

# GREAT BASIN UNIFIED AIR POLLUTION CONTROL DISTRICT



## GOVERNING BOARD MEETING INFORMATION

### Meeting Date & Time

Monday, July 18, 2011 at 10:30 am

### Meeting Location

Alpine County Supervisor's Chamber  
Alpine County administrative Center  
99 Water Street (State Hwy 89)  
Markleeville, California

### District Board

Linda Arcularius, Inyo County, Chairwoman  
Tim Hansen, Mono County, Vice Chair  
Richard Cervantes, Inyo County  
Larry Johnston, Mono County  
John Eastman, Town of Mammoth Lakes  
Henry "Skip" Veatch, Alpine County  
Tom Sweeney, Alpine County,

Theodore D. Schade, Air Pollution Control Officer  
157 Short Street, Bishop, California 93514  
(760) 872-8211 E-mail: [tschade@gbuapcd.org](mailto:tschade@gbuapcd.org)





## GREAT BASIN UNIFIED AIR POLLUTION CONTROL DISTRICT

157 Short Street, Bishop, California 93514-3537

Tel: 760-872-8211 Fax: 760-872-6109 tschade@gbuapcd.org

### NOTICE OF PUBLIC HEARING

ADOPTION AND APPROVAL OF REVISION TO THE 2008 OWENS VALLEY PM<sub>10</sub> PLANNING AREA  
DEMONSTRATION OF ATTAINMENT STATE IMPLEMENTATION PLAN (2008 SIP)  
MODIFYING THE DESCRIPTION AND REQUIREMENTS OF  
THE MANAGED VEGETATION BEST AVAILABLE CONTROL MEASURE

**PLEASE TAKE NOTICE** that on Monday, July 18, 2011, the Governing Board of the Great Basin Unified Air Pollution Control District (District) will conduct a public hearing and consider for adoption and approval a modification to the 2008 SIP. The proposed modification would change the description of the Managed Vegetation Best Available Control Measure (BACM) for new PM<sub>10</sub> control areas on the dried bed of Owens Lake. The proposed BACM description for new areas is proposed to be identical to the current approved BACM for existing Managed Vegetation areas. On March 17, 2011, the District and the City of Los Angeles Department of Water and Power stipulated that the revised BACM would be presented to the District Governing Board prior to July 31, 2011. The stipulation is not construed to be an approval by the District. No other changes to the 2008 SIP are proposed or will be considered.

The proposed modified BACM description is available for public review at the District's Bishop office, 157 Short Street, Bishop, CA 93514 and on the District's website at: [www.GBUAPCD.org](http://www.GBUAPCD.org). Copies are available in person or by mail upon request.

The public hearing and the District Governing Board's consideration for adoption and approval will occur at the Board's regular meeting on **Monday, July 18, 2011 at 10:35 a.m. in the Alpine County Administrative Center, Board of Supervisors Chambers, 99 Water Street (State Highway 89), Markleeville, California 96120.**

Written public comments can be submitted prior to the July 18, 2011 Board meeting. Written comments should be submitted to Theodore D. Schade, Air Pollution Control Officer, Great Basin UAPCD, 157 Short Street, Bishop, CA 93514. Written and oral comments can be provided at the July 18, 2011 public hearing.





## GREAT BASIN UNIFIED AIR POLLUTION CONTROL DISTRICT

157 Short Street, Bishop, California 93514-3537

Tel: 760-872-8211 www.gbuapcd.org

### GOVERNING BOARD REGULAR MEETING AGENDA

**MONDAY, JULY 18, 2011 AT 10:30 AM**

**Alpine County Supervisors Chamber**

**Alpine County Administrative Center**

**99 Water Street (State Hwy 89)**

**Markleeville, California**

(All Meetings Are Electronically Recorded – Materials related to an item on this agenda submitted to the Governing Board after distribution of the agenda packet are available for public inspection in the Board Clerk’s office at the District’s Bishop office.)

1. Call to order and pledge of allegiance
2. Public comment on matters not on the agenda (No action)
3. Approval of minutes of the May 16, 2011 Governing Board meeting .....1
4. **10:35 am – Public Hearing** – Revision of the Managed Vegetation Best Available Control Measure description contained in the 2008 Owens Valley PM<sub>10</sub> Nonattainment Area Demonstration of Attainment State Implementation Plan .....17
5. Continued discussion and possible action regarding projects to be funded by the Great Basin/LADWP Clean Air Projects Program.....27
6. Consent Items
  - a. Consideration of annual sole source determinations for equipment and professional services .....34
7. Informational items
  - a. Contracts signed by the Air Pollution Control Officer .....39
  - b. Travel report .....40
8. Board member reports
9. Air Pollution Control Officer report .....41
  - a. Owens Lake update
  - b. Air quality monitoring updates
  - c. Personnel update
  - d. Annual permit and enforcement summary
10. Set date and location of next regular meeting (September, usually in Mono County).....46
11. Adjournment





## GREAT BASIN UNIFIED AIR POLLUTION CONTROL DISTRICT

157 Short Street, Bishop, California 93514-3537

Tel: 760-872-8211 Fax: 760-872-6109

### BOARD REPORT

**Mtg. Date:** July 18, 2011

**To:** District Governing Board

**From:** Tori DeHaven, Board Clerk

**Subject:** Approval of minutes of the May 16, 2011 Governing Board Regular Meeting

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**Summary** – Attached for the Board’s approval are the minutes from the May 16, 2011 regular meeting of the District Governing Board held in Bridgeport, California.

#### **BOARD ACTION**

Staff recommends that the Board review and approve the minutes from the May 16, 2011 meeting.

#### **Attachments:**

May 16, 2011 minutes.

**GREAT BASIN UNIFIED AIR POLLUTION CONTROL DISTRICT  
GOVERNING BOARD MINUTES**

May 16, 2011

(All Meetings Are Mechanically Recorded)

The Great Basin Unified Air Pollution Control District Governing Board of the Counties of Alpine, Inyo and Mono, State of California met at 10:00 am on May 16, 2011 in the Mono County Supervisors Chambers, Mono County Courthouse, in Bridgeport, CA. The following Board members were present: Chair Linda Arcularius, Inyo County; Vice Chair Tim Hansen, Mono County; Board Member Richard Cervantes, Inyo County; Board Member Larry Johnston, Mono County; Board Member Henry "Skip" Veatch, Alpine County; Board Member Tom Sweeney, Alpine County; and Board Member John Eastman, Town of Mammoth Lakes. GBUAPCD staff present: Ted Schade, Air Pollution Control Officer; Duane Ono, Deputy Air Pollution Control Officer; Nik Barbieri, Director of Technical Services; Grace Holder, Playa Geologist; Chris Lanane, Air Monitoring Specialist; and Tori DeHaven, Clerk of the Board. Members of the public included: Janice McRoberts and April Zrelak, Lone Pine Paiute Shoshone Reservation; Rick Phelps, High Sierra Energy Foundation; Bill Taylor, Mammoth Lakes Resident; Paul Lamos, U.S. Borax; Mike O'Carroll, Inyo-Mono Advocates for Community Action (IMACA); Colleen Brock, Coso Operating Company; Walter Brock, Department of Defense; Michael and Liz O'Sullivan, Paradise Resident; Martin Adams, William VanWagoner and David Edwards of the City of Los Angeles Department of Water and Power; John Wentworth, Mammoth Lakes Trails Public Access; Kelly Garcia, Mono County Public Works; Paula Williams, Eastern Sierra Institute for Collaborative Education; Lisa Isaacs, Mammoth Lakes Resident; and Randy Keller, Inyo County Counsel for the District.

**Agenda Item #1**  
Call to Order

Board Chair Arcularius called to order the regular meeting of the District Board at 10:00a.m.

Board Member Eastman led the Pledge of Allegiance.

**Agenda Item #2**  
Public Comments  
on Matters not on  
the Agenda (No  
Action)

Board Chair Arcularius opened the public comment period for matters not on the agenda at 10:00 am.

No comment was offered.

Board Chair Arcularius closed the public comment period for matters not on the agenda at 10:00 am.

**Agenda Item #3**  
Approval of Minutes  
of the March 17,  
2011 Governing  
Board Meeting

**Motion (Eastman/Veatch) Approval of the minutes of the March 17, 2011 Governing Board regular meeting.**

Motion carried 7/0 and so ordered.

B/O 110516-03

**Agenda Item #4**  
Appointment of New  
Hearing Board  
Member

Board Clerk Tori DeHaven briefed the Board on the recruitment process for a Hearing Board member due to the resigning of Tony Barrett. One letter of application was received from the public.

**Motion** (Cervantes/Johnston) Appointing Alexander B. Reid to serve a three-year term on the Great Basin Unified Air Pollution Control District's Hearing Board, to provide representation from Inyo County in accordance with the Unification Agreement.

Motion carried 7/0 and so ordered.

B/O 110516-04

**Agenda Item #5**  
**PUBLIC HEARINGS**  
a) Adoption of Orders  
to the City of Los  
Angeles to Pay the  
2011-2012 Fiscal Year  
SB 270 Mitigation Fees  
as Provided by Section  
42316 of the California  
Health & Safety Code

Board Chair Arcularius opened the public hearing (agenda item 5a) at 10:05 am. She noted that although the representatives for the City of Los Angeles (City) had not arrived yet, they would continue on with the public hearing.

b) Approval of the  
Fiscal Year 2011-12  
Total District Budget –  
District Budget and SB  
270 Sub-Budgets

APCO Schade began with a brief introduction regarding the SB 270 Assessment Fee. The first of the two required hearings occurred on March 17, 2011; based on comments from the City and responses made by the District, no substantive changes have been made. The Mono Visitors Center requested assistance in paying for an updated exhibit regarding air quality issues and funding had been included in the budget for the project. The City voiced concerns regarding the funding and the District adjusted the budget by removing this item. If the District decides to assist in the exhibit update, funds will come from somewhere other than the current FY 2011-12 SB 270 Assessment Fee. (City representatives arrive at 10:06 am). The Assessment Fee has been reduced compared to previous years.

Board Chair Arcularius asked if the Board had any questions. No comment was offered. She then asked if there was any public comment.

Mr. Marty Adams indicated that the City has reviewed the Assessment Fee and has only one issue with it: funding for the Keeler Dunes. He indicated that after a review of past Governing Board minutes, the City believes there had been specific direction to staff from the Governing Board to participate in a collaborative process; the City believes the collaboration has yet to occur. He then distributed a graph to the Board titled, "LADWP SB270 Payments 1995 – Present" to demonstrate how much money the City has paid the District in the past. He summarized for the Board the graphs information.

Being that no further public testimony was given, APCO Schade responded to the information given by Mr. Adams. He discussed the materials handed out by Mr. Adams.

Board member Eastman asked APCO Schade to remind the Board, roughly the amount of area still left to be addressed on the lake bed.

APCO Schade estimated that less than five square miles still needs to be addressed. He added that dust has been reduced by about 80% to 90% due to the research and efforts over the years. This is the largest air pollution control project in the country. Over the past few years, research efforts have been reduced and air monitoring efforts are continuing.

Board Chair Arcularius commented on work done at Owens Lake during certain timeframes from 1995-2002, 2003-2006, the 2007 SB 270 fee spike and Board concerns that the SB 270 budget decreases as more work on the lake is completed and the monitoring becomes more stable.

APCO Schade responded that up until 2001 there was nothing on the lake bed. Everything before 2001 was figuring out what to do and how to do it. He noted that as research went down the amount of control on the lakebed went up. The 2007 spike was from the 2006 settlement agreement with the City wherein they agreed to carry out certain tasks and projects. There continues to be monitoring associated with the lakebed on areas that are not mitigated and that are dust sources. Areas that are controlled still need to be monitored.

APCO Schade said that in the foreseeable future, five years or so, there will be considerably less effort and costs will continue to decrease.

Board Chair Arcularius explained that it is important to spend a little time to explain to members of the public present about what is going on at the Lake as many may not have been part of the SB 270 discussions for a long time.

Air monitoring Specialist Chris Lanane added that when the District put together the air monitoring network around Owens Lake about three years ago, the City was insistent that there be more air quality monitoring stations, two more were added. Once a station is in place and they measure a violation you cannot remove it or shut it down until it has had no violations for three years.

APCO Schade added that the fact that there are more monitors than there have ever been out there and costs continue to go down. This is a good indication that staff is doing a good job of encouraging the downward curve in terms of costs.

Board member Cervantes noted that over the last few days there have been severe wind events in the southern part of the valley however, there seem to be a lot of things other than the Lake creating dust in the Owens Valley.

Board member Johnston said that he was ready to approve the budget and stated that it seems fair considering the situation on the Lake. He thanked the City for the work done so far and stated it is unfortunate that lawsuit activities are necessary to keep the work going by the City. He also thanked

the District staff and acknowledged that he is ready to entertain a motion.

APCO Schade responded to Mr. Adams comments regarding the Keeler Dunes and "lack of collaboration." Mr. Schade stated that it takes two to collaborate and noted there was a public meeting last January with about 40-50 people in attendance including staff from the City. The City offered no questions or comments. He then indicated that the question of whether or not the City has paid enough toward the Keeler Dunes study will be decided by the Governing Board.

Schade stated that work needs to be done at the Keeler Dunes. Associated with any work to be done involves preparation of the Environmental Impact Report/Environmental Impact Statement (EIR/EIS), regardless of who is responsible for the dust impacts. The development of the EIR/EIS sets the critical time frame for the project. Since the Keeler Dunes is on BLM property, this will be a joint CEQA/NEPA document. The BLM will be the lead from a federal standpoint. While recognizing the need to begin immediate preparation of an EIR/EIS, APCO Schade made the decision to ask the Board for the first time ever to use monies from its independent Owens Lake Trust Fund to help fund preparation of the EIR/EIS (not part of the current SB 270 Fee Assessment for FY 2011-12). APCO Schade noted however that ultimately, around the beginning of 2012, this Board is going to be asked to determine, based on evidence and reports, who if anyone is responsible for the mitigation of the Keeler Dunes. If the City is determined to be responsible, staff asks that the Board back assess them for all costs to develop the plans and environmental documents. Schade further stated that in response to the City about what has been done with the money that they have paid toward the Keeler Dunes study, a supplement has been put together with the Board Packet to show what been spent in terms of monitoring equipment, staff and consultant time and effort.

Board Chair Arcularius asked if the scope of work was shared with the City for comment.

APCO Schade responded yes, which is summarized in the Board Packet.

Dr. Holder added that staff has always provided detailed presentations and project budgets to the City over the last several years. The City has also provided input regarding monitoring sites.

APCO Schade responded that a lot of equipment has been brought to the area, experts have been consulted and staff has been monitoring and modeling the area extensively; nothing has been done behind closed doors. Staff has also put together a webpage summarizing the activities being done as well as data collected. Staff put together a summary of the Board meetings in the past where the Keeler Dunes have been discussed; there have been six meetings since March 2008. The City has either had no representative at the meeting or hasn't offered comments or questions.

Board member Hansen added that he thinks until the other property owners are at the table that using the trust fund money as well as the money that the City has contributed seems fair. Whether the City collaborated or not, they collaborated with their money.

APCO Schade added if the Board decides to not assess the City for that investigation, then in the budget discussion it will have to be decided whether or not to fund the work some other way or to not do it at all.

APCO Schade noted that on page 26 of the Board Packet, item K II, line item 18 and 19 notes the specific services in relation to the Dunes investigation.

Board member Johnston stated that he likes the suggestion by staff. He then asks if the City is 'okay' with the proposed Fee Assessment.

Mr. Adams asked if Board member Johnston is asking if the City is 'okay' with leaving the \$125,000 in the SB 270 Assessment or the whole Fee Assessment itself.

Board member Johnston answered, leaving the \$125,000 in the Assessment.

Mr. Adams stated that the City is officially requesting that the \$125,000 for the Keeler Dunes investigation be removed. It seems that the work has not changed year by year and the City just does not feel responsible.

Board Chair Arcularius asked if staff wanted to respond. She then limited response to five minutes.

APCO Schade took the opportunity to respond and said that in 2008 there was a pretty extensive public presentation which was attended by the City representatives; again, they made no comment. Mr. Adams stated that the same work seems to be assessed every year and a lot of it is the same, but it is an on-going process. In regard to the collaborative effort for the Keeler Dunes, it has been a strange relationship. The City is very closed about what they have been up to. Staff is willing to sit down with the City and any other interested parties, at any time.

Board member Johnston asked if staff thinks the \$125,000 is a fair assessment at this point.

APCO Schade said that considering the GBUAPCD is contributing \$500,000, (for the EIR/EIS), yes.

Board Chair Arcularius concluded that it would be very valuable for a future workshop at the next scheduled agenda to bring the Board up to date as to

the data available on the website. All parties interested, including the public, should be invited as well. In terms of the \$125,000, she asked if any other Board members had any comments.

Board member Cervantes said that there is a considerable amount of people who live in Keeler who utilize the Dunes to recreate. The Keeler Dunes has to be addressed because they have become a safety issue in that it cuts the visibility on US Highway 136 down to zero at times due to the dust blowing across it. He then suggested that maybe CALTRANS should participate in this workshop.

Board member Eastman then asked APCO Schade the time frame on the scientific data in regards to the CEQA and NEPA.

APCO Schade answered staff is hoping to wrap up the scientific effort by the end of this year and then in early 2012 have some sort of hearing to present it officially to decide which direction to go. The environmental work is the thing that's going to take the longest, staff is proposing to start immediately; in fact staff has already started some of the field work.

Board member Veatch noted that it seems the City's intention is that they are paying for the same thing year after year but that is a little off. Basically the monitoring is gathering information and building from it; there is not a problem with asking the City to pay this again because at the end of this upcoming budget there will be some hard information found regarding the history of the Dunes that will help the Board make a decision. The City needs to continue to pay this year especially since the District is going to put up money to bring the Dune issue to a head.

Board Chair Arcularius added it seems like this is to conclude the previous \$420,000 work; it doesn't seem feasible to stop that and delay an answer. The question that needs to remain open is that at the end of this investigation and the environmental work if there is responsibility less than what is already paid in and it needs to be addressed in a future SB 270 fee assessment. It does not matter who the entity is, nobody should have to pay for something that they are not responsible for. Whatever conclusions happen at the Dunes, there needs to be recognition that the City of Los Angeles contributed greatly to what information was generated upon which decisions will be based.

APCO Schade asked if an amendment could be made to the Board recommendation in the Board Packet. The assessment should be adopted with the stipulation that following a hearing, if the City's responsibility turns out to be less than what they have paid, that the Board consider refunding, to the City, \$125,000 from the Owens Lake Trust Fund.

Board Chair Arcularius asked if anyone else wanted to address the Board regarding this matter. Seeing none the public hearing was closed at 11:00 am.

**Motion** (Johnston) Adopting the Fiscal Year 2011-2012 SB 270 Fee Assessment Order to Pay as presented by staff.

Hearing no second the motion fails.

**Motion** (Eastman/Sweeney) Adopting the Fiscal Year 2011-2012 SB 270 Fee Assessment Order to Pay in the amount of \$4,480,000.00 which is due to the District by the close of business on July 1, 2011. The Board additionally finds that if the City of Los Angeles' financial obligation for mitigating PM10 emissions from the Keeler Dunes is found by the Board to be less than the amount paid in fees by the City of Los Angeles for work related to the emissions, the District will reimburse up to \$125,000 to the City of Los Angeles. Any such reimbursement will be made within sixty days of the determination of responsibility.

Motion carried 6/1 and so ordered.

B/O 110516-01

*(Please note that the Board Order number is out of order. This is the number reflected on the Order to Pay, written by staff, in the Board Packet.)*

Board Chair Arcularius opened the public hearing (agenda item 5b) at 11:04 am.

APCO Schade gave a brief introduction of the District budget as well as the SB 270 sub-budgets.

Board Chair Arcularius asked for any questions regarding the budgets. Hearing no questions from the Board, she then asked for public comment at 11:07 am.

No public comment was offered. The public comment period was closed at 11:07 am.

**Motion** (Eastman/Veatch) Adopting the total Great Basin Unified Air Pollution Control District budget which includes a) the proposed 2011-2012 District budget; and b) the proposed fiscal 2011-2012 SB 270 budget.

Motion carried 7/0 and so ordered.

B/O 110516-5b

Board member Johnston noted that with the economic conditions that everyone is facing, it does not make sense to include raises no matter how small. It sends the wrong message to the public when there is a significant number of people who are not making it. He added that he supports the overall budget but not that part of it.

Board Chair Arcularius responded that there is a future agenda item in regards to the raise and memorandum of understanding (MOU) between the Board and staff. She then asked if the MOU was not adopted, then what would happen to the one percent that is allocated.

APCO Schade responded that it would go into the fund balance and not reallocated anywhere else unless the Board chose to do so.

Board Chair Arcularius closed for a five minute break at 11:10 am.

The Board meeting was re-opened at 11:17 am.

**Agenda Item #6**  
Workshop to Discuss  
Projects to be Funded  
by and Administration  
of the Great  
Basin/LADWP Clean  
Air Projects Program

Board Chair Arcularius opened the workshop at 11:25 am to discuss projects to be funded by and administration of the Great Basin/LADWP Clean Air Projects Program.

APCO Schade noted that as a result of an agreement to settle an issue at Owens Lake, the City agreed to pay \$6.5M to be used in other areas of the District to address air pollution control issues outside of Owens Lake. Fifteen percent of the money will be set aside to go into the District budget to pay for project administration costs. The rest of the money will go toward projects promoting clean air. Staff needs direction from the Board in regards to project administration as well as whether or not the projects on Indian reservations would be funded since technically they are not within the District. The money will be called Excess Air Pollution Control Offsets. People in the southern valley are most affected by the emissions from Owens Lake and therefore should have preference.

Board Chair Arcularius noted that two letters have been received by the District and the Board. One from the Lone Pine Tribe and the Keeler Community Services District. She then asked members of the public to introduce their ideas and suggestions as to how the money should be spent.

The following individuals introduced ideas to the Board as well as District staff, in regards to how the offset money should be spent to reduce emissions in the District areas.

Rick Phelps, High Sierra Energy Foundation: Suggests that his organization be utilized to collaborate with multiple agencies to help administrator funds and promoting air pollution control programs throughout the valley.

John Wentworth, Mammoth Lakes Trails Public Access: Organization to

promote and develop public access trails in Mammoth Lakes.

Paula Williams, Eastern Sierra Institute for Collaborative Education:  
Promoting the support of educational programs throughout the District.

Kelly Garcia, Mono County Public Works: Promoting re-vegetation project throughout Mono County as well as to obtain a tub grinder to be used by local agencies. Also promoted government building weatherization and diesel engine emissions reduction programs.

April Zrelak, Lone Pine Paiute Shoshone Reservation: Re-iterated support for woodstove replacement program as stated in letter from Chairman Mel Joseph.

Bill Taylor, Mammoth Lakes Resident: Promoting the general development of the Clean Air Projects Program as well as the distribution to Inyo, Mono and Alpine counties.

Lisa Isaacs, Mammoth Lakes Resident: Promoting interpretive education and collaboration.

Board Chair Arcularius noted that the public comment period concluded at 11:56 am. She then invited discussion from the Board.

**Board member Ideas for the Offset Money**

Board member Johnston in support of:

- Eastern Sierra Biomass Group
- Weatherization of government buildings
- Educational programs

Board member Hansen in support of:

- Buying a sweeper for cinder management
- Development of trails
- Managing controlled burns
- Pellet buying program

Board member Cervantes in support of:

- Solar energy projects
- Changing senior center over to solar heating

Board member Eastman in support of:

- Cinder sweeper in Mammoth
- "Shovel ready" projects throughout

Board member Veatch in support of:

- Assist in effort to bring power lines to Kirkwood

Board member Sweeney in support of:

- Using the money to address the better good of everybody specifically where the dust problems are

Board Chair Arcularius in support of:

- Concentrate on areas between Olancha and Big Pine
- Projects that can be implemented in a timely manner
- Weatherization of community buildings

### **Administration of the money**

APCO Schade: utilize outside agencies, no District staff currently available.

Board Chair Arcularius: RFP not connected to any other agency receiving the funding.

### **Board Direction**

Staff to put out an RFP for the administration of the program and to agendize an action item that would be more particular to designing the program itself.

The workshop was closed at 12:24 pm.

APCO Schade briefed the Board on staff's history with Sapphos Environmental as well as the Desert Research Institute.

Board member Hansen asked if it was customary to pay per diem, lodging and meals.

APCO Schade responded, yes, especially when they have an office outside of the District.

Ms. Marie Campbell, owner Sapphos Environmental, explained to the Board that most public agencies prefer to be billed in this manner as it makes book-keeping easier. However, Sapphos does have another billing option that would not include those costs upfront. She added that Sapphos is offering to bill at the 2009 fee schedule.

Further discussion between staff and the Board continued regarding approval of the consultant contracts. It was also noted that Sapphos, in the past, has hired local members of the public and plans to do so for the current contract.

**Motion (Cervantes/Eastman) approving contracts with Sapphos Environmental and the Desert Research Institute as detailed in the Board Report, with suggested amendments, as follows:**

**Agenda Item #7**  
Approve Contracts with Sapphos Environmental and the Desert Research Institute for Environmental Impact and Scientific Analyses Associated with Preparation of an EIR/EIS for a Dust Control Project in the Keeler Dunes & Authorize Funding the Contracts with Monies from the Owens Lake Trust Fund

- 1) The Board finds that Sapphos Environmental and the Desert Research Institute have provided outstanding, long-term services to the District that are unique to the work done in the Owens Lake area and, based on reliable and above-satisfactory performance, that these consultants be determined as sole-source providers for their services.
- 2) The Board hereby awards a contract effective May 17, 2011 for preparation of the first two phase of an Environmental Impact Report/Environmental Impact Statement (EIR/EIS) for the Keeler Dunes PM10 control project, as specified in the scope of work submitted to the Board on May 16, 2011, to the Sapphos Environmental of Pasadena, California for an amount no to exceed \$338,783.00. The funds for said contract are to be paid from the Owens Lake Trust Fund. The Board understands the proposed amount for the third phase of the work is \$221,631.00 and that this work is not being contracted at this time.
- 3) The Board also awards a contract task order effective July 1, 2011 for sand dune dynamics and EIR/EIS preparation assistance, as specified in the scope of work submitted to the Board on May 16, 2011, to the Desert Research Institute of Reno, Nevada for an amount not to exceed \$25,000.00. The funds for said contract are to be paid from the Owens Lake Trust Fund.
- 4) The Board also finds that if the Los Angeles Department of Water and Power (LADWP), Bureau of Land Management (BLM) or any other entity are ultimately determined by the Governing Board to be fully or partially responsible for the PM10 emissions from the Keeler Dunes, the Board will consider recovering Trust Fund Expenses through an SB 270 assessment against the responsible entity.

Motion carried 7/0 and so ordered.

(Amended, see below)

Mr. David Edwards, Deputy City Attorney for the City, indicated that the City would like the direct reference to them be removed from the fourth finding as it is not yet clear as to who is specifically responsible. He suggested not naming any entity at this time.

**Amended Motion (Cervantes/Eastman) approving contracts with Sapphos Environmental and the Desert Research Institute as detailed in the Board Report, with suggested amendments, as follows:**

- 1) The Board finds that Sapphos Environmental and the Desert Research Institute have provided outstanding, long-term services to the District that are unique to the work done in the Owens Lake area and, based on reliable and above-satisfactory performance, that these consultants be determined as sole-source providers for their services.
- 2) The Board hereby awards a contract effective May 17, 2011 for preparation of the first two phase of an Environmental Impact Report/Environmental Impact Statement (EIR/EIS) for the Keeler Dunes PM10 control project, as specified in the scope of work submitted to the Board on May 16, 2011, to the Sapphos Environmental of Pasadena, California for an amount no to exceed \$338,783.00. The funds for said contract are to be paid from the Owens Lake Trust Fund. The Board understands the proposed amount for the third phase of the work is \$221,631.00 and that this work is not being contracted at this time.
- 3) The Board also awards a contract task order effective July 1, 2011 for sand dune dynamics and EIR/EIS preparation assistance, as specified in the scope of work submitted to the Board on May 16, 2011, to the Desert Research Institute of Reno, Nevada for an amount not to exceed \$25,000.00. The funds for said contract are to

be paid from the Owens Lake Trust Fund.

- 4) The Board also finds that if any entity is ultimately determined by the Governing Board to be fully or partially responsible for the PM10 emissions from the Keeler Dunes, the Board will consider recovering Trust Fund Expenses through an SB 270 assessment against the responsible entity.

Motion carried 7/0 and so ordered as amended.

B/O 110516-07

**Agenda Item #8**  
Consideration of a  
Proposal to Modify the  
Fiscal Services  
Specialist Position and  
Retention of Outside  
Consultant to Comply  
with Auditor  
Recommendations

APCO Schade said staff is suggesting that payroll services be contracted to an outside agency. In addition, due to the impending retirement of the current Fiscal Services Specialist (FSS), staff would like to see the creation of a new position, Fiscal Services Technician, and the elimination of the FSS. The restructuring would save the District in employee costs. The outside agency that staff has contacted to handle the District payroll is called Paychex, located in California. They will be responsible for filing state and federal tax forms, payroll and year-end reporting which includes employees W-2's.

Board member Johnston asked why staff could not use a local accounting firm so as to use public funds to stimulate local jobs.

APCO Schade responded that staff did contact a local firm and they were unable to run the payroll due to their software. Paychex was the only company who was able and willing to manipulate their software in order to get the job done.

**Motion (Veatch/Johnston) approving agenda item 8 as follows:**

- 1) Eliminating the Fiscal Services Specialist position (Grade 49) effective January 1, 2012, or upon the retirement of the existing Fiscal Services Specialist employee.
- 2) Authorizing the creation of the proposed Fiscal Services Technician position (Grade 33) and approving the job description effective June 1, 2011.
- 3) Authorizing the Air Pollution Control Officer to hire outside consultant to perform fiscal audits and reconciliations as deemed necessary; not to exceed \$5,000.00 per year

Motion carried 7/0 and so ordered.

B/O 110516-08

**Agenda Item #9**  
Consent Items

**Motion** (Eastman/Veatch) approval of consent agenda items a through g as follows:

- a. Approval of budgeted consulting and service contracts (effective July 1, 2011)
- b. Approval of offices and monitoring sites leases (effective July 1, 2011)
- c. Approval of contracts with Inyo County for legal and financial services and contract with external independent auditor (effective July 1, 2011)
- d. Approval of contract with David Gemmill of Quality Assurance Consulting, LLC, for quality assurance support services including systems audits of Coso Operating Company, Air Sciences, and LADWP; and quality assurance training for District, LADWP, and Air Sciences Monitoring Personnel
- e. Appropriation changes, carry-overs and request for end-of-year transfer authority
- f. Approve equipment loan agreement with the Keeler Community Service District for long-term loan of groundwater monitoring equipment
- g. Approval of annual Network Monitoring Plan as required by the U.S. EPA

Motion carried 7/0 and so ordered.

B/O 110516-09

Board Chair Arcularius noted that consent agenda item h would be removed for further discussion.

Board member Johnston noted that on item h he does not think it is prudent, in today's economy, to give raises.

Board Chair Arcularius agreed but noted that her opinion is not a reflection on staff but on the current times.

**Motion** (Eastman/Veatch) approving and authorizing the Board Chair to sign Memorandums of Understanding with the District's Management and Non-Management Employee Groups that provide for one percent (1%) salary increases on July 1, 2011 and July 1, 2012 with no changes to any compensation or benefits.

Motion carried 4/3 and so ordered.

B/O 110516-09h

**Agenda Item #10**  
Informational Items  
(No Action)

APCO Schade noted that the interest on the Retiree Trust fund has gone up from previous years.

Board member Johnston commented that he appreciates the work that has been put into the preparation of the Board Reports.

Board Chair Arcularius called for a break at 12:51 pm.

Board Chair resumed the meeting at 12:56 pm.

**Agenda Item #11**  
Board Member  
Reports

Board member Cervantes noted that he and Board Chair Arcularius will be attending the upcoming Master Planning meeting.

**Agenda Item #12**  
Air Pollution Control  
Officer's Report

APCO Schade said that he did not have anything to add beyond what is in the Board Packet.

Marty Adams noted that Great Basin began many years ago looking at the use of groundwater in Owens Lake as mitigation. The City is in the process of completing a comprehensive study of the feasibility of groundwater. In order to do this the City would need to use District wells. In October, Mr. Schade sent a letter to the City noting that permission to access the wells would not be given until the issues between the City and the County regarding the Water Agreement could be worked out. If the City is not able to do the test, the District really will not know if it would work. The City is asking for permission from the Board to use the wells to complete the study.

Board member Hansen asked if using strictly salt water would help with the tilling project.

Mr. Adams responded that the saltwater would help better than freshwater because it evaporates slower.

Board Chair Arcularius noted that action cannot be taken right now. She then asked if that direction came from staff or the Board. APCO Schade responded that the direction to not get involved until the issues are resolved came from the Board. When the Board gives the authority to access the wells the environmental impacts need to be determined to better inform the public and residents of Keeler.

Board Chair Arcularius added that there are two issues: testing versus using. The City seems to be saying that there could be a possibility of a working solution developed through Inyo County and the City to either have Inyo County do the test altogether or the District to not enter into the dilemma of whether or not the Water Agreement applies or not but to be able to find a working solution that at least allows for the test to determine if there is even water available. If there can be some kind of solution to do the testing to fill in that critical hole of the data, it would be something to consider.

Mr. Adams said that he would try to work with his board members to determine if something can be done to develop a solution.

Mr. VanWagoner updated the Board on the Phase 8 gravel project. A bid for a construction contract is going to go out next month. On the Phase 7a project, the contract has made it through the City Council Review period.

Either this weekend or early next week the City will be putting out an initial study to prepare for the environmental work. The State Lands Commission (SLC) has expressed concern about the gravel. Hopefully SLC can take a look at the planned test area. The Master Planning committee is looking to develop more BACM's.

Board Chair asked if staff wants to consider putting not only this BACM but BACM's overall and how to do tests quicker on a future agenda for discussion.

APCO Schade stated that he objects to Mr. VanWagoner's characterization that somehow District staff is delaying the City's tests. Schade emphasized that making something BACM is a big deal and the District needs to know that an idea will work before approval is considered. He stated that there are multiple things that the City is doing and not doing that is causing delays but that District staff is working with the City's consultants.

Paul Lamos noted that he heard somebody say that they were considering trucking off the dunes or using gravel. But if these are not going to happen, why are they being analyzed.

APCO Schade responded that trucking off the Dunes is not a project that will ever be approved.

Board Chair Arcularius recommended that APCO Schade and Mr. Lamos discuss further outside of the meeting to clarify the issues at hands.

**Agenda Item #13**  
Set Date and Location  
of Next Regular  
Meeting (July, usually  
in Alpine County)

The next regular meeting of the District Board will convene at 10:30 am on Monday, July 18, 2011 in Markleeville, California. The District's Board Clerk will find and reserve a handicap-accessible meeting room and contact District Board members as to its location.

**Adjournment**

The meeting was adjourned at 1:30 p.m. The Board will reconvene in open session at 10:30 a.m. on Monday, July 18, 2011 in Markleeville, California at a location to be determined.

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**Linda Arcularius, Chair**

**Attest:**

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Tori DeHaven, Clerk of the Board



## GREAT BASIN UNIFIED AIR POLLUTION CONTROL DISTRICT

157 Short Street, Bishop, California 93514-3537

Tel: 760-872-8211

### BOARD REPORT

**Mtg. Date:** July 18, 2011

**To:** District Governing Board

**From:** Theodore D. Schade, Air Pollution Control Officer

**Subject:** **Public Hearing** – Revision of the Managed Vegetation Best Available Control Measure description contained in the 2008 Owens Valley PM<sub>10</sub> Nonattainment Area Demonstration of Attainment State Implementation Plan

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#### Background

During the mid-1990s, the District conducted a considerable amount of research in an attempt to develop methods of establishing and maintaining vegetation as a dust control measure on Owens Lake (the District even had a staff botanist). There were two questions that need to be answered: 1) could vegetation be deployed on the large scales necessary to make it a practical control measure? and 2) how much vegetation cover was required to reduce lake bed emissions by the large amounts (99% reduction) necessary to meet the PM<sub>10</sub> standards? In July 1997, the District adopted the first Owens Lake State Implementation Plan (SIP). Based on the results of research by the District and others in the arid west, the 1997 SIP established a Best Available Control Measure (BACM) known as “Managed Vegetation” with the following performance prescription:

...the City [of Los Angeles] shall achieve coverage of at least 50 percent on each acre in substantially evenly distributed live or dead vegetation, as measured by the point-frame method. The vegetation shall consist only of locally-adapted native species or species approved by both the District and the State Lands Commission.

Therefore, in order for vegetation to be a compliant dust control measure on the Owens Lake bed, every acre has to be at least half-covered with vegetation. The vegetation can be a mix of the current year’s live (green) vegetation and previous year’s remnant dead (brown) vegetation. This same definition of Managed Vegetation was contained in the subsequent 1998 and 2003 SIPs.

In 2002, the Los Angeles Department of Water & Power (LADWP) constructed about 3.5 square miles of Managed Vegetation PM<sub>10</sub> control on the southern portion of the lake bed. The project was designed to achieve the 50 percent cover requirement. The project involved placement of over 3,500 miles of drip irrigation tubing and planting about 27 million small saltgrass plants. By 2004, vegetation was well established on the site. Although some areas met the 50 percent cover requirement, the overall cover was well below 50 percent and about two-thirds of a square mile (400

Revision of the Managed Vegetation Best Available Control Measure Description Contained in the 2008 Owens Valley PM<sub>10</sub> Nonattainment Area Demonstration of Attainment State implementation Plan

July 18, 2011 – Agenda Item No. 4 – Page 1

acres) had cover that was classified poor. These poor areas were replanted in 2004 and by 2005 vegetation cover was adequate on nearly all areas. Since 2005, focus on the site has shifted from an establishment strategy to a long-term sustainability focus. Problem areas continue to occur, but procedures are in place to promptly address them.

Although the Managed Vegetation site never met the “50 percent cover on every acre” compliance prescription, monitoring by both the District and the LADWP showed that, overall, PM<sub>10</sub> control was sufficient. In 2006, both the LADWP and the District approved the 2006 Settlement Agreement in order to resolve a number of disputes between the two parties. One of the provisions in the Settlement Agreement was that the existing Managed Vegetation site would be deemed compliant for dust control, if the site was maintained at its current cover level. In May of 2008, the District approved an operation and management plan for maintaining the Managed Vegetation site in its current non-emissive condition. However, this reduced cover condition and O&M plan only applied to the existing Managed Vegetation—any new vegetated areas would still be required to meet the prescription in the SIP and provide 50 percent cover on every acre.

In March 2010, the LADWP submitted an application (Attachment 1) to change the definition of Managed Vegetation for all areas on the lake—it was the LADWP’s desire to construct new areas that could meet the new criteria, not the 50 percent cover everywhere criteria. The 2008 SIP includes provisions for modifying BACM descriptions. On August 20, 2010, the Air Pollution Control Officer (APCO) provided the LADWP with a staff-level approval letter (Attachment 2) and committed to take the LADWP’s application to the District Governing Board for formal approval and revision of the SIP to include the new Managed Vegetation definition.

During settlement discussions with the LADWP regarding the recent Phase 7a project, the LADWP needed assurance that any new Managed Vegetation areas constructed as part of the 3.1 square-mile Phase 7a project and the associated Transition Areas could be constructed to meet the new revised performance prescription. Therefore, the March 17, 2010 Stipulated Order for Abatement includes a commitment for the District to consider revising the Managed Vegetation BACM description before July 31, 2011.

### **Proposed BACM revision**

Attached to this report (bound separately) is the LADWP’s entire Managed Vegetation BACM Proposal. The proposal includes a considerable amount of technical backup information that is not part of the BACM description, but required by the SIP for any new BACM. Although the new description is somewhat technical in nature, in short, the new Managed Vegetation BACM definition would be that any new Managed Vegetation areas shall be established to have the same vegetation cover as the existing, proven-effective Managed Vegetation area. The proposed compliance prescription requires a blend of minimum vegetation covers that mimic the cover distribution on the existing site. Although an overall average vegetation cover of 37 percent is required, the cover at any point can vary significantly from the average.

Satellite imagery and ground-truthing are used to develop a map that shows percent vegetation cover on each acre of the area. These covers are then grouped into “bins” that take into account the size of an area and the average cover over that area. For example, although the overall average must be at least 37 percent, 95 percent of any mix of 100-acre blocks must have more than 5 percent cover, 90 percent must have at least 10 percent cover and 77 percent must have at least than 20 percent cover. This distribution is calculated for all areas grouped into 100, 10, 1 and 0.1 acre blocks. The required distribution profile over the entire Managed Vegetation control is summarized in this table:

<b>Grid Scale</b>	<b>Average</b>	<b>&gt;5% cover</b>	<b>&gt;10% cover</b>	<b>&gt;20% cover</b>
(acres)	(min. cover)	(minimum % of control area)		
0.1	37	92	83	65
1	37	94	87	68
10	37	95	89	74
100	37	95	90	77

Any Managed Vegetation area that meets these minimum cover/area requirements will be deemed to be in compliance. Additional information regarding the proposed Managed Vegetation BACM description is contained in the attached materials.

The proposed SIP revision is not subject to California Environmental Quality Act (CEQA) action as it is exempt. The proposed action is not a project under the terms of CEQA—it is simply the description of a project that, if constructed, would meet the District’s definition of a sufficient PM<sub>10</sub> control measure. However, any specific Managed Vegetation projects proposed to be constructed under this BACM definition would be subject to CEQA analysis.

**Alternatives**

The March 17, 2011 Stipulated Order for Abatement requires the APCO to submit the proposed Managed Vegetation BACM revision “to the District Governing Board for approval and incorporation into the 2008 SIP prior to July 31, 2011.” This submittal fulfills that obligation. The Board can either approve the new BACM description or keep the old “50 percent cover on every acre” requirement. The existing Managed Vegetation site has successfully controlled PM<sub>10</sub> on a large scale for more than eight years. This would seem to be the rigorous proof required for a control measure to be designated a Best Available Control Measure.

**Staff Recommendation**

The APCO recommends:

1. The Board conduct the public hearing required for a SIP revision.
2. Make a finding that the proposed Managed Vegetation BACM description revision is exempt from CEQA as it is not a “project” as defined by CEQA.
3. Adopt the attached (Attachment 3) BACM description of the Managed Vegetation PM<sub>10</sub> control measure as a revision to the 2008 Owens Valley PM<sub>10</sub> SIP.

4. Direct the Board Clerk to submit the SIP revision to the California Air Resources Board for forwarding to the U.S. Environmental Protection Agency.

Attachments:

“Description of Managed Vegetation for PM<sub>10</sub>”

“Managed Vegetation BACM Proposal” dated March 2010 (bound separately)

1106161

Revision of the Managed Vegetation Best Available Control Measure Description Contained in the 2008 Owens Valley  
PM<sub>10</sub> Nonattainment Area Demonstration of Attainment State implementation Plan  
July 18, 2011 – Agenda Item No. 4 – Page 4



ANTONIO R. VILLARAIGOSA  
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BARBARA E. MOSCHOS, *Secretary*

S. DAVID FREEMAN  
*Interim General Manager*  
RAMAN RAJ  
*Chief Operating Officer*

March 22, 2010

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: Application for Change to Managed Vegetation Best Available Control Measure

Enclosed for your review and consideration is one copy of our Managed Vegetation Best Available Control Measure (BACM) Proposal that incorporates the corrections described in the Erratum submitted to you on March 1, 2010, and has been developed in keeping with provisions in the 2008 Owens Valley PM<sub>10</sub> Planning Area Demonstration of Attainment State Implementation Plan (SIP). We look forward to working with the Great Basin Unified Air Pollution Control District (District) toward approval and incorporation into the SIP.

Please contact me at (213) 367-1138, if you have any questions about this application.

Sincerely,

William T. Van Wagoner  
Manager of Owens Lake Regulatory Issues and Future Planning

WTV:jmm

Enclosure

c/enc: Mr. Mark Schaaf, Air Sciences  
Mr. John Dickey, NewFields  
Ms. Mica Heilmann, NewFields

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## GREAT BASIN UNIFIED AIR POLLUTION CONTROL DISTRICT

157 Short Street, Bishop, California 93514-3537  
Tel: 760-872-8211 E-mail: tschade@gbuapcd.org

August 20, 2010

Mr. William T. Van Wagoner, P.E.  
Los Angeles Dept. of Water & Power  
111 N. Hope Street, Room 1315  
Los Angeles, California 90012-2607

Subject: Staff approval of revision to the Managed Vegetation Best Available Control Measure (BACM) description

Dear Mr. Van Wagoner:

In a letter dated March 22, 2010 the Los Angeles Department of Water and Power (LADWP) requested that the Great Basin Unified Air Pollution Control District (District) approve a revision to the Managed Vegetation BACM description contained in the 2008 Owens Valley PM<sub>10</sub> State Implementation Plan (SIP). The proposed new description would apply the BACM description approved for only the existing 3.5 square mile Managed Vegetation area to new vegetated areas the LADWP may want to construct or convert. The existing Managed Vegetation BACM description for new or converted areas still requires 50 percent vegetative cover on every area of MV area. The new BACM description would replace that description.

Based on the eight years of successful operation of the existing 3.5 square mile site and a thorough review of the LADWP's application for a BACM revision, District staff approves the new Managed Vegetation BACM description and intends to recommend that the District Governing Board approve a SIP revision making the change. As the Board is scheduled to issue an order for the Phase 8 project after the LADWP approves the mitigated negative declaration, staff will include the Managed Vegetation BACM revision at the same time.

Sincerely,

Theodore D. Schade, P.E.  
Air Pollution Control Officer

1008201

## **APPENDIX 1.**

### **DESCRIPTION OF MANAGED VEGETATION FOR PM<sub>10</sub> CONTROL (SIP SECTION 5.3.1, PROPOSED)**

Vegetated surfaces are resistant to soil movement and thus provide protection from PM<sub>10</sub> emissions. Vegetative cover that is sufficiently dense and uniform (particularly avoiding large, contiguous expanses of barren playa) provides a very effective barrier that traps sand and sand-sized soil particles and keeps wind speeds from reaching the threshold friction velocity required to generate emissions at the playa surface. Vegetation has naturally become established where sufficient water quantity and quality is available on or near the playa surface to leach the salty playa soils and sustain plant growth. Natural saltgrass meadows around the playa margins and the scattered spring mounds found on the playa are examples of such areas (Figure 5.13). Observation of these naturally vegetated areas has shown that very little dust emissions are generated from them. The Managed Vegetation strategy is modeled on these naturally protective saltgrass vegetated areas. Dust control using Managed Vegetation is a mosaic of fields with soil conditions suitable for plant growth. These conditions may (usually are) created by minimal irrigation and, where necessary, artificial subsurface drainage. Aerial and ground-level views of existing Managed Vegetation PM<sub>10</sub> controls constructed by the City are shown in Figures 5.14, 5.15a and 5.15b.

To date, the Managed Vegetation control measure has been implemented by constructing and operating farm-like facilities to transform the naturally barren playa. The saline soil is first reclaimed with the application of relatively fresh water, and then planted with salt-tolerant plants that are native to the Owens Valley. Thereafter, soil fertility and moisture inputs are managed to encourage plant development first to rapidly achieve, and then to maintain, required levels and patterns of vegetative cover. Existing Managed Vegetation controls on the lake bed are irrigated with buried drip irrigation tubing and drained during wet weather by surface overland flow and a network of buried tile drains that capture excess water for reuse on the Managed Vegetation area or in Shallow Flooding areas.

Future Managed Vegetation facilities may also include habitat enhancement and/or recreation features unrelated to dust control, such as watering points to promote wildlife reproductive success in a manner that does not compromise components required for plant establishment and maintenance.

The root zone is the soil volume in which active rooting, and uptake of water and nutrients, occurs. Managed Vegetation is sustainable at Owens Lake only if salts present in unreclaimed lake bed soils and the naturally occurring shallow groundwater are prevented from reaching critically high concentrations in the root zone. Leaching with rainfall and irrigation water applied to Managed Vegetation serves to generally move salts down and away from the root zone of the planted vegetation. The subsurface drainage system facilitates this process, and may be essential in some areas. Water must be applied to satisfy the plants' uptake needs and the soil reclamation requirements. Excess applied water may exceed that which can practically be moved downward through the soil. When that occurs, the soil can become waterlogged, and salinity may accumulate at concentrations that can damage plants. The two main approaches to avoiding this circumstance are (a) minimizing the volume of applied water and (b) providing artificial subsurface drainage. Approach (a) involves promoting good surface drainage (to avoid surface flow of stormwater and applied water to low points within the control area) and by monitoring of site conditions and scheduling irrigation to avoid exceeding drainage capacity of the soil. Approach (b) involves constructing subsurface drainage facilities of various designs, each of which collect subsurface water into perforated pipes or gravel channels, and removal of collected water for recycling, usually with pumps.

Water is pumped from the subsurface drain system and placed into brine storage ponds where it can be recycled and used for Shallow Flooding, or mixed with fresh irrigation water for re-application to Managed Vegetation. However, depending on local site conditions and compliance requirements, alternative irrigation and drainage configurations, water supply quality, irrigation scheduling regimes, and plant communities may be employed, so long as the dust-controlling vegetative cover requirements are achieved. Drains installed near naturally occurring wetlands are operated so as not to cause significant groundwater drawdown or loss of surface water extent in the adjacent wetland

areas. Drainage systems are to be operated with the goal of not decreasing the amount and or changing the type of existing natural wetlands.

In some cases, it is possible to reduce root-zone salinity to levels that are too low. In clay dominated soils, irrigation with low-salinity or fresh water may cause soil structure to collapse, altering future water infiltration and salt leaching. The City's existing Managed Vegetation site has a target applied water salinity of approximately 9 deciSiemens per meter (a measure of electrical conductivity—seawater has a salinity of about 35 deciSiemens per meter). Needed salt is collected in drain water. Prolonged irrigation of clay soils on Owens Lake with freshwater, where attempted, has not been observed to cause dramatic immediate effects. Over time, however, there does appear to be a consolidation of very large soil prisms, limiting most water flow, aeration, and rooting to the surfaces of those prisms. Therefore, where this is considered a risk on Owens Lake, irrigation water salinity may be controlled to avoid creating this undesirable condition.

Operational experience indicates that applied water of approximately 1.2 feet per year (net of recycled drainage water) is required to maintain sufficient protective vegetative cover. A somewhat greater depth of applied water is required for land reclamation and establishment (primarily before and during the first growing season). Thereafter, the appropriate applied water depth varies widely around this average depending on local soil and drainage conditions.

At the end of 2009, the City had about 3.5 square miles of Managed Vegetation PM<sub>10</sub> controls on the lake bed. This 2009 Managed Vegetation area is in one contiguous block near the south end of the lake bed. Initial site planting occurred in the summer of 2002 and the City has worked since that time to improve and maintain vegetative cover.

Once 3.5 square miles of Managed Vegetation was established, the District and City engaged in relatively intense monitoring and analysis of control efficiency. This collaborative effort has formed the basis for refinement of the initial performance specifications for Managed Vegetation. The required control efficiency for the site has been 99%, and new performance specifications are for that level of control. However, other vegetative cover levels could be similarly determined where lower control efficiency levels are required. The refined specifications and their basis are described next.

Tests by LADWP have shown that the 3.5-square-mile site, as a whole, has achieved a high level of PM<sub>10</sub> control. Air quality modeling conducted in conjunction with the 2008 SIP revision confirmed that the site achieved its required level of PM<sub>10</sub> control. In addition, two studies were produced based on a control efficiency study on the existing Managed Vegetation facility on Owens Lake:

- Air Sciences Inc. 2006. Managed Vegetation Control Efficiency Study, Owens Dry Lake, California. Prepared for the Los Angeles Department of Water & Power, Los Angeles, California. July, 2006 (Appendix 3 of this BACM Proposal).
- Air Sciences Inc. 2007a. Demonstration of 99% Control Efficiency for the Managed Vegetation Dust Control Measure. Prepared for the Los Angeles Department of Water & Power, Los Angeles, California. June, 2007 (Appendix 4 of this BACM Proposal).

The 2006 study determined that 99% control was achieved on the existing Managed Vegetation site with between 11 and 20% vegetative cover (as measured by methods in use at the time. This is equivalent to 20 to 29% vegetative cover measured with the updated remote sensing approach).

The 2007 study verified, on the basis of the Dust ID model and sand motion data collected by the GBUAPCD and LADWP, that the entire Managed Vegetation site did not cause or contribute to an exceedance of the federal 24-hour PM<sub>10</sub> standard at the shoreline. Vegetative cover performance specifications (average vegetative cover and spatial distribution requirements) for Managed Vegetation at Owens Lake have been developed based on effectiveness monitoring results from the existing Managed Vegetation facility. An appropriate margin of safety has been incorporated into these specifications and is reinforced by selection of a 99% PM<sub>10</sub> emissions control efficiency for many areas; lower vegetative cover levels would be acceptable where lower control efficiencies are required, and where evidence indicates that the lower target vegetative cover levels could achieve that lower control efficiency.

Pursuant to the 2006 Settlement Agreement between the District and the City (Chapter 8, Attachment A, 2006 Settlement Agreement, Paragraph 6) the City prepared, and the APCO approved a Managed Vegetation Operation and Management Plan that ensured the 3.5 square-mile site continued to achieve control sufficient to prevent emissions that caused or contributed to NAAQS violations. With respect to determination of compliance, that Plan will be superseded by this BACM Proposal upon APCO approval, except where it is cited herein.

Vegetative cover requirements cannot be met until vegetation has had time to develop. Initial development may take at least two growing seasons, after which substantial control efficiency should be achieved. Resolution of site-specific drainage challenges and compliant levels of vegetative cover may require another several seasons for resolution. Vegetation of some of these areas may or may not be required for compliance, but their improvement will in any case render the facility more robust, and is therefore desirable where practicable. Some areas of the playa, however, may prove extremely hard to vegetate and must either be controlled in the context of an otherwise vegetated site, or by some other means.

Any Managed Vegetation area will be considered compliant when the vegetative cover requirements in Table 1.1 are maintained on the area by the City. Vegetative cover compliance is to be determined on a **fall satellite image of the area and ground-truthed, calibrated, and validated by reference to** measurements made by point frame or by equivalent methods (including digital point frame [measurement of vegetative cover on downward-looking, high-resolution digital images of vegetative cover taken a few meters from the land surface]). Vegetative cover provided by any locally adapted native plant species will count toward compliance in any Managed Vegetation area.

TABLE 1.1  
Managed Vegetation DCM Vegetative Cover Criteria without Adjustments Based on Absolute Fractional Bias of the Cover Measurement  
*Managed Vegetation BACM*

<b>Grid Scale</b>	<b>Average</b>	<b>&gt;5% cover</b>	<b>&gt;10% cover</b>	<b>&gt;20 % cover</b>
(acres)	(minimum % cover)	(minimum % of DCM area)		
0.1	37	92	83	65
1	37	94	87	68
10	37	95	89	74
100	37	95	90	77

<sup>a</sup>Note that in the measured reference condition, no whole, 1- to 100-acre grid cells had <5 percent vegetative cover. The associated criteria are not intended to imply or to allow whole 10-acre or 100-acre grid cells to have < 5 percent vegetative cover. Rather, they are intended to allow for smaller grid cell fragments (e.g., at the DCM’s edges) with this level of vegetative cover.

DCM areas will be subdivided by grids imposed at four scales, beginning at 0.1 acre, and increasing tenfold in area for the three subsequent grids (to 1, 10, and 100 acres). Vegetative cover distributions among these grid cells (average vegetative cover in each cell, and the distribution of those average values for each grid scale) will be characterized. Average cover thresholds in Table 1.1 will be adjusted for uncertainty of the vegetation map for that particular date, based on the vegetative cover map validation results. Adjustment of each of these thresholds will be made as follows:

$$\text{Threshold}_{adj} = \text{Threshold} * (1 - (\text{AFB} / 2.5)) \tag{1}$$

where AFB = half of the Absolute Fractional Bias (ranging from 0 to 2, with 0 indicating no error in the calibrated model prediction of vegetative cover at independent validation points), *Threshold* = any average % cover threshold from Table 1.1, and *Threshold<sub>adj</sub>* is the adjusted criterion against which an average cover measurement for the date and parameter in question would be evaluated.

Table 1.2 contains a summary of responses in the event that one or more of the following occur in a Managed Vegetation area:

- Vegetation shows signs of decline over significant areas that could result in future failures to meet vegetative cover requirements
- Vegetative cover levels are shown to be less than those required in Table 1.1

TABLE 1.2

Tabular Summary of Managed Vegetation Operation and Management

Site condition	Management requirement	Regulatory requirement	Range of site management responses
1. Vegetation and soil conditions	No 10-acre grids with predominantly orange or brown aboveground saltgrass and insignificant new growth during an entire growing season (as determined by ground observations and subsurface investigation).	See item 2.	a) Site-specific evaluation of plant health and determining factors, and surrounding conditions, b) develop and implement steps to address determining factors identified in Step a, c) if actions were required under Step b, then monitor and verify that these actions achieve their stated goals.
2. Vegetative cover	No 10-acre grids with <5% cover; 1-acre grids with <5% cover (subject to site-specific review).  Assess green cover annually during the August-September period. Identify and evaluate areas with low rates of green cover generation.	Cover levels > threshold shown in Table 1.1.  Process and results documented, and reviewed annually with GBUAPCD.	a) Site-specific evaluation of plant health and determining factors, and surrounding conditions, b) develop and implement steps to address determining factors identified in Step a, c) if actions were required under Step b, then monitor and verify that these actions achieve their stated goals.  Employ primarily as "early warning". Consider green vegetative cover in the context of total vegetative cover, in relation to the size and surroundings of the area being considered. Develop management responses to remedy low levels of green vegetative cover replacement when and where this evaluation indicates that such action is needed.

The following portions of the areas designated for control with Managed Vegetation are exempted from the vegetative cover requirements:

1. portions of the site that are consistently inundated with water, such as reservoirs, ponds and canals,
2. roadways and equipment pads necessary to access, operate and maintain the control measure which are otherwise controlled and maintained to render them substantially non-emissive, and
3. portions of the site that are used as floodwater diversion channels or desilting/retention basins.

"Substantially non-emissive" shall be defined to mean that the surface is protected with gravel, durable pavement or other APCO-approved surface protections sufficient to meet the requirements of District Rules 400 and 401 (visible emissions and fugitive dust).



## GREAT BASIN UNIFIED AIR POLLUTION CONTROL DISTRICT

157 Short Street, Bishop, California 93514-3537

Tel: 760-872-8211

### BOARD REPORT

**Mtg. Date:** July 18, 2011

**To:** District Governing Board

**From:** Theodore D. Schade, Air Pollution Control Officer

**Subject:** Continued discussion and possible action regarding projects to be funded by the Great Basin/LADWP Clean Air Projects Program (CAPP)

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#### Background

On March 17, 2011, the District and the Los Angeles Department of Water and Power (LADWP) entered into a Stipulated Order for Abatement (SOA) regarding the completion of additional dust control measures at Owens Lake. One of the provisions of the SOA was that the LADWP would help offset excess air pollution caused by the delay of dust controls on the lake bed by paying the District \$6.5 million for local projects that controlled air pollution that otherwise would not be controlled. On May 17, 2011, the District Board held a workshop to discuss possible projects to be funded with the offset money. Members of the Governing Board and the public expressed their views on the type of projects that could be funded. Administration of the program was discussed and Board consensus was that the District would hire an outside administrator to manage the program. Another item of discussion was whether the program should be extended to the Indian Reservations in Alpine, Mono and Inyo Counties, which are not part of or under the jurisdiction of the District. Board consensus was that local Reservations could participate in the program if they entered into individual agreements with the District to assure appropriate enforcement, oversight and audit of the program.

#### Discussion

On June 16, 2011, the District received a check for \$6,500,000 from the LADWP. A special fund was set up for this money and the program was named the "Clean Air Projects Program" or "CAPP." On July 8, 2011, District staff sent out a request for proposals for a CAPP administrator. Proposals will be due at the end of July and staff will present a recommended administrator and contract to the Board at the September meeting.

In the meantime, staff has heard from a number of members from our communities regarding the type of projects that could be funded. The most promising ideas, from staff's point of view are presented below for further Board discussion and possible action.

Continued Discussion and Possible Action Regarding Projects to be Funded by the  
Great Basin/LADWP Clean air Projects Program  
July 18, 2011 – Agenda Item No. 5 – Page 1

### Home weatherization and woodstove replacement

A repeated theme at the Board's workshop on May 17 was that of "leverage." The Board encouraged staff to look for existing programs and opportunities where the CAPP money could be used to augment other successful efforts. The most obvious candidate in this regard is Inyo Mono Advocates for Community Action (IMACA). IMACA has been helping people in need in Inyo and Mono Counties for many years. One of their many successful efforts is a home weatherization program. Prior to the current fiscal year, funding has totaled a couple of million dollars, mainly from state and federal Departments of Energy. However, in the current fiscal year alone, IMACA has almost one million dollars (\$951,000) for home weatherization's. Much of this funding comes from the federal stimulus (American Recover and Reinvestment Act - ARRA) program. IMACA employs 8.5 people specifically dedicated to the program.

Home weatherization reduces air pollution, especially in homes that heat with wood. If the replacement of non-certified woodstoves took place in conjunction with weatherization efforts, there would be a "double whammy" decrease in air pollution emissions—the direct decrease in local air pollution emissions associated with less wood being burned and the indirect decrease in regional air pollution associated with more efficient homes. IMACA's program is already in place in both Inyo and Mono Counties—IMACA is confident it could be expanded to Alpine County as well. Their program creates a significant number of local jobs; cost control and audit provisions are already in place through the state and federal agencies that fund current efforts; and, CAPP funds could be immediately put to work (leveraged) with existing funding.

Staff recommends the Board discuss this opportunity and consider an agreement with IMACA to supplement and expand their current program.

### Keeler Transfer Station access road

The SOA with the DWP states that projects in the southern Owens Valley (between Tinnemaha and Haiwee Reservoirs) be given preference for CAPP funding. This is due to the fact that Owens Lake air pollution emissions impact the residents in this area more than any other. In May, the District received a proposal from the residents of Keeler to improve the drainage and driving surface of about 0.4 mile of unpaved county road from the edge of Keeler north to the County Transfer Station. This road is used by all Keeler residents to haul trash to the transfer station. Because of silt accumulation caused by inadequate drainage and the dust emissions associated with frequent trips on the roads unpaved surface, the residents of north Keeler are regularly impacted by the dust from this road. The Keelerites contacted Inyo County, but lack of funding puts this project low on the County's priority list.

However, as indicated in the attached e-mail from Keelerite, John Dukes, Bob Brown of the Inyo County road department recommends that Inyo County forces could perform the drainage and paving work necessary to improve the road, if Keeler (and its partners) provided the materials. The approximate cost of the materials is \$80,000. Again, this is an excellent opportunity to leverage the CAPP funds by having Inyo County forces do the work.

### Other promising projects

Other promising projects include a mobile tub grinder for Mono County and new street sweepers for CalTrans and/or Mammoth Lakes. Tub grinders are used to mulch woody material that would otherwise be either burned or buried in landfills. The air pollution reduction would occur by not burning the wood and making the mulch available for private and public uses. The County wins by keeping the material out of the landfills and the District wins by not burning the material.

Local CalTrans Director, Tom Hallenbeck, has requested the District consider funding new street sweepers. CalTrans' sweepers are at the end of their useful life and spend much time in for repair when they should be out sweeping cinders of the roads. Funding could be contingent on CalTrans committing to a more aggressive schedule of sweeping Main Street in Mammoth (State Hwy. 203) to remove cinders after snow storms. Cinders ground to dust by vehicles on dry roads are one of the biggest sources of PM<sub>10</sub> air pollution in Mammoth Lakes.

Additional project ideas will be solicited from the public after the CAPP administrator is hired in September.

### **Staff Recommendation**

Staff recommends the Board continue to discuss the CAPP program. If it so desires, it could immediately go ahead with the IMACA weatherization/woodstove program and/or the Keeler Transfer Station road project. Both projects would require agreements with the project proponents (IMACA and Inyo County) that could be developed over the next few months and presented to the Board for final approval in September. Staff recommends that the Board conceptually approve an \$80,000 grant to Inyo County for the road project and a substantial amount (\$500,000 to \$1,000,000) to IMACA for the weatherization /woodstove program. Details of both programs would be developed and presented to the Board with the contracts in September.

### Attachments:

May 11, 2011 e-mail from John Dukes regarding Keeler Transfer Station road improvement project

1107051

## Ted Schade

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**From:** John Dukes <data05@solutionsunlimited.com>  
**Sent:** Wednesday, May 11, 2011 8:05 AM  
**To:** tschade@gbuapcd.org  
**Cc:** Jim Macey; Larry Patrich; Robert Strub; Glenn Young; Julie Robinson; Bob Brown (Inyo Co); John F. Bowden; Dan Dickman; Ann Bramhall; Myrna Tew  
**Subject:** Repair of Old State Highway, Keeler CA

To:

Theodore D. Schade, Air Pollution Control Officer  
GREAT BASIN UNIFIED AIR POLLUTION CONTROL DISTRICT  
157 Short Street, Bishop, California 93514  
(760) 872-8211 E-mail: [tschade@gbuapcd.org](mailto:tschade@gbuapcd.org)

With respect to:

Item 6: "Workshop to discuss projects to be funded by and administration of the Great Basin/LADWP Clean Air Projects Program" of the GOVERNING BOARD REGULAR MEETING AGENDA. MONDAY, MAY 16, 2011 AT 10:00 AM, Mono County Supervisors Chamber, Mono County Courthouse (2nd Floor), Main Street (U.S. Highway 395), Bridgeport, California

Dear Sirs,

As a Keeler Community Service District (KCS D) director I sought endorsement by the board, on 10th May, to apply for funding (from GBUAPCD) to improve the section of Old State Hwy, from approximately its intersection with Lincoln Street to the Inyo County Transfer Station.

During discourse at that meeting I was reminded that KCS D is involved only in the providing water, not paving roads and further, asking for endorsement would be a conflict of interest. However there was agreement that there were no objections from the people in the room, some eight, who reside in Keeler. Some even had a positive opinion, wished to support the concept, would perhaps email later, as appropriate, their opinion of this request.

Details of funding:

See page 70 of

[http://www.gbuapcd.org/boardmeetings/2011/May16/2011.05\\_16\\_BrdPackt\\_Email.pdf](http://www.gbuapcd.org/boardmeetings/2011/May16/2011.05_16_BrdPackt_Email.pdf)

"District staff will solicit ideas and direction from the Board and the public regarding the type of projects that should be funded with the offset monies. The Board will be asked to provide direction as to program scope and administration. After receiving direction, District staff will return to the Board in July or September for approval to begin implementing specific projects. Staff anticipates that projects will start this fall."

"The order requires 85 percent of the payment (\$5,525,000) to be used "for Clean Air Projects within the District (Inyo, Mono and Alpine Counties) with preference given to projects in the Owens Valley PM10 Planning"

Background:

- \* Of all sections of Old State Highway, this particular section is in constant use; Each household visits the Transfer station at least 2 times each week.
- \* Large refuse removal vehicles pound the potholes, raising dust along this roadbed at least 4 times each week.
- \* GBUAPCD use this roadway to collect data from nearby parts of the lake, augmenting the Owens Lake Master Plan (OLMP).
- \* The section has been flooded several times in the last few years, creating a lake that, at one point was within inches of flooding a recently built home.
- \* Keeler needs clear access to shut-off valves and fire hydrants in this area, dust and sediment layers left after storms cause difficulties.
- \* Each time any vehicle passes through this area, there is excessive dust created from the fine sands that settle after any rain, causing air pollution.

\* OLMP identifies Old State Highway, in Keeler and near Swansea as points for open access to the lake's habitat viewing, adding potential traffic and therefore dust and degradation of the this section of the Old State Highway.

Proposal:

In conjunction with Inyo County planning this is the proposed 2 part project to improve this section of Old State Highway -:

1) Drainage; To remove the puddling that is usual after a storm, puddling that in turn leaves silt along the length of the roadway. This would be a one or two drainage ditches with some rip-rap on the sides and base immediately to the NW of the the town limits and again some distance further N. Both ditches would be graded towards the lakebed, W.

It is believed that this is LADWP's property and as yet they have not been officially contacted, but I see no reason for their objection.

2) Road bed improvement.

From: Bob Brown <[bbrown@inyocounty.us](mailto:bbrown@inyocounty.us)> Friday, May 06, 2011 10:08 AM

"This is a 2.5 inch overlay of asphalt and would be the preferred method for this roadway. According to my calculations, it would take approximately 550 tons of Asphalt to pave this portion (2112 feet long x 16 feet wide) of Old State Highway. Current prices for asphalt are about \$90 per ton. So, cost of material would be just under \$50,000.

.....

My recommendation to the Public Works Director would be to have County forces perform the work and have your group and it's partners provide the materials.

.....

I will need to get the Public Works Director to give me the go ahead. In the past, we have been able to partner with different entities on similar types of projects and so I feel confident that this can be done but I do need to speak with Mr. Wilson first"

Funding requirements (approximate):

1) Drainage estimate \$30,000

2) Roadbed improvement \$50,000

Should your review of this application for funding (grant) require additional information please contact me.

Yours sincerely

John Dukes,  
440 Old State Hwy,  
PO Box 221,  
Keeler CA 93530-0221  
Note: Updated e-mail address  
[Data05@SolutionsUnlimited.Com](mailto:Data05@SolutionsUnlimited.Com)  
1(760)876-9258 Keeler  
or 1(760)375-8281 Ridgecrest



## GREAT BASIN UNIFIED AIR POLLUTION CONTROL DISTRICT

157 Short Street, Bishop, California 93514-3537

Tel: 760-872-8211 Fax: 760-872-6109

### BOARD REPORT

**Mtg. Date:** July 18, 2011

**Date Prepared:** July 5, 2011

**To:** District Governing Board

**From:** Chris Lanane, Air Monitoring Specialist

**Subject:** Annual Sole-Source Determinations

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#### Summary

Section 3.3 of the District's Purchasing, Bidding and Contracting Policy (Rule 1101) provides that "due to availability, experience or overall cost (including operating and maintenance costs), certain materials, equipment, consultant services or public construction services ... may be purchased without first conducting a formal or informal bid procedure...." The elimination of the bidding procedure can take place only after the District Board or, in some cases, the Air Pollution Control Officer makes a "sole-source determination" that the equipment or services are practically available from only one source. In the long term, this provision can save considerable money by providing consistent brands of equipment or types of services.

A discussion of all our sole-source justifications follows. Staff believes that it is appropriate for the District to review the sole-source determinations each year. Staff requests that the Board make these sole-source determinations at this time. This list is intended as a complete list of sole-source determinations; these determinations replace all previous determinations.

#### MATERIALS AND EQUIPMENT

**AlumaTower Inc. for meteorological towers** – The District currently has about 20 meteorological monitoring towers throughout its network. All of these towers were manufactured by AlumaTower, Inc. The towers have been trouble-free and have been part of the system that enables the District to gather high-quality defensible meteorological data. The AlumaTower systems are relatively inexpensive, easy to operate, and are problem-free. Having an installed base of these systems also reduces the need for the District to have spare parts available for different systems from different manufacturers, reducing the overall cost of the network. District staff recommends that the Board consider AlumaTower, Inc. as a sole-source provider of meteorological tower systems for the District.

**American Honda Motor Company for all-terrain vehicles** – Since the mid-1980s the District has used Honda FourTrax all-terrain vehicles (ATVs) to work on Owens Lake. We currently have a fleet of eight Honda ATVs. We believe that the Hondas are the only ATVs designed for the rugged conditions we encounter at Owens Lake. They are 4-wheel drive, all the brakes are sealed, we have a

Consideration of Annual Sole Source Determinations for Equipment and Professional Services

July 18, 2011 – Agenda Item 6a – Page 1

good inventory of maintenance parts, the parts are readily available from local dealers and our staff has experience servicing the vehicles. It is important that when employees are working alone on remote and poorly accessible areas of Owens Lake they have a vehicle that they can count on. District staff recommends that the Board consider American Honda Motor Company as a sole-source provider of ATVs for the District.

**Campbell Scientific, Inc. for data-loggers and radio telemetry equipment** – The District uses electronic devices called “data-loggers” to store the wide variety of meteorological and air quality data that we collect at Owens and Mono Lakes. Based on our experience with these types of devices, we have found that the “Campbell” brand of data-logger is the only one capable of standing up to the extreme conditions found on Owens Lake. The District has used Campbell Scientific data-logging equipment for collecting data throughout the District for many years. We currently operate well over 230 Campbell data-loggers. This means our technicians have become very adept at servicing and operating these instruments and we have needed to build a comprehensive inventory of only Campbell repair parts. In addition to the data-loggers, the District uses the compatible Campbell radio telemetry equipment that allows the data collected to be transmitted via radio frequency to our Keeler field office. This allows staff to download data without having to visit the often difficult-to-access sites. Based on its reliability record and to maintain consistency in the type of equipment used by the District, staff requests that the Board consider Campbell Scientific as the sole source provider of data-logger and radio telemetry equipment.

**Campbell Scientific, Inc./R.M. Young Co./NRG Systems for meteorological monitoring equipment** – In 1994, the District completely overhauled all of the meteorological monitoring stations in the monitoring networks, changing to R. M. Young and NRG Systems equipment. After careful research it was determined that R.M. Young and NRG Systems equipment would be more cost-effective due primarily to the reduced maintenance frequency associated with the equipment. This equipment can be purchased either from R.M. Young, NRG Systems or from Campbell Scientific, the District’s data logger provider. Occasionally, due to inventory considerations, the equipment may be less expensive at Campbell, and therefore, the District would like the flexibility to purchase the equipment from any of the three vendors. The District staff requests the Board consider Campbell Scientific, NRG Systems and R.M. Young Co., as the sole-source providers of our meteorological equipment.

**Dell Computer, Inc. for personal computers (PCs)** – As with most government agencies and businesses today, the District is heavily reliant on PCs for nearly all the work we do. In the late 1980s, the District began buying Dell Computer PCs. They are consistently rated as the most reliable PCs and we have had very good experience with them. Our computer repair technicians understand how to repair them and have developed relationships with Dell’s sales and service staff. Therefore, for the sake of maintaining consistent equipment and due to their reliability, staff requests that the Board consider Dell Computer as the sole source provider of PCs for the District.

**EKTO Manufacturing for monitoring shelters** –The District has eleven (11) EKTO walk-in shelters in our monitoring network. EKTO is the only shelter manufacturer that wraps the shelter with metal on all six sides. Other materials allow rodents to get into the shelter and, with the potential threat of hantavirus throughout the District, could put employees at risk. A specially designed trailer was purchased with the Dirty Socks shelter in 2003 that allows staff to easily tow any EKTO shelter

from place to place with District vehicles. This trailer is configured to fit only EKTO shelters. In light of the fact the shelters can be easily moved from place to place and the aforementioned feature of the shelters being entirely sheathed in metal, it is the staff's recommendation that the Board make EKTO Manufacturing the sole-source provider of monitoring shelters for the District.

**Thermo Fisher Scientific (formerly Rupprecht & Patashnick, Inc.) for Tapered Element Oscillating Microbalance (TEOM) PM monitors** – The Thermo (Rupprecht & Patashnick) TEOM PM monitors have been used in the District since 1992. The TEOM PM<sub>10</sub> monitor is an approved EPA equivalent method monitor for PM<sub>10</sub>. The TEOM PM<sub>2.5</sub> monitor with the accompanying filter dynamics measurement system (FDMS) is an EPA-approved equivalent method monitor for PM<sub>2.5</sub>. The TEOMs have proven to be reliable continuous monitors and have minimal maintenance requirements. These monitors provide a continuous measurement of PM and have been utilized effectively in the District's particulate health alert system. The TEOMs have also proven to be an invaluable resource in measuring dust episodes near Owens Lake especially for the dust source identification program. The only producer of TEOM monitors is Thermo Fisher Scientific. District staff requests that the Board consider Thermo Fisher Scientific as a sole-source provider of TEOM monitors.

**Thermo Fisher Scientific (formerly Rupprecht & Patashnick, Inc.) for Partisol PM monitors** - The Partisol is a filter-based sampler for particulate matter. The District currently has six Partisol samplers currently in operation. These samplers have been reliable and have required minimal maintenance. Rupprecht & Patashnick, Inc. had the foresight to have the Partisol approved as an EPA reference method monitor for both PM<sub>10</sub> and PM<sub>2.5</sub>, thereby allowing the District to monitor for either particle-size cut with the same monitor resulting in a significant cost savings. The District has not found any other filter-based samplers that require as little maintenance as the Partisols or are as reliable as the Partisols. District staff requests that the Board consider Thermo Fisher Scientific (formerly Rupprecht & Patashnick, Inc.), as a sole-source provider of filter-based PM monitors for the District.

**Thermo Fisher Scientific for Pollutant Gas Analyzers** - Staff has conducted research on the monitoring systems available and has concluded that Thermo Fisher has produced the most robust and reliable equipment for gaseous pollutant monitoring. Of the three manufacturers that make EPA-approved gaseous pollutant monitors, Thermo, API, and EcoTech, only one, Thermo, has produced analyzers that utilize similar parts across the analyzer line such that only one spare power supply, pump, etc. needs to be procured because the parts fit all of the different analyzers. Staff has had experience operating Thermo and API instruments. The Thermo instruments are very reliable and are easy to repair. The API instruments are finicky and require a lot of labor and spare parts to keep them operating. The EcoTech instruments are made in Australia, are more expensive than the others, and have a limited track record in the United States. Based on this information, staff recommends the Board designate Thermo Fisher a sole-source provider of pollutant gas analyzers and associated equipment.

**Carmanah Technologies Corporation (formerly SPS Energy Solutions) for solar power equipment** – The District has a long history (approximately 16 years) of working with what is now Carmanah Technologies Corp., (formerly SPS Energy Solutions) and purchasing their solar power generation equipment products. Their engineers have been very helpful in designing systems for use

in various projects on Owens Lake, in the Coso monitoring network when it was operated by the District, and most recently on Mono Lake. These types of solar power systems are often complex and require an experienced vendor to make them work well and with a minimum of maintenance. The District has found the equipment supplied by Carmanah in the past to be reliable, easy to work with, and always very competitively priced. The customer service and design service Carmanah has provided the District in the past has been exemplary. Staff recommends Carmanah Technologies Corporation be determined to be a sole-source provider of solar power systems and solar power components for the District.

**Trango Systems, Inc. and Rock House Products Intl. for wireless video transmission equipment**

– Trango Systems, Inc. is the only manufacturer of the 5.8GHz unlicensed video system that the District has been using since 2000 to transmit wireless video from the District’s remote video sites above Owens Lake to the District office in Keeler. Rock House Products International, Inc. is the wholesale and commercial distributor for Trango products in the U.S. and Canada. All other distributors purchase the systems through Rock House. This is the only system on the market and parts procured in the future must match our existing equipment. District staff recommends that the Board consider Trango Systems, Inc., and Rock House Products International, Inc. as sole-Source providers of Trango Systems wireless video surveillance systems for the District.

**Feeney Wireless** - Feeney Wireless is an authorized distributor of AirLink cellular modems and associated telecommunications equipment. The District currently has an installed base of ten AirLink modems with plans to install them at more District stations. The District has purchased several complete cellular modem systems from Feeney under the informal bidding procedure and they have always been the low bidder. Feeney has experienced technical support personnel that are always available to provide input for the installation and operation of the cellular modem systems. Having similar systems at all District monitoring stations minimizes parts inventories, labor, and equipment costs. Staff recommends the Board determine Feeney Wireless to be a sole-source provider of cellular modems and associated telecommunications equipment for the District.

**PROFESSIONAL SERVICES**

**Apex Solar for solar power system design, installation, and maintenance services** - Apex Solar was subcontracted by Carmanah Technologies as the installation contractor for the Mono Shore monitoring system upgrade. They did excellent work, were very reasonable in their costs and have a long history of designing and installing solar power systems, both residential and commercial. Carmanah Technologies has moved out of the engineering and design business to focus on providing products. The Apex personnel are already familiar with the system that they installed at Mono Lake and so are familiar with the conditions under which the equipment is operated by the District. Their work on Mono Lake was exemplary. Complex systems such as the one installed at Mono Lake require regular maintenance by experienced professionals, such as those at Apex Solar, to ensure the equipment remains fully operational. Staff recommends Apex Solar by named the sole-source provider of solar power system design, installation, and maintenance services for the District.

**Desert Research Institute for water chemistry analysis** – The District has used the Water Resources Laboratory at the Desert Research Institute (DRI) for spring water and groundwater analyses since 1991. We request that the Board continue making the Water Resources Laboratory at the Desert Research Institute a sole source for analysis of deep groundwater from Owens Lake for the

following reasons:

1. The District has a valuable working relationship with DRI and has developed a high level of satisfaction with the water lab at DRI in terms of Quality Assurance/Quality Control procedures, the instrumentation used, the quality of the analyses and the turn-around time required to complete the analyses.
2. All of the District's data on water chemistry of the deep groundwater has been conducted by DRI. Therefore, to keep the continuity and consistency in the data, it is important to continue to use DRI for additional water analyses.
3. Analysis of the chemistry of highly saline waters can be difficult due to the unique chemistry. Some of the analysis methods used by DRI are specially tailored to dealing with the unique Owens Lake waters. Over the years, DRI has developed extensive experience in analyzing the highly variable and saline waters of Owens Lake. This experience allows the lab to more efficiently and quickly analyze for the parameters requested.

**Fiscal Impact:**

None. Each of the sole-source providers is either the only source for the product or service, or there are other compensating factors that make the sole-source provider the most economical source, when all costs are taken into consideration. These compensating factors could include a history of proven reliability, staff training and familiarity with the product, existing stockpiles of replacement parts and a need for continuity and consistency in the data provided.

**Board Action:**

Staff recommends that the Board make the following sole-source determinations as provided for in Section 3.3 of Rule 1101 (District Purchasing, Bidding and Contracting Policy):

- AlumaTower Inc. for meteorological towers
- American Honda Motor Company for all-terrain vehicles
- Campbell Scientific, Inc. for data loggers
- Campbell Scientific, Inc./R. M. Young Co./NRG Systems for meteorological equipment
- Dell Computer, Inc. for personal computers
- EKTO Manufacturing for monitoring shelters
- Thermo Fisher Scientific for TEOM and Partisol PM monitors and gaseous pollutant monitors
- Carmanah Technologies Corporation for solar power equipment
- Apex Solar for solar power design, installation, and maintenance services
- The Sensit Company for electronic sand motion devices
- Trango Systems, Inc. and Rock House Products Intl. for wireless video systems
- Desert Research Institute for water chemistry analysis



## GREAT BASIN UNIFIED AIR POLLUTION CONTROL DISTRICT

157 Short Street, Bishop, California 93514-3537

Tel: 760-872-8211 Fax: 760-872-6109

[www.gbuapcd.org](http://www.gbuapcd.org)

### BOARD REPORT

**Mtg. Date:** July 18, 2011

**Date Prepared:** June 30, 2011

**To:** District Governing Board

**From:** Shirley Ono, Administrative Projects Manager

**Subject:** Contracts Less than \$10,000 or Otherwise Within the APCO's Authority

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The District's purchasing, bidding and contracting policy allows the Air Pollution Control Officer (APCO) to execute leases, contracts and purchase orders for consultant and contractor services when the value is less than or equal to \$10,000. The APCO can also execute contract change orders when the value of the change order is equal or less than 10% of the contract price or \$25,000, whichever is less. The policy requires the APCO to inform the Board of all such contracts or leases at the Board's next meeting.

Since the Board's last regular meeting, the APCO has executed the following leases, consultant and contractor contracts or contract amendments:

Contract with David Gemmill, Quality Assurance Consulting, LLC. The APCO executed a contract on June 15, 2011 with David Gemmill, Quality Assurance Consulting, LLC for an amount not to exceed \$9,000. The contract is for a technical systems audit of the Coso Operating Company's (Coso) ambient air monitoring program. Coso paid \$8,060 towards the cost of Mr. Gemmill's services as part of an agreement regarding a Notice of Violation (No. 456). Coso also agreed to discuss program improvements following recommendations resulting from the audit.

#### **Fiscal Impact**

District Budget - \$8,060 from funds received from Coso Operating Company. Balance up to \$940 from funds allocated to Professional Services. .

**BOARD ACTION** - Information only.



## **GREAT BASIN UNIFIED AIR POLLUTION CONTROL DISTRICT**

157 Short Street, Bishop, California 93514-3537

Tel: 760-872-8211 Fax: 760-872-6109

### **BOARD REPORT**

**Mtg. Date:** July 18, 2011

**To:** District Governing Board

**From:** Tori DeHaven, Board Clerk

**Subject:** Travel Report

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#### **Summary –**

Chris Howard July 10 – 14 Geographic Information Systems Conference San Diego, CA

#### **BOARD ACTION**

Information only.



## GREAT BASIN UNIFIED AIR POLLUTION CONTROL DISTRICT

157 Short Street, Bishop, California 93514-3537

Tel: 760-872-8211

### BOARD REPORT

**Mtg. Date:** July 18, 2011

**To:** District Governing Board

**From:** Theodore D. Schade, Air Pollution Control Officer

**Subject:** Air Pollution Control Officer's Update

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**a. Owens Lake update**

Work is progressing on many other fronts at Owens Lake. A few of the more important issues are addressed below.

*Owens Lake Master Plan* – A wide range of interested parties continue to meet regularly to develop the Owens Lake Master Plan. An all-day meeting was held on May 18; however, there was no meeting in June. This is an effort led by the LADWP with the assistance of an excellent mediator, Gina Bartlett, to develop a long-term plan for the future of Owens Lake. The project schedule calls for releasing a draft Master Plan this summer. The California State Lands Commission will then prepare an Environmental Impact Report on the Plan with hopes of approving the final plan by mid-2012. In addition to the overriding goal of providing dust control, the Master Plan will address wildlife habitat improvements, water conservation, cultural resources protection, public access and recreation, economic development, and renewable energy.

*Dust Control Measure Testing* – The Abatement Order adopted by the Board on March 17 allows the LADWP to conduct PM<sub>10</sub> control measure testing on a one-third square mile area in the southern portion of the lake bed. This Area is known as T12-1. The LADWP intends to conduct a three-year test of tilling on the site. The intent of the proposed measure would be to till clay soils into non-emissive clods and monitor their condition. The soil would be re-wet and re-tilled when the clods start to break down. This measure could provide sufficient dust control while using very little water. The District has approved the monitoring plan for the project. We are waiting for the LADWP to get started with their test.

Although the District has provided numerous other opportunities for the LADWP to conduct additional testing of new measures and refinement of existing measures through provisions in the 2006 Settlement Agreement and the 2008 SIP, the LADWP has yet to take advantage of these cost- and water-saving opportunities.

*Phase 8 Dust Control Project* – In December 2010, the District Board ordered the LADWP to implement controls on a 2 square-mile (1,300 acre) area in the northwest corner of the lake bed. The LADWP agreed to proceed with this project in September 2009 as part of a variance that provided the LADWP with additional time to implement required dust controls. The project is known as the “Phase 8” project and will consist solely of a gravel blanket covering this emissive portion of the lake bed. Almost one million tons of gravel will be hauled in 40,000 truck trips over 18 months and spread across the lake bed. The work is scheduled to start this summer or fall. The District requires the project to be completed in November 2012.

*Channel Area Dust Controls*

The 2006 Settlement Agreement between the District and the LADWP, as well as the District’s approved 2008 Owens Lake State Implementation Plan (2008 SIP), requires the LADWP to construct dust controls on a 0.51 square-mile (326 acre) area of the lake bed along the route Cartago Creek takes as it flows toward the lake’s brine pool. This area of the lake bed is known as the “Channel Area.” Because the emissive Channel Area is also an intermittent creek channel, the 2008 SIP allows the LADWP to develop and implement alternative dust control measures, if traditional approved controls are not allowed by the California State Lands Commission or the California Department of Fish and Game.

The District and the LADWP are working on a project to use temporary, above-ground sprinklers to wet the emissive surfaces and ultimately establish vegetation to control dust emissions. This would serve the dual purpose of controlling dust while enhancing the otherwise barren habitat in this area. The work should start this fall and be complete by December 1.

*Phase 9 Dust Control Project Order*

The 2003 and 2008 SIPs require the District to continue to monitor the amount and location of dust emissions from the Owens Lake bed and the APCO is required to issue orders to the LADWP to control all additional areas that cause or contribute to violations of air quality standards. The 2008 SIP provided for a pause in these “Supplemental Control Determinations” between 2006 and 2010 to allow the LADWP to complete the controls ordered in 2008 and determine if any additional areas required controls. As the District resumes the determinations, it must use the data collected between July 1, 2006 and June 30, 2010. The data is collected and analyzed according to a complex modeling protocol included in the 2008 SIP known as the “Dust ID Program.”

Staff finalized the analysis of four years of data and issued a preliminary determination to the LADWP on April 7, 2011. The preliminary determination requires 2.93 additional square miles to be controlled. This will bring the total dust control area on Owens Lake to 47.96 square miles (30,700 acres). The LADWP had 60 days to review and respond to the preliminary determination. The response was submitted on June 3. The APCO has until August 2 to review the LADWP’s response and issue the final determination. District staff has been very busy with the review and additional analyses necessary to respond to the issues raised by the LADWP. This phase of dust control will be known as “Phase 9.”

### Keeler Dunes dust controls

The District continues to investigate the nature of the dust emissions from the Keeler Dunes. PM<sub>10</sub> emissions solely from the dunes cause an average of six violations of the federal PM<sub>10</sub> standard in Keeler every year. This air pollution will continue to threaten the health and safety of the residents and employees of Keeler until controls are deployed in the dunes. In May, the Board approved a contract with Sapphos Environmental for preparation of an EIR/EIS for the Keeler Dunes project. The document is well under way. District and Sapphos staffs met with the BLM on June 29 to discuss the project. The District will be holding a public meeting in Keeler on August to discuss the work completed to date and solicit ideas as to how dust emissions could be controlled while preserving the other resources associated with the area.

### **b. Air monitoring update (by Chris Lanane)**

The following information highlights the monitoring program activities in which District staff has been involved since the March 17, 2011 Board meeting.

#### Owens Lake

All twelve (12) of the District's fixed and two (2) of the portable air quality monitoring stations (Portables 2 and 3) in the Owens Lake network (Figure 1) are operating within regulatory requirements. The Portable 2 station had been down for one month due to a failed generator. A new generator was ordered installed in Portable 2 in late April 2011. The old generator was rebuilt under contract with a shop in Ridgecrest. Plans are to rebuild the generators after every 2000 hours of use on a rotating basis. This procedure will ensure that the District always has two portable monitors operational.

The Flat Rock site particulate monitoring system, a PM<sub>10</sub> TEOM, was shut down and moved to the Mill Site monitoring station during the last week of April 2011 (official start date, May 5, 2011). Millsite is on the east shore of the lake bed, about two miles south of Keeler. A meteorological monitoring tower and camera are still in operation at the Flat Rock station. Data from all of the stations can be viewed on the District's website. ([www.gbuapcd.org/data](http://www.gbuapcd.org/data))

There have been power outage issues (a few hours on May 15, 28, 29, 2011) at the Shell Cut site that have resulted in some data losses at that station. One of the Portable PM<sub>10</sub> monitors has been installed at the Shell Cut station while repairs are made to the onsite TEOM.

The local dust source issues at the Coso monitoring station continue to be addressed by Coso Operating Company staff. The office parking area, which had become emissive due to the breakdown of the cinder cover, had a new layer of cinders added in January 2011. All of the denuded vegetation areas are being watered on a regular basis in order to mitigate the dust in the short term, and have been revegetated in order to address local dust issues in the long term. The District camera at the Coso Junction site provides a view to the west of the station. This camera allows staff to monitor the effectiveness of the Coso dust mitigation efforts and to determine whether local dust sources are influencing the monitor at the site or the dust is being transported from the north or south. Video from the Coso site is logged onsite and archived in the Keeler office.

### Mono Lake Network

The three (3) monitoring stations within the Mono Lake network continue to operate well. District staff continues to access the Mono Shore site using low-impact means by hiking in on foot or by using the Polaris Ranger utility all-terrain vehicle when necessary. Procurement and installation of a small garage for storage of the utility ATV is now moving forward and the District anticipates installation of the garage on Cole Hawkins' property by the end of summer.

Staff is continuing the development mitigation measures for reducing the reflection from the Mono Shore solar array that brightly reflects the sun toward US 395 during certain times of the year. The galvanized steel-framed test barrier continues to operate well. Staff plans a full-scale installation by Fall 2011. The pictures and the PM10 and meteorological data from the Mono Shore station are available on the District's website.

### Mammoth Lakes

The monitors at the station continue to operate within regulatory requirements. The TEOM at Mammoth is scheduled to have the Nafion dryer replaced this summer. This dryer is an integral part of the filter dynamics measurement system (FDMS) that allows the TEOM to correct its measurement of particulate matter for losses due to the heating of the sample and enable that measurement to compare more accurately with the filter-based PM10 monitor concentrations.

### District NCORE Site

Staff has placed orders for and received the bulk of the monitoring equipment for the NCORE monitoring station. The station will be located adjacent to the White Mountain Research Station east of Bishop. Specifications for the monitoring shelter and the monitoring platform are being completed with plans to order these items by mid-July. Staff is developing a design for a concrete pad for the monitoring shelter and platform that will go out for bid by the end of August 2011. Installation of an IMPROVE monitoring system for elements, carbon, particulates, and nitrates is currently planned for mid-September. Funds for all capital expenditures for the NCORE program have been provided by EPA.

The EPA Region 9 staff is continuing to work to have the District designated a primary quality assurance organization (PQAO) and/or a direct-grantee agency so that EPA can more expeditiously fund EPA/District projects like the NCORE monitoring station.

### Laboratory Update

The laboratory continues to function well. Valerie Thorp, the District lab technician who coordinated the installation of the new replacement laboratory temperature and humidity control system in early February 2011, has found a buyer for the old system. She negotiated a price of \$1,500 for the old system, with the buyer picking up the tab for the shipping costs. Plans are to pack and ship the system to the buyer by the end of July 2011.

### **c. Personnel update**

In May, the District Board authorized the elimination of one of the four Field Technician positions at Owens Lake and conversion of two of the remaining Field Techs from contract employees to regular

employees (the 4<sup>th</sup> Field Tech was already a regular employee). Applications were solicited and interviews were held in June. Over 40 applications were received. Due partly to their extensive field experience at Owens Lake, but mostly to the fact that they are extremely intelligent and hard-working, the existing contract employees, Sondra Grimm and Brian Russell, came out on top and were offer jobs as regular employees. We are very happy to have their services.

The District’s Fiscal Services Specialist, Linda Anderson, is retiring this summer. In May the Board authorized reclassifying the fiscal services position to a lower-paid position, while at the same time contracting out payroll services to an outside firm. Applications for the new Fiscal Services Technician position were solicited and over 20 applications were received. Top applicants were interviewed and the job was offered to Patty Gilpin, a fiscal services employee with the Inyo County Health and Human Services Department. Patty started in June and will have about a month overlap with Linda Anderson for training.

**d. Annual permit and enforcement summary**

**2010-2011 Permit Enforcement Activities Summary**

	1st Qtr	2nd Qtr	3rd qtr	4th Qtr
Permit Applications Received	3	0	0	4
Authority to Construct Issued	3	7	0	3
Temporary/Permits to Operate Issued	6	3	4	3
Permit Inspections	1	1	2	30
Notices of Violation Issued	1	1	1	0

**Staff Recommendation**

No action. Information only.

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# September 2011

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Sun	Mon	Tue	Wed	Thu	Fri	Sat
				1	2	3
4	5 Labor Day	6	7	8	9 Admissions Day	10
11	12	13	14	15	16	17
18	19	20	21	22	23	24
25	26	27	28	29	30	