corporation would like to offer its expertise and products to assist in providing for additional means of air quality control. We feel that there is the opportunity to explore additional measures capable of achieving attainment of air quality goals sooner, at a potentially reduced cost and with a reduced impact on the current environment.**

**Thank you for your consideration and return comments. We would be happy to supply further information and answer questions that you may have regarding the report and materials referred to in the report.**

**Sincerely yours,**

Lloyd Marsden

**Lloyd Marsden, P.E.**
**General Manager**

Attachments: 1) **"Control of Wind-borne Dust from Alkaline Tailings Ponds and Playas", 2) KP4000DX Specification**

## Draft 2008 Owens Valley SIP Public Comment Responses

## Letter 5 – Rantec Corporation, Lloyd Marsden, P.E. – 10 October 2007

**RAN SIP 1 –** The Rantec Corporation provides a report on the use of chemical dust palliatives to control dust from alkaline soils and offers its expertise in "providing for additional means of air quality control."

Over the past two decades, the District has conducted occasional research on the use of chemical dust palliatives to control Owens Lake dust emissions. The research concluded that while some such chemicals may have limited application at Owens Lake (for use on roads, for instance), the cost of the materials and the enormous size of the dust emitting areas make their use impractical and uneconomical. The District took this official position on chemical dust controls in its comprehensive 1996 *Alternative Analysis* document (GBUAPCD, 1996).

As the chemical palliatives do have the potential for limited application, the District's current policy is to refer all such contacts to the Los Angeles Department of Water and Power for their evaluation.

*Range of Light Group*
*Toiyabe Chapter, Sierra Club*
*Counties of Inyo and Mono, California*
*P.O. Box 1973, Mammoth Lakes, CA, 93546*

SIERRA CLUB
FOUNDED 1892



October 31, 2007

Theodore Schade, Air Pollution Officer
Great Basin Unified Air Polluton Control District
157 Short Street
Bishop, CA 93514-3537

Draft Owens Vally PM10 Planning Area Demonstration of Attainment SIP

Please accept the following comments submitted on behalf of the Sierra Club Range of Light Group, Toiyabe Chapter.

Draft 2008 Owens Valley PM10 Planning Area

5.2.6 Shallow Flooding for PM10 Control:
The document states "runoff and ponding have created...habitat conditions for insects and shorebirds." This statement acknowledges that shallow flooding has created habitat throughout the project. This habitat now supports a large public trust wildlife resource. This resource is a great benefit to wildlife and to the public.

5.2.6 Shallow flooding Habitat
Tamarisk has invaded T29 and T36 dust control cells adjacent to the Lower Owens River Delta. Tamarisk invasion is a troublesome issue. A nearby seed source is in the Lower Owens River Delta Waterfowl Area (State Lands area). Removal of that tamarisk colony would alleviate the threat of tamarisk invasion into the dust control zone and would lessen the expense of future removal of invasive seedlings.

5.2.7 Shallow Flooding Operation and Maintenance
The document states drains installed near naturally occurring wetlands would be operated to not cause significant water drawdown or loss of surface water. Explain how the operation would not affect the naturally occurring wetlands. Will monitoring wells be installed? Will the vegetation be monitored?

5.5 Moat and Row
The document states that this is not an approved method of dust control. There are many unanswered questions and concerns about this method. How will it affect wildlife? It could be devastating for wildlife. What monitoring is proposed during the tests?

Draft Subsequent EIR Volume I
Page 2-7 Existing Mitigation Areas
Zone 2 Habitat Shallow Flood Area, the largest bird habitat mitigation at Owens Lake is not shown I Table 2.4.4-1 and Figure 4.4.4-1. LADQP prepared "Zone 2 Shallow Flood Shorebird Habitat Management Plan, July 2004." That document is meant to be the management document for the largest wildlife mitigation at Owens Lake. Will it be used for wildlife mitigation?

Page 2-14 Channel Areas
This is an excellent dust control component that enhances native vegetation and habitat along natural drainages from two shoreline wetlands: Cartago Springs (204 acres owned by California Dept. of Fish and Game) and the Cabin Bar Ranch (owned by Anheiser-Busch). The Cartago Springs property is being considered for wildlife enhancement and visitor interpretation. The view shed in this area is important and should be seriously considered. Near-by work on dust control—particularly the moat and row proposal-- would significantly affect the view shed.

p. 3.2-41 Measure Biology 14, Wildlife Management Plan
This proposal by the California State Lands Commission should be implemented. It is an excellent method of dust control. It recognizes the value of the large public trust wildlife resource that has returned to Owens Lake because of the shallow flooding dust control measures. The plan should be implemented as soon as possible. A deadline for the plan's completion should be closely monitored. The plan should also incorporate the Shallow Flood Habitats in Zone 2 and at Dirty Socks, the channel area as well as any other appropriate areas.

Biological Resources Technical Report
Page 1.2 – Project Objectives
"Be consistent with the State of California's obligation to preserve and enhance the public trust values associated with Owens Lake"
This is very important for wildlife and esthetics. Thousands of birds, waterfowl and shorebirds, are using the lake as a food resource, especially during migration and the winter. Owens Lake is the largest nesting site for snowy plovers in California. The National Audubon Society has designated Owens Lake as an Important Bird Area. Audubon-California plans to devote resources to this Important Bird Area. We need public access for wildlife viewing and interpretation. Funding grants are being sought for interpretative sites in and around Owens Lake.

Public Trust wildlife values at Owens Lake can and should be enhanced and provided additional protection. Creation of islands for waterfowl and shorebirds in the pond area where there are no such protection and where existing soil islands are being eroded by wave action is needed.

Schedule discussions between CSLC, CDFG and LADWP to negotiate balancing the Public Trust wildlife values at Owens Lake with the water needs of the City of Los Angeles. Planning such discussions could avoid uncertainty, future delays and expense.

As the moat and row dust control proposal poses a hazard to chicks of birds species which nest on the ground (eg. poor water quality in the moats, chicks being trapped in the moats; reptiles could also be harmed), Another problem with moat and row is its unnatural appearance and visual impact. It seems this method should not be used.

Protecting the snowy plovers is very important and that should include corvid management, as ravens are the primary predator of snowy plover nests. Corvid management should be continued indefinitely. It must include education of citizens and businesses in local communities. Stress how important it is to protect wildlife by keeping all dumpsters and garbage containers closed and inaccessible to ravens at all times. School children could effectively be involved through various means.

There are many good and excellent provisions in the Plan and others that need improvement and or more detail.

Thank you for the opportunity to comment.

Sincerely,

Wilma Wheeler
Conservation Committee
Range of Light Group
Toiyabe Chapter of the Sierra Club
P.O. Box 1975
Mammoth Lakes, CA 93546

## Draft 2008 Owens Valley SIP Public Comment Responses

## Letter 6 – Sierra Club, Range of Light Group, Wilma Wheeler – October 30, 2007

**SC SIP 1 –** 5.2.6 Shallow flooding for PM10 Control
Response: Comment noted. No response required.

**PRA SIP 2 –** p.5-8 Shallow Flooding Habitat
Response: Paragraphs 15.I and 16.C.vii. of the proposed Board Order in Chapter 8 require the City to "remove all exotic pest plants, including salt cedar (*Tamarix ramosissma*) that invade any of the areas designated for control…." This requirement applies to all existing and proposed dust control areas. District field staff routinely report occurrences of tamarisk to the City and request immediately removal. Members of the public that observe tamarisk within the boundaries of dust control areas are encouraged to report such to the District.

**PRA SIP 3 –** p.5-8 Shallow Flooding Operation and Maintenance
Response: The District has had a formal program to monitor the hydrology and vegetation in the Owens Lake wetlands since 1994. The data collected from these sites have established the baseline conditions within the wetlands before DCM implementation. In addition to baseline monitoring, the wetland sites have been monitored regularly since initial DCM implementation and will continue to be monitored during the next phase of dust control projects as well as after 2010. Data collected will be evaluated with respect to the baseline conditions to determine if there are measurable changes to the wetlands. Data from sites adjacent to DCM projects as well as data from sites away from DCM projects will be evaluated in order to determine if observed changes are related to the proximity of the DCM area and can be attributed to their operation or are part of a region-wide trend unrelated to DCM activity. Parameters that are evaluated include wetland plant species composition, plant vigor, water levels of shallow groundwater, salinity and chemistry of shallow groundwater and spring flow, flow rates at springs, and surface water extent.

In addition to the ongoing District monitoring, described above, the 2008 EIR describes two mitigation measures that monitor for and take care of potential impacts to Owens Lake wetlands. Biology Measure-6 and Hydrology Measure-2 are present to mitigate the potential direct and indirect impacts from operation and maintenance of dust control projects to the Owens Lake wetlands to below the level of significance.

**PRA SIP 4 –** p.5-15 Moat and Row
Response: See response to EIR comments on this issue.

Samuel R. Wasson
P.O. Box 223
385 Laws Ave.
Keeler, CA 93530

OCT 30 2007

Mr. Theodore D. Schade, APCO
157 Short Street
Bishop, CA 93514

October 29, 2007

Dear Mr. Schade,

Hopefully the draft "Owens Valley PM10 Planning Area Demonstration of Attainment State Implementation Plan" will be the last major draft SIP regarding the Owens Valley Planning Area. There have been tremendous air quality improvements in the vicinity of the Owens Dry Lake over the last few years. However, I would like to bring to your attention a few air quality issues that negatively impact the daily lives of Keeler residents.

**5.2: Shallow Flooding**
I am concerned that on the shallow flooding project for PM10 Control, both the shallow flooding and pond flooding methods are significantly impacting air quality, particularly in the Keeler town site. I am referring to a putrid, stinky, swampy odor that begins to impact the air quality in Keeler shortly after the waterflows are reduced and/or stopped—between July 1 and September 30 when the City is not required to apply water for dust control. The time when the odor is at its worst is during the month of July, when it can last up to 24 hours-a-day. During the months of August and September, it continues but not as often as during July. Breezes from the west bring the odor from the shallow flood area into town.

Specifically, what is causing the odor? What areas in the shallow flood zones are creating the odor? What is the odor chemically composed of? What measures can be implemented to mitigate or eliminate the odor?

**5.2.6: Shallow Flooding Habitat**
Abatement of mosquitoes and other biting flies and gnat populations must continue to be an absolute requirement to protect nearby residents from Vector born disease.

**7.5: Dust Control for Keeler Dunes**
I feel that **if** the Keeler Dunes continue to be emissive in 2009 and 2010, then the suggested multi-agency group needs to develop a plan to control dust emissions from the dunes. Control methods need to be implemented several years sooner than the proposed implementation date of December 31, 2013. If the dunes continue to be emissive, mitigation should be moved forward by two or three years so that the town of Keeler does not have to endure this last known air polluter any longer. The attainment of the federal standard by 2017 is 10 years away—**too long to wait**.

Sincerely,

Samuel R. Wasson

## Draft 2008 Owens Valley SIP Public Comment Responses

## Letter 7 – Samuel R. Wasson, October 29, 2007

**WAS SIP 1 –** Odors from Shallow Flooding dust control areas.

This comment will be responded to in the responses to EIR comments received.

**WAS SIP 2** – Abatement of mosquitoes and other biting insects.

Paragraphs 15.I. and 16.C.vii. of the proposed final Board Order in Chapter 8 require the City to "prevent, avoid and/or abate mosquito, other pest vector and biting nuisance insect breeding and swarming within and in the vicinity of the dust control areas, including within surrounding communities (communities within three miles of the lake bed), by effective means that minimize adverse effects upon adjacent wildlife." This will provide the District with the ability to require the City to take actions to protect residents.

**WAS SIP 3 –** Keeler Dunes should be controlled sooner than December 31, 2013.

See response to Letter 1 - California Indian Legal Services, Comment 1

Section 7.10 and Table 7.1 provide information on the schedule for implementing control measures at Owens Lake. Dust control measures for the 13.2 square miles of the lake bed are expected to be fully operational by April 1, 2010, however dust from the Keeler Dunes is not expected be controlled until the end of 2013. Due to the longer schedule to develop control measures with the BLM and other parties responsible for the Keeler Dunes, three calendar years of air monitoring data with no violations of the PM10 standard may not be available until 2017.

The District staff believes that the schedule to implement the control measures proposed in the 2008 SIP is as expeditious as practicable. The time required to implement lake bed control measures is consistent with the 2½ years provided in the 2003 SIP to implement shallow flooding on new dust source areas. The deadline to control dust from the off-lake Keeler Dunes was extended to December 31, 2013 to provide adequate time to complete environmental planning with the responsible agencies, and to design and implement the selected control measure. If an acceptable control measure for the Keeler Dunes can be fully implemented prior to 2013, then attainment could be sooner than 2017. However, no meetings have been held to discuss the issues or to set a schedule to control dust from the Keeler Dunes. The deadline of December 31, 2013 is the final date when control measures must be implemented in the Keeler Dunes in order for the planning area to have three calendar years of air quality data with no violations prior to the extended attainment deadline of March 23, 2017.

As shown in Figure 7.5, emission reductions associated with the proposed control strategy will comply with the required 5% emission reduction rate pursuant to CAAA §179(d)(3). The District will request a 5-year extension of the attainment deadline to March 23, 2017.

STATE OF CALIFORNIA ARNOLD SCHWARZENEGGER, *Governor*

**CALIFORNIA STATE LANDS COMMISSION**
100 Howe Avenue, Suite 100-South
Sacramento, CA 95825-8202

**PAUL D. THAYER,** *Executive Officer*
(916) 574-1800 FAX (916) 574-1810
*Relay Service From TDD Phone* **1-800-735-2929**
*from Voice Phone* **1-800-735-2922**

***Contact Phone:*** **(916) 574-1868**
***Contact FAX:*** **(916) 574-1835**

December 10, 2007

File Ref: PRC 8079.9

Ted Schade
Air Pollution Control Officer
Great Basin Unified Air Pollution Control District
157 Short Street
Bishop, CA 93514-3537

SUBJECT: Comments on Screen Check of 2008 SIP

Dear Mr. Schade:

The California State Lands Commission (CSLC, or Commission) is a responsible agency under the California Environmental Quality Act and a significant landowner in Owens Lake. Previous comments concerning the Commission's jurisdiction and interests, dated March 27, 2007, attached, remain accurate. Based upon CSLC staff's review of this document, we offer the following comments:

Chapter 2 – Owens Valley Planning Area
2.1 - Project Location and Land Ownership

On page 2-1, the third paragraph, fourth line should read "...Control Measures (BACM) and may be applied where approved by the California State Lands Commission on the Owens Lake Bed to...."

The fourth paragraph should indicate that the City of Los Angeles, Department of Water Resources (City) must seek permission from the California State Lands Commission (CSLC) for implementation of dust control measures on lands under the jurisdiction of the CSLC. Further, this paragraph should also reflect that appropriate CEQA analysis must be undertaken and adopted by the City, as well as permitted by other responsible agencies, including the California State Lands Commission, prior to implementation.

Chapter 5 – PM10 Control Measures

As a general comment to this document and to confirm previous comments provided by CSLC staff, regarding the large scale use of the gravel blanket or moat and row dust control measures, CSLC staff has strong reservations that these dust control

measures may not be compatible with the public trust at Owens Lake, and therefore, would require consideration of appropriate alternatives.

5.1 Introduction

On page 5-1, the first paragraph should indicate that an appropriate CEQA analysis must be prepared and adopted by the City, as well as permitted by other responsible agencies, prior to long-term implementation of the Moat and Row dust control measure.

On page 5-3, the fourth full paragraph, second line should read "...boundaries of each Shallow Flooding irrigation block to prevent leakage and increases in the ..."

5.2.4 Shallow Flooding Operational Refinements

On page 5-6, this section should reflect that the CSLC has discretionary authority over all modifications to the project description for implementing dust control measures on lands under its jurisdiction, including operational refinements. In addition, operational refinements should include a CEQA analysis of potential environmental impacts, particularly to vegetation and wild life.

On page 5-7, item #5 should include CSLC approval of the wetness cover plan.

The locations requiring 99 percent control efficiency should be shown on a site plan of Owens Lake.

5.2.6 Shallow Flooding Habitat

On page 5-8, removal of exotic pest and weed plants from the dust areas will require appropriate CEQA analysis, documentation, and public hearing prior to consideration, as well as approval from other responsible agencies.

On Page 5-8, the fifth paragraph should indicate that the mosquito and pest abatement program shall be the sole financial responsibility of the City.

The City's program to implement mosquito and pest abatement will require a mitigation monitoring program for all potentially significant impacts to wildlife, including snowy plovers.

5.2.7 Shallow Flooding Operation and Maintenance

This section should identify who will be responsible for ensuring that the City installs drains correctly to minimize impacts to nearby wetlands.

5.4.1 Description of Gravel Blanket for PM10 Control

On Page 5-14, fifth paragraph, the size of gravel to be placed is described as a size greater than ½ inch; however, on page 5-15, first paragraph, the minimum size is ¼ inch. The document should consistently identify the size of gravel necessary for potential use.

5.5 Moat and Row
5.5.1 Description of Moat and Row for PM10 Control

On page 5-15, second paragraph, first line should read: "The general form of Moat and Row is an array of earthen berms (row) about 5 feet high above the lake bed surface with..."

The supplemental material elements of the Moat and Row dust control measure should be described.

5.5.2 PM10 Control Effectiveness for Moat and Row

The first paragraph, fourth sentence should read: "The PM10 control effectiveness of Moat and Row may, if permitted, be enhanced by combining it with other dust control methods..."

On page 5-17, first partial sentence at the top of this page should read: "...array may also be increased by adding more moats and rows to the array, which reduces the distance between rows and if appropriate CEQA documentation has been prepared, approved, and permitted by all responsible agencies."

Chapter 7 – Control Strategy and Attainment Demonstration
7.3.2 Moat and Row Dust Control Areas

The first paragraph, second sentence should read: "Depending on the results of the Moat and Row demonstration projects and the permitting process by other responsible agencies, the City may decide which DCMs to propose for implementation in the areas designated for..."

The second paragraph, second sentence should read: "If the City is permitted by other responsible agencies to implement Moat and Row in any of the SDCA areas ..." Fourth sentence should read: "If the City is permitted by other responsible agencies, including the California State Lands Commission, to implement Moat and Row in any of the areas...".

7.9 Changes to BACM

The first sentence should read: "Existing BACM controls may be replaced with other BACM if permitted by other responsible agencies, including the California State Lands Commission," The third sentence should read: "Any approved BACM can be changed to any other approved BACM, if permitted by other responsible agencies, including the California State Lands Commission, however, such transitions must be done...".

Chapter 8 – Enabling Legislation to Implement Control Strategy
Attachment D – Board Order 080128-01

2. Research On Potential New BACM – Including Moat & Row

This section should indicate that the City may test new dust control measures if permitted by all responsible agencies, including the California State Lands Commission. The City cannot implement test measures on lands under the jurisdiction of the California State Lands Commission without its prior written consent and authorization.

3. Transitioning From One BACM to Another BACM After 2010

This section should describe that written authorization of the California State Lands Commission for any proposed modification or transitioning of dust control measures on lands under the jurisdiction of the California State Lands Commission is required.

Thank you for the opportunity to comment on this screen check document. We look forward to receiving the final 2008 SIP and notification prior to the District's final consideration of the SIP.

Please contact Judy Brown at (916) 584-1868, if you wish to discuss these comments.

Sincerely,

Barbara Dugal, Chief
Land Management Division

Attachment: March 27, 2007 Letter

cc: Judy Brown

## Draft 2008 Owens Valley SIP Public Comment Responses

## Letter 8 – California State Lands Commission, by Barbara Dugal, December 10, 2007

On November 30, 2007, the District submitted a screen-check draft of the proposed final SIP to the U.S. Environmental Protection Agency, the California State Lands Commission and the Los Angeles Department of Water and Power. Comments were due back to the District by December 10, 2007. Only the California State Lands Commission (CSLC) submitted written comments.

CSLC's comments concerned their jurisdiction over lake bed lands and the need for the City of Los Angeles to secure the appropriate approvals from the CSLC prior to implementing and/or modifying dust controls on lands under CSLC jurisdiction. CSLC requested minor additions and clarifications to the text in Chapters 2, 5, 7 and 8. The District generally accommodated their requests and clarified the document to reflect CSLC's jurisdiction. However, language was also added to indicate that nothing in the 2008 SIP gives the CSLC, or any other responsible agency, any additional authority beyond their authority under law.

**BLANK PAGE**

Department of Water and Power the City of Los Angeles

ANTONIO R. VILLARAIGOSA
Mayor

Commission
NICK PATSAOURAS, *President*
EDITH RAMIREZ, *Vice President*
FORESCEE HOGAN-ROWLES
WALLY KNOX
BARBARA E. MOSCHOS, *Secretary*

H. DAVID NAHAI,
*Chief Executive Officer and General Manager*

January 24, 2008

Mr. Theodore D. Schade
Air Pollution Control Officer
Great Basin Unified Air Pollution Control District
157 Short Street
Bishop, CA 93514

Dear Mr. Schade:

Subject: 2008 Owens Valley $PM_{10}$ Planning Area Demonstration of Attainment State Implementation Plan (Final 2008 OVPA SIP)

Thank you for the opportunity to provide comments on the Final OVPA SIP. The Los Angeles Department of Water and Power has reviewed the Final 2008 OVPA SIP, and offers the enclosed comments for the administrative record.

If you have any questions, please contact me at (213) 367-1138.

Sincerely,

William T. Van Wagoner
Manager of Owens Lake
Regulatory Issues

WVW:lsf

Enclosure

c: Dr. Mark D. Schaaf, Air Sciences, Inc.

Los Angeles Department of Water & Power Comments on the
**Proposed Final** 2008 Owens Valley $PM_{10}$ Planning Area Demonstration of Attainment
State Implementation Plan

| No. | Theme | Chap | Page | Section | Para | Line | Comment |
|---|---|---|---|---|---|---|---|
| 1 | BACM | 8 | 8.4-8.5 | 1,2, and 3 | All | all | This language could be interpreted to imply that if LADWP fails to comply with these requirements, a number of other Settlement Agreement provisions are voided. However, it could arise that changes agreed to by the District (e.g., minor alterations to the shallow flood control areas) are implemented. Under no circumstances should such changes be a cause for voiding of any of the provisions in the Settlement Agreement. |
| 2 | BACM | 8 | 8.8 | 12 | All | all | The first sentence of item 12 appears to place unnecessary restrictions on LADWP. If performance standards for BACM are continuously met, all that should be asked is that LADWP inform the APCO in writing of changes to BACM, their location, and timing. No approval for the change should be required.<br><br>APCO approval is understandably required where any lapse in compliance would occur. In this case, LADWP must also demonstrate that violations will not be caused by the lapse. This is addressed elsewhere in the SIP. |
| 3 | BACM | 8 (and 4, pages 4-10 to 4-12, section 4.3.6) | 8.8 | 13 | All | 3 | The importance of off-lake sources to attainment is acknowledged. However, it is not appropriate for the District to arbitrarily extend LADWP's responsibility to control $PM_{10}$ to sources beyond the Owens Lake playa and throughout the OVPA.<br><br>Section 30 of the Settlement Agreement addresses the Keeler Dunes as follows:<br><br>*"The GBUAPCD and LADWP agree to cooperate with other federal, state and local agencies and experts as necessary to develop a plan to reduce dust emissions from the Keeler dunes."* |
| 4 | BACM | 8 | 1 of 10 | D | 3 | 6-7 | After a test has been conducted and its effectiveness has been demonstrated, preconditions are listed for BACM approval that require certain shoreline concentrations be met before BACM can be approved. With regard to these preconditions the SIP states: "*The monitored values will be used as measured, and will not be adjusted for from-the-lake and non-lake wind directions as they are for the Supplemental Control Requirements.*" This means that |

| No. | Theme | Chap | Page | Section | Para | Line | Comment |
|---|---|---|---|---|---|---|---|
| | | | | | | | off lake sources can prevent the LADWP from using a BACM measure that has proven effective on the lake, even if on lake emissions are being controlled within requirements. This could unreasonably withhold approval for a measure that is as effective as existing BACM.<br><br>The clear purpose of modified BACM is to allow for refinement of original BACM measures and to improve the efficiency of using public resources. Efficient use of resources, when proven effective, does not pose a greater risk to public health. To place conditions on the process for modifying BACM that would disallow the use of scientifically acceptable data analysis methods, such as allowing off-lake emissions to be used in evaluating dust control measure performance on the lake, clouds the intent of this provision and does nothing to improve protection of public health.<br><br>Recognizing that modifications or improvements to dust control facilities are possible while maintaining stipulated control levels, the Settlement Agreement contains several provisions that fall outside the BACM provisions in the 2003 SIP. With the agreed success of the dust control measures in place on the Owens lake, this BACM condition is out of date and could prevent effective measures from being implemented. |
| 5 | Construction Impacts | 8 | 8-5 and 8-7 | 8, 10, and 11 | All | All | Provisions for maintenance and improvements of dust control facilities are essential, but insufficiently provided for in the Proposed Final SIP. |
| 6 | Construction Impacts | 8 | 8-5 and 8-7 | 8, 10, and 11 | All | All | There are no provisions to account for facility construction, repair or maintenance impacts on data collection. Sand flux data collected within or near (within 200 feet) areas of ongoing construction, repair, or maintenance activity, which are essential for sustained long-term operation of the dust control facilities, should be omitted from the SCR determination procedures provided LADWP notifies the District in writing of planned construction activities, durations, and locations by the end of each dust season (June 30) within a given calendar year. |

Los Angeles Department of Water & Power Comments on the
**Proposed Final** 2008 Owens Valley $PM_{10}$ Planning Area Demonstration of Attainment
State Implementation Plan

| No. | Theme | Chap | Page | Section | Para | Line | Comment |
|---|---|---|---|---|---|---|---|
| 7 | Construction Impacts | 8 | 8-7 | 10.B, 11, and 12 | All | All | As part of the Dust ID methodology refinement process, LADWP proposes a joint effort to monitor and understand the relationship between construction disturbance of the lakebed and lakebed conditions. Although future data collection on which supplemental control requirements will be based (taken from April 1, 2010 onward) will likely be less impacted by construction than in the past, this relationship will always need to be understood so that lakebed data can be properly interpreted relative to the needs for future dust control. A main focus should be understanding potential construction impacts on data pertaining to study areas. |

Los Angeles Department of Water & Power Comments on the
**Proposed Final** 2008 Owens Valley $PM_{10}$ Planning Area Demonstration of Attainment
State Implementation Plan

| No. | Theme | Chap | Page | Section | Para | Line | Comment |
|---|---|---|---|---|---|---|---|
| 8 | Control Efficiency | 5 (also Chapter 8, page 8-11, section 16B) | 5-11 | 5.3.1 | 6 | All | The vegetation cover level history and criteria contained in the SIP are not complete as it does not acknowledge the following:<br>1) Cover levels were measured by the District during the summer in field studies that formed part of the basis for the managed vegetation control measure. The resulting performance criteria are now measured by the District on the LADWP site in the wintertime, when saltgrass cover levels drop to about half of the preceding summer due to leaf senescence and plant dormancy. Furthermore, these criteria must be achieved on each and every one of the 2,100 acres of existing (and in every acre of future) managed vegetation constructed by LADWP. This is a cover distribution requirement that is not based on any particular study result.<br>2) At the District's request, the cover measurement methodology was recently altered. The new method indicates that an average wintertime cover of 34% was achieved on the LADWP site in March 2005. The "24 percent" figure cited in the SIP, also for March 2005, was based on the discarded cover measurement method.<br>Achievement of SIP performance criteria for managed vegetation was never proven feasible within any District or LADWP facility; rather, all indications are that these criteria cannot be achieved uniformly on large areas of Owens lake. However, as stated in the SIP, the lower levels of vegetative cover and uniformity that LADWP has achieved on 2,100 acres have proven effective. This proof far exceeds in scale and thoroughness any proof yet obtained for BACM performance. |
| 9 | Cost | 7 | 7-14 | 7.15 | 1 | 1 | LADWP appreciates the District's openness to reduction of implementation costs through learning, innovation, and changes that are consistent with achievement of required levels of dust control. This is an urgent and legitimate activity for both agencies. LADWP looks forward to working productively with the District to make progress on such fronts as compliance monitoring and |

| No. | Theme | Chap | Page | Section | Para | Line | Comment |
|---|---|---|---|---|---|---|---|
| | | | | | | | refinement of effectiveness relationships, along with the all-important refinement of the Dust ID methodologies. |
| 10 | EI | 5 | 5-17 | 5.7 | 2 | 2-3 | This paragraph is in conflict with the acknowledged and growing relative importance of off-lake sources such as the Keeler dunes. The importance was acknowledged by both the District and the City in Section 30 of the Settlement Agreement, which addresses the Keeler Dunes as follows: "The GBUAPCD and LADWP agree to cooperate with other federal, state and local agencies and experts as necessary to develop a plan to reduce dust emissions from the Keeler dunes."<br><br>The contribution of Keeler dunes is significant relative to the 13.2-square-mile SDCA. The data in Table 4.2 show that just the combination of emissions inventoried for Keeler dunes and Olancha dunes comprises emissions nearly 30% of that for the entire 13.2-square-mile SDCA. |
| 11 | Facilities | 5 | 5-15 | 5.5.1 | 3 | 1 | The serpentine layout of moats and rows is one possible configuration, but by no means the only one. Significant non-principal wind vectors can be addressed by other means, such as placement of perpendicular moat and row or sand fence features. |
| 12 | Facilities | 8 | 8-11 and 8-14 | 15H and 20 | All | All | In keeping with applicable waste discharge requirements, stormwater entering the shallow flooding facilities is generally captured, but if the capture capacity is exceeded the water is released downgradient through controlled outlets. It is LADWP's understanding that this approach is adequate. |
| 13 | Facilities | 5 | 5-15 | 5.5.1 | 3 | 1 | The SIP states that "The individual Moat & Row elements are to be constructed in a serpentine layout…." This is a more rigid definition of Moat & Row than what is contained in the 2006 Settlement Agreement. The Settlement Agreement states that "The general form of the 'moat and row' (MR) measure is an array of earthen berms…" that are to be "…constructed in a serpentine layout across the lakebed… ." The Settlement Agreement goes |

| No. | Theme | Chap | Page | Section | Para | Line | Comment |
|---|---|---|---|---|---|---|---|
| | | | | | | | on to say that "The serpentine layout of the MR array is intended to control emissions under the full range of principal wind directions…."<br><br>The serpentine layout is only one of several possible Moat and Row configurations that can achieve the stated objective of controlling emissions under the full range of principal wind directions. A lattice configuration (i.e., hatched pattern of straight lines) can also achieve this objective, with less surface disturbance than a serpentine pattern. In drafting this portion of the Settlement Agreement, the City was providing the negotiating team with one example—a visual interpretation—of what was then a little-known and little-understood concept. Care was taken to state that the illustrated layout was a ***general form***. This general form was not intended to substitute for, or preclude, any future design effort by the City. |
| 14 | Mitigation requirements | 8 | 8.11 and 8.13 | 15J, 16C.vii | All | All | LADWP's responsibilities for insect abatement in the dust control facilities are spelled out elsewhere. That preventative effort is necessary and sufficient. |
| 15 | Modeling | 4 | | | All | All | The District makes statements that the K-factors are "relatively constant" ranging from a factor of "2 to 3". The City has a number of issues with K-factors and the Dust ID protocol in general that are to be addressed under the Expert Panel process. Figures 4.10 through 4.13 indicate that within individual K-factors vary by more than 2 orders of magnitude, and individual storm K-factors can vary by over an order of magnitude. For example, spring central area K-factors range from 8.8 to 122, much more that the factor of 2 to 3 cited. |
| 16 | Modeling | 8 | 15 of 45 | Attach. C | --- | --- | The SIP states that the GBUAPCD is planning to measure sand masses down as low as 0.1 grams (the lower limit was 5 grams in the 2003 Revised SIP). It is not appropriate to record such low sand masses. The City has provided the District with numerous examples in the past showing that one gram of sand is so low that |

| No. | Theme | Chap | Page | Section | Para | Line | Comment |
|---|---|---|---|---|---|---|---|
| | | | | | | | the associated kinetic energy fits within the instrument "noise" for some of the Sensits that are currently operating on the Owens playa. For these instruments, low sand masses cannot be accurately apportioned over time because the Sensit kinetic energy cannot be separated from the baseline instrument "noise." At low sand masses, even the Sensit particle counts may not be well correlated with sand mass because of small-scale spatial differences between the Sensit and sand mass collection points. This has been demonstrated using the District's data. The sand mass threshold should have been retained at five grams, the level used in the 2003 Revised SIP.<br><br>For masses less than 5 grams, the GBUAPCD should verify that a statistically significant relationship between the sand mass and Sensit output exists before using these data in the Dust ID model. Furthermore, one should question whether a $1/10^{th}$ of a gram of sand constitutes "saltation." |
| 17 | Off-Lake Sources | 4 | 4-1 | 4.1 | 1 | 2 | The phrase "off-lake sources of lakebed dust" suggests that these off-lake sources originated exclusively from the Owens playa. This statement cannot be supported by any quantitative scientific data. The dry desert soils that predominate the Owens Valley and other valleys along the eastern Sierra Nevada are inherently dusty. Qualitative observations of dust from areas beyond the Owens playa have been observed for many years and it is mutually acknowledged that the playa is not the only source of dust in the OVPA. While the Owens playa has in the past represented the majority of dust sources, the dust controls stipulated in previous SIPs and this SIP have dramatically reduced the prevalence of the Owens playa as a dust source in the valley.<br><br>All of the sources mentioned in the second sentence are *off-lake sources*. A more accurate description would have read: "Other <u>off-lake</u> wind erosion sources in the Owens Valley Planning Area include: sand dunes; portions of alluvial fans; wind-eroded desert soils; small mining facilities such as the Dolomite Mine; off-road vehicle areas near Lone Pine, Keeler, Independence, and |

| No. | Theme | Chap | Page | Section | Para | Line | Comment |
|---|---|---|---|---|---|---|---|
| | | | | | | | Olancha; and the Inyo County's Lone Pine Landfill, among others." |
| 18 | Off-lake sources | 4 | 4-1 | 4.1 | 3 | 4-5 | As the Owens Lake Dust mitigation project moves toward its clear attainment goal in this SIP, the statement that other wind erosion sources "…are usually sporadic and are very small in comparison to dust from the Owens Lake bed…" has already become less true. There are several recorded exceedances from off-lake sources annually and ANY exceedances should be considered significant by the GBUAPCD, particularly given the fact that this 2008 SIP places restrictions on advancement of dust control technologies on Owens Lake if any off-lake exceedances occur. This fact is acknowledged in paragraph 9.C.(iii) of the Settlement Agreement and should be acknowledged in the SIP. The SIP states elsewhere that the Keeler dunes area is expected to continue to cause exceedances of the standard after the lake bed sources in the 2003 and 2008 dust control areas are controlled. It is important to include all other sources of dust in the emissions inventory. |
| 19 | Off-lake sources | 4 | 4-11 | 4.3.6 | Last | 5-8 | The basis of the K-factor determination for the Olancha Dunes implies that the erodible material in the dunes originated from the lakebed. The District has not provided any scientific data to support that this is the case. |
| 20 | Off-lake sources | 4 | 4-11 | 4.3.6 | 4 | 1-2 | Quantitative scientific data are not available to support the statement that "Most of these off-lake sources of wind-blown dust were formed by material that was initially entrained from the exposed playa and then deposited in areas off the lake bed." The cited source (Holder, 1997) contains no quantitative data to support this statement. Rather, it states that the sands in off-lake source areas are "thought to have originated on Owens Lake." Material would have moved from the Owens Lake playa into dune formations around the Owens Valley, not only during the most recent lowering of lake levels, but during previous low-water periods that are known to have occurred. Again, while the |

| No. | Theme | Chap | Page | Section | Para | Line | Comment |
|---|---|---|---|---|---|---|---|
| | | | | | | | importance of non-playa sources of $PM_{10}$ is acknowledged, it is premature to assign responsibility for the control of these sources to LADWP.<br><br>The City and District committed to study of this source area in section 30 of the Settlement Agreement. It is understood that the District is currently working on a project on the Keeler dunes to better understand their detailed development over time and possible methods for control of $PM_{10}$ emissions. Per the Settlement Agreement Section 30 statement above, the City expects to be involved in this project and in the development of data that will help to determine the developmental history of the Dunes. |
| 21 | Off-lake sources | 4 | 4-11 | 4.3.6<br>Fig. 4.14<br>Table 4.2<br>Eqn. 4.4 | | | The 2008 SIP emission inventory likely has underestimated the contributions from off-lake sources. Plume observations for the period from 2002-2006 shows that dust emissions have occurred over a much larger area than is shown in either Figure 4.14 or Table 4.2. Using a delineation that envelopes the District's 2002-2006 plume observations (because no GPS delineations are available for these areas), the following area estimates were obtained: Keeler dunes, 5.05 sq. km.; Olancha dunes and corridor along the shore south of the Managed Vegetation site, 11.1 sq. km; other miscellaneous areas south of the playa and east of the town of Olancha, 1.98 sq. km. This information could have been used to better quantify the emissions from these off-lake source areas, and the results subsequently reflected in an updated Figure 4.14, Equation 4.4, and Table 4.2. |
| 22 | Off-lake sources | 4 | 4-11 | 4.2.6<br>Figure 4.14 | Last | | The Department is concerned that the on-lake dust control measures might not be enough to bring the OVPA into attainment and off-lake sources that are currently producing exceedances of the standards need to be considered.<br><br>The GBUAPCD's monitoring data for the period from January 2000 through June 2007 shows that off-lake sources at Owens Lake produced a total of 131 exceedances. Of these 131 |

| No. | Theme | Chap | Page | Section | Para | Line | Comment |
|---|---|---|---|---|---|---|---|
| | | | | | | | exceedances, 52 occurred at Keeler, 41 at Dirty Socks, 18 at Shell Cut, 7 at Flat Rock, 6 at Lone Pine, 6 at Olancha, and one at Bill Stanley. The fewest exceedances occurred in the year 2007, however the 2007 data represents only the first six months of the year. Exceedances might still occur during the second half of the year. There does not appear to be any systematic reduction in the frequency or magnitude of off-lake exceedances at any of the shoreline monitors over the period from 2000-2007. |
| 23 | Regulations | 6<br>7 | 6-1<br>7-7 | 6.1<br>7.8 | 3<br>4 | | While it is reasonable to use all four years of data for the model attainment demonstration, running the test over a single four-year period is inconsistent with the rules and guidelines for implementing the NAAQS. For consistency with the federal standard, the attainment test should be based on two, running three-year periods, not a single four-year period. |
| 24 | Regulations | 7 | 7-7 | 7.7 | 1 | 10-13 | The Proposed Final 2008 SIP states that: "For the purpose of applying District Rule 401.D, the Dust ID model results will only be used to determine if any lake bed dust source area(s) caused or contributed to a state $PM_{10}$ standard violation…." This method assumes that the Dust ID model can predict $PM_{10}$ concentrations of 100 $\mu g/m^3$ or less with sufficient accuracy. The current Dust ID model is not sufficiently accurate in this concentration range. The capability of the model to accurately predict low $PM_{10}$ concentrations is contingent upon future model refinements or an alternative means of obtaining the $PM_{10}$ emission rates. |
| 25 | SCDA | 8<br>Attach-ment B | 7 of 17<br><br>10 of 17 | | 3<br><br>5 | | The assignment of a one-square-kilometer default source area is a carry over from the 2003 Revised SIP. Because the emissive areas are much smaller now than they were prior to implementation of the 2003 SIP, it no longer seems reasonable to assign for dust control a one-square-kilometer default area if no GPS boundary or other physical evidence is available to identify the on-lake source area. LADWP favors having the GBUAPCD make a scientifically based, good-faith effort to identify the on-lake source areas that produced the monitored violation at the |

| No. | Theme | Chap | Page | Section | Para | Line | Comment |
|---|---|---|---|---|---|---|---|
| | | | | | | | shoreline.<br><br>The square kilometer default area has not been used in recent years because discussions between the GBUAPCD and Department have led to mutually agreeable source area delineations. The GBUPACD agrees that site-specific default source area boundaries should be discussed for each sand flux site as an alternative to the one-square-kilometer default source area. Nonetheless, the GBUPACD still favors the one-square-kilometer default area because it serves as an alternative dust control area if no agreement can be reached based on the evidence available. Because the GBUAPCD has sole discretion in deciding the source area boundaries to use in the Dust ID modeling analysis, the Department believes that this default source area is unnecessary and overtly punitive. |
| 26 | Settlement Agreement | 5 | 5-6 | 5.2.4 | 5 | 4 | Logically, only exceedances caused by sources on the lakebed should be required to have ceased for the Owens Lake dust sources to be considered under control. The Settlement Agreement, while allowing for violations caused by non-playa sources to slow reductions in wetness cover levels, also requires that the District deal expeditiously with these sources (Section 16B). |
| 27 | Settlement Agreement | 7 | 7-5 | 7.4 | 1 | 2 | The study areas were excluded from the proposed 2008 control area not only because of the uncertainty about the "actual boundaries of the emissive areas" but also because of general uncertainty regarding the accuracy and representativeness of the inputs and intermediate data, including the k factors, used in the Dust ID modeling. All of the study areas were modeled and at least one of the areas—Study Area 1—exceeded the federal $PM_{10}$ standard at the shoreline. However, it was excluded from the Total Dust Control Area because the data quality was deemed questionable, making the modeled outcome too uncertain to require dust controls at that time. These areas were placed in the "study" category, awaiting additional evidence and refinement of |

| No. | Theme | Chap | Page | Section | Para | Line | Comment |
|---|---|---|---|---|---|---|---|
| | | | | | | | the modeling techniques. |
| 28 | Settlement Agreement | 8 | 4 of 10 | Attach-ment D | B | | Even if already tested and proven effective, BACM can only be become part of the SIP if over a three-year period: (1) there are no modeled shoreline concentrations >140 $\mu g/m^3$ and (2) there are no observed concentrations >140 $\mu g/m^3$. These pre-conditions are unnecessary and should not apply to tests already done without change to operation of a DCM. Off-lake sources that are out of the control of the Owens Lake dust control facilities could make the second condition impossible to achieve, essentially preventing a new measure from being implemented even if it is demonstrated to be effective through study on the Playa. These preconditions allow for possible inefficient and unnecessary use of public resources despite a known more efficient alternative. Evaluation of such tests should be based solely on demonstration that the measure provides adequate control efficiency, just as existing BACM measures have been.<br><br>It is still not clear from this section that new BACM approval from tests that are <u>not</u> performed by intentionally reducing controls on a portion of a DCA, is not subject to the above conditions. At least one BACM test situation is not yet addressed in this section. The subsection under 8B titled First Step on Test Areas states that "The City may also satisfy the requirements of a BACM test for Managed Vegetation with documentation of a site-specific BACM test, along with written justification for more general application of the results of this test." At the time of the development of the 2003 SIP it could not have been anticipated that a test could be achieved within a DCA without intentional reduction of controls. At this time, however, such data exist and the potential value of such data should not be discarded. |

Los Angeles Department of Water & Power Comments on the
**Proposed Final** 2008 Owens Valley $PM_{10}$ Planning Area Demonstration of Attainment
State Implementation Plan

| No. | Theme | Chap | Page | Section | Para | Line | Comment |
|---|---|---|---|---|---|---|---|
| 29 | Water quality | 8 | 8.12 and 8-14 | 16C.vi and 20 | All | all | In keeping with applicable waste discharge requirements for the project, LADWP's stormwater management has to date employed the vegetation itself to spread and de-silt stormwater. Additional surface and subsurface drainage features have been constructed to facilitate drainage after irrigation and storm events As a result, flows across the site to the brine pool, while similar in volume to historic conditions, likely contain less suspended material. It is LADWP's understanding that this approach satisfies this condition. |