

AGENDA
Regularly Scheduled Meeting
PLACER COUNTY AIR POLLUTION CONTROL DISTRICT
BOARD OF DIRECTORS

Thursday, August 20, 2009
2:30 P.M.

Placer County Board of Supervisors' Chambers
175 Fulweiler Avenue, Auburn, California

- 1. Call to Order**
- 2. Flag Salute**
- 3. Roll Call / Determination of a Quorum**
- 4. Approval of Minutes: June 11, 2009, Public Hearing for the Preliminary Budget FY 2009-10, and the Regular Board Meeting.**
- 5. Public Comment**
- 6. Synopsis of Agenda (information only, no action needed)**
- 7. Approval of Agenda**

Consent Calendar

<p>These items are expected to be routine and non-controversial. The Board will act upon these items at one time without discussion. Any Board member, Staff member, or interested citizen may request that an item be removed from the consent calendar for discussion.</p>

- 8. Appoint Air Pollution Control Officer as Authority for the District: (Consent/Action)**
Approve Resolution #09-11 thereby designating the Air Pollution Control Officer as the Authorized Official for the District and to represent the District as needed to apply for grants and to seek funding opportunities.
- 9. Technical Service Contract with Sierra Research Inc. for UPRR Roseville Railyard Modeling Evaluation Project (Consent/Action)**
Approve Resolution #09-08 thereby authorizing the Air Pollution Control Officer to negotiate, sign, and amend as needed, a contract with Sierra Research, Inc. to conduct a project to evaluate computer modeled diesel particulate matter (DPM) levels around the Union Pacific Railroad Roseville Railyard compared to monitored DPM levels. This agreement is contingent upon the approval of the FY 2009-10 Budget.

Public Hearing/Action Items 10 and 11

- 10. Approval of Proposed Final Budget FY 2009-10 (Public Hearing/ Action)**
Conduct a public hearing regarding the proposed final budget for FY 2009-10 and approve Resolution # 09-09 thereby adopting the final budget.

- 11. Amendment to Rule 245: Surface Coating of Metal Parts and Products (Public Hearing/ Action)**
Conduct a public hearing regarding the proposed amendment of Rule 245: Surface Coating of Metal Parts and Products and approve Resolution #09-10 thereby adopting all findings and recommendations to amend the rule.

- 12. Air Pollution Control Officer's Report**
(Verbal reports and/or handouts will be provided)
 - a. Upcoming Climate Change/Greenhouse Gas Workshop
 - b. Fiscal Update

- 13. Adjournment**

NEXT REGULARLY SCHEDULED MEETING - Thursday, October 8, 2009, 2:30 PM

Opportunity is provided for the members of the public to address the Board on items of interest to the public, which are within the jurisdiction of the Board. A member of the public wanting to comment upon an agenda item that is not a Public Hearing item should submit their name and identify the item to the Clerk of the Board. Placer County Air Pollution Control District is committed to ensuring that persons with disabilities are provided the resources to participate fully in its public meetings. If you require disability-related modifications or accommodations, please contact the Clerk of the Board. All requests must be in writing and must be received by the Clerk five business days prior to the scheduled meeting for which you are requesting accommodation. Requests received after such time will be accommodated only if time permits.

District Office Telephone – (530) 745-2330

AGENDA SYNOPSIS
August 20, 2009

- 8. Adoption of Resolution #09-11 Designating the Air Pollution Control Officer as the Authorized Official for the District (Consent)**
Within the normal scope of business there are opportunities for the APCO to apply for and seek grants and other funding sources for District projects and programs. The adoption of this resolution will assist in making this process go more smoothly when dealing with some government entities that have specific requirements for their grant applications such as having a board designated authorized official.
- 9. Technical Service Contract with Sierra Research Inc. for UPRR Roseville Railyard Modeling Evaluation Project (Consent)**
This contract, which is contingent upon the adoption of the FY 2009-10 budget, is an agreement with Sierra Research, Inc. to conduct a project which will evaluate computer modeled diesel particulate matter (DPM) levels around the Union Pacific Railroad (UPRR) Roseville Railyard in comparison to monitored DPM levels. This is a follow-up research study based upon the Roseville Railyard Air Monitoring Project (RRAMP). The RRAMP was a four-year (2005-2008) air monitoring study of the air pollutant impacts emanating from the UPRR Roseville Railyard facility. The proposed project results will help to quantify the level of potential bias in the air dispersion model for future modeling analysis and provide useful information regarding the interpretation of data collected in the RRAMP.
- 10. Approval of Proposed Final Budget FY 2009-10 (Public Hearing/Action)**
Conduct a public hearing regarding the District's proposed Final FY 2009-10 budget and adopt Resolution #09-09 thereby approving the final budget. District Staff are presenting two budget proposals to the board. One will include the annual Consumer Price Index (CPI) increase to permit fees and the other will not. The board will choose whether they desire to have the CPI included, as has been done in proceeding years, or if the CPI increase will be excluded this fiscal year.
- 11. Adoption of Amended Rule 245, Surface Coating of Metal Parts and Products (Public Hearing/Action)**
Conduct a public hearing regarding the proposed amendment of Rule 245, approve and adopt the findings in the staff report, and approve Resolution #09-10 thereby adopting the amendments to Rule 245. Amendments are being made to address control guidance contained in U.S. Environmental Protection Agency's "Control Techniques Guidelines (CTG) for Miscellaneous Metal and Plastic Parts Coatings", September 2008, which was issued too late for incorporation in the December 9, 2008, Rule. This proposed rule amendment fulfills the District requirement to adopt a measure that incorporates CTG guidance within one year of a CTG's release.



MEMORANDUM

TO: PCAPCD Board of Directors

FROM: Jane Bailey, Administrative Services Manager

AGENDA DATE: August 20, 2009

SUBJECT: Adoption of Resolution #09-11 Designating the Air Pollution Control Officer as the Authorized Official for the District (Consent)

Action Requested:

Adopt Resolution # 09-11 thereby designating the Air Pollution Control Officer (APCO) as the Authorized Official for the District to represent the District as needed to apply for grants and to seek funding opportunities.

Background:

Within the normal scope of business there are opportunities for the APCO to apply for and seek grants and other funding sources. These opportunities do not always fall within a time frame where the APCO can seek Board approval before the deadline for applying for these types of funds expires. Even though the Board has given the APCO discretion to negotiate, sign and amend most District contracts, there are some entities that require a more formalized document submitted with their applications confirming that the APCO has the Board's authorization to pursue grants and other funding opportunities.

Discussion:

At the June 11, 2009, Board Meeting, Staff brought Resolution #09-07 to the Board in order to enable the APCO to apply for and accept the Lower Emission School Bus (LESB) grant award. At that meeting the Board approved the resolution designating the APCO as the duly authorized official representing the District in all matters pertaining to that particular program.

District Staff felt it would be prudent to have this type of authorization in place for future funding opportunities and not be caught in the same situation as when trying to secure the LESB funding. As the California Air Resources Board (CARB) tightens up its application requirements, the District will be able to submit applications for grant funding to the CARB and other entities without having to go through the same process as for the LESB funds. Adoption of Resolution #09-11 will provide the APCO the same authorization as Resolution #09-07, except

that Resolution #09-11 will allow the APCO to pursue any funding that may support the District's mission.

Fiscal Impact:

Most grants and funding from other sources typically have little impact on the District's fiscal resources. Most of these funding sources are "pass through" monies which are specified for a particular program or project. Any revenue obtained from these sources will be presented to the Board at a subsequent regularly scheduled meeting in a Budget Revision, upon which the Board will have the opportunity to vote.

Recommendation:

Staff recommends that the Board adopt Resolution #09-11 thereby designating the APCO as the authorized official for the District to apply for grants and to represent the District as needed for funding opportunities.

Attachment(s) #1: Resolution #09-11: Designation of the APCO as the Authorized Official for the District

ATTACHMENT #1

SUBJECT:

Resolution #09-11:
Designation of the APCO as the Authorized Official for the District

1 **BEFORE THE BOARD OF DIRECTORS**
2 **PLACER COUNTY AIR POLLUTION CONTROL DISTRICT**
3 **STATE OF CALIFORNIA**

4
5 **RESOLUTION NO: 09-11**

6
7 **In the matter of:** Adoption of a resolution designating the APCO as the authorized official
8 of the District to apply for grants and to represent the District as needed
9 for funding opportunities.

10
11 The following **RESOLUTION** was duly passed by the Board of Directors, Placer County Air
12 Pollution Control District, at a regular meeting held **August 20, 2009** by the following vote:

13
14 Ayes: Holmes, M. _____ Ucovich _____ Weygandt _____ Holmes, J. _____ Barkle _____

15 Nakata _____ Hill _____ Uhler _____ Allard _____

16 Noes: Holmes, M. _____ Ucovich _____ Weygandt _____ Holmes, J. _____ Barkle _____

17 Nakata _____ Hill _____ Uhler _____ Allard _____

18 Abstain: Holmes, M. _____ Ucovich _____ Weygandt _____ Holmes, J. _____ Barkle _____

19 Nakata _____ Hill _____ Uhler _____ Allard _____

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21 Signed and approved by me after its passage.

22
23 _____ Chairperson

24
25
26 Attest:

27
28 _____ Clerk of said Board

1 **Whereas**, the needs of the Placer County Air Pollution Control District (hereinafter District) are
2 such that within the normal scope of business, opportunities arise when the District may apply
3 for grants and other funding opportunities and,
4

5 **Whereas**, these opportunities to apply for grants and to seek funding from other entities does not
6 always occur in a time frame when the deadlines for applications will be met if not acted upon
7 before the next regularly scheduled meeting of the District Board of Directors, and,
8

9 **Whereas**, the receipt of any grant awards or funding from other entities will be presented to the
10 Board through the budget revision process,
11

12 **NOW, THEREFORE BE IT RESOLVED**, that the Placer County Air Pollution Control
13 District Board of Directors designates the APCO as the Authorized Official for the District to
14 apply for grants and funds from other entities.
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16 **BE IT FURTHER RESOLVED AND ORDERED**, that the revenue collected from grants or
17 funding from other entities will be presented to the Board in a Budget Revision.
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MEMORANDUM

DATE: August 20, 2009

TO: Placer County Air Pollution Control District Board of Directors

FROM: Yushuo Chang, Manager, Planning and Monitoring

SUBJECT: Technical Service Contract with Sierra Research Inc. for UPRR Roseville Railyard Modeling Evaluation Project (Consent)

Action Requested:

Approve Resolution # 09-08 (Attachment #1), thereby authorizing the Air Pollution Control Officer to negotiate, sign, and amend, as needed, a technical service contract with Sierra Research Inc. to conduct a project to evaluate computer modeled diesel particulate matter (DPM) levels around the Union Pacific Railroad Company (UPRR) Roseville Railyard compared to monitored DPM levels. The total proposed contract amount is \$50,000.

Background:

The proposed project is a follow-up research study for the Roseville Railyard Air Monitoring Project (RRAMP). The RRAMP was a four year (2005-2008) air monitoring study of the air pollutant impacts emanating from the UPRR Roseville Railyard facility. The major goals of the RRAMP were to use the field monitoring equipment and the latest monitoring technologies to 1) determine whether air pollutant impacts from the emissions at the UPRR facility can be identified and 2) observe changes in ambient concentrations that may be indicative of the effectiveness of mitigation measures (over time) proposed by UPRR. In addition, the RRAMP provided a unique opportunity to evaluate the performance of the air dispersion model by comparing the actual ambient monitoring data with the forecasted exposure concentration from the computer modeling analysis. The proposed project is designed to conduct this evaluation and the results will help to quantify the level of potential bias in the air dispersion model for future modeling analysis and provide useful information regarding the interpretation of data collected in the RRAMP. Furthermore, the final modeled concentration profiles will be transferred to California Air Resources Board (CARB) to update the risk analysis for the Roseville Railyard.

Discussion:

On December 9, 2004, your Board approved Resolution #04-21 authorizing the Chairperson and the APCO to sign an Agreement with Union Pacific Rail Road (UPRR) pertaining to mitigation measures to decrease DPM and monitoring of emissions at the Roseville Railyard. The RRAMP was originally designed as a three-year (2005-07) air monitoring study associated with the mitigation plan. Later, the District accepted recommendations from the RRAMP Technical Advisory Committee (TAC) to continue another summer study in 2008. Currently, District Staff is working with the data analysis contractor, Desert Research Institute, to review all four years (2005-08) of monitoring data. District staff is planning to submit the final RRAMP report, including the multi-year trend analysis and DPM estimates, to the Board in October 2009.

According to the Agreement in 2004, UPRR also committed to the goal of reducing DPM emissions from its Roseville operations by at least 25% from the baseline period when data for the CARB Health Risk Assessment (HRA) was collected (1999-2000). An Emissions Trend Report (Report) from UPRR was submitted to your Board in October 2008 to demonstrate that the goal of reducing DPM emissions from its Roseville operations was achieved. The Report contains the railyard activity data and emissions estimates for the years of 2005, 2006, and 2007 in a similar manner to the original 1999-2000 estimate for the CARB HRA. In 2009, the District received an updated Report including the railyard activity data and emission estimates for the year of 2008. District Staff are currently reviewing all four years of Railyard emission data (2005-2008) from the updated Report, as well as the details emerging from the RRAMP final report and will provide a report back to your Board with the RRAMP final report in October 2009.

While reviewing all available data and information, a new project has been initiated by UPRR and PCAPCD to answer the question: Is there any correlation between the four-year railyard activity data and resulting calculated emissions with the ambient monitoring data using the on-site weather data? The proposed project will develop concentration isopleths for each year based on computer models and calculated emissions with related railyard activities. The modeling results include the forecasted concentration at the locations of each of the RRAMP monitoring stations. Therefore, the correlation and the level of bias could be identified based on this rare opportunity by comparing the forecasted concentrations from the railyard emissions with the actual ambient monitoring measurements. Furthermore, the value in the effort will be to update the risk analysis from the 2000 year activity to 2008 activity in order to present whether the presumed reduction in health risk is due to the mitigation efforts made by UPRR.

The proposed contract with Sierra Research, Inc. will be to conduct the computer model

analysis and quantify the level of bias between the modeled concentrations and actual ambient measurements (Attachment #2). Sierra Research has worked with UPRR and CARB to prepare the facility-wide emission inventory and air dispersion modeling analysis for the UPRR Railyards identified in the Statewide Agreement, which was signed by CARB, UPRR and BNSF to reduce emissions from their railyard operations. Nine (9) emission inventory and air dispersion modeling analysis reports have been conducted by Sierra Research. Those reports have been submitted to CARB to conduct the follow-up railyard health risk assessments. Because of their unique expertise and knowledge in emission calculation and air dispersion model analysis for the railyard activity, Sierra Research was selected as the primary contractor for the proposed project. Their project proposal has been reviewed by the District and UPRR (Attachment #3). The cost proposal from Sierra Research for this project is \$50,000. The District agrees to contribute \$35,000 and the UPRR agrees to contribute \$15,000.

In addition to the modeling result evaluation, there will be another opportunity to update the health risk assessment based on the computer modeling results from this proposed project. The District has requested that CARB takes the modeled emission concentration profiles from the proposed project and extend the analysis to a health risk assessment (Attachment #4). This effort will provide the opportunity for an update to the risk analysis from the year 2000 activity to the year 2008 activity to show if the associated emission reduction of the mitigation efforts in the Roseville railyard represents a reduction in health risk in the vicinity of the Railyard. CARB has verbally agreed with this request and is working with the District to draft an agreement to join the effort. CARB will provide technical recommendations to assist in guiding the proposed project. The District anticipates that the draft report will be delivered by Sierra Research in early 2010 and that the updated health risk assessment for Roseville railyard will be finished by CARB in late 2010.

Fiscal Impact:

The District has included \$35,000 for the technical services in the proposed FY 2009-10 budget to conduct this modeling evaluation project for the Roseville Railyard. UPRR has agreed to contribute \$15,000 for this technical service contract. The total cost for this project is \$50,000.

Recommendation:

District Staff recommends that the Board approve Resolution # 09-08, thereby authorizing the Air Pollution Control Officer to negotiate, sign, and amend as needed, a contract for professional services with Sierra Research, Inc., for the Roseville Railyard modeling evaluation project.

- Attachments #1:** Resolution #09-08
#2: Draft Contract with Sierra Research, Inc.

UPRR Roseville Railyard Modeling Evaluation Project

PCAPCD Board of Directors Meeting

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#3: Sierra Research Project Proposal

#4: Letter to CARB for a HRA Update for Roseville Railyard

ATTACHMENT #1

SUBJECT:

Resolution # 09-08

1 **BEFORE THE BOARD OF DIRECTORS**
2 **PLACER COUNTY AIR POLLUTION CONTROL DISTRICT**
3 **STATE OF CALIFORNIA**

4
5 **RESOLUTION NO. 09-08**

6
7 **In the matter of:** A Resolution Authorizing the Air Pollution Control Officer to Negotiate,
8 Sign, and Amend, as Needed, a Contract with Sierra Research Inc., to
9 Conduct the Roseville Railyard Modeling Evaluation Project.

10
11 The following **RESOLUTION** was duly passed by the Board of Directors, Placer County Air
12 Pollution Control District, at a regular meeting held **August 20, 2009** by the following vote:

13
14 Ayes: Holmes, M. _____ Ucovich _____ Weygandt _____ Holmes, J. _____ Barkle _____

15 Nakata _____ Hill _____ Uhler _____ Allard _____

16 Noes: Holmes, M. _____ Ucovich _____ Weygandt _____ Holmes, J. _____ Barkle _____

17 Nakata _____ Hill _____ Uhler _____ Allard _____

18 Abstain: Holmes, M. _____ Ucovich _____ Weygandt _____ Holmes, J. _____ Barkle _____

19 Nakata _____ Hill _____ Uhler _____ Allard _____

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21
22 Signed and approved by me after its passage.

23
24
25 _____ Chairperson

26
27 Attest:

28
29 _____ Clerk of said Board

1 **WHEREAS**, The California Air Resources Board (CARB) designated diesel particulate matter
2 (DPM) as a Toxic Air Contaminant in August 1998; and

3
4 **WHEREAS**, The Placer County Air Pollution Control District (District) received the risk
5 assessment from CARB on October 14, 2004 in a report titled Roseville Rail Yard Study which
6 indicated that the DPM emissions from the railyard were widely dispersed over a large area at levels
7 that pose a cancer risk concern; and

8
9 **WHEREAS**, the Board of the Placer County Air Pollution Control District (Board) approved an
10 Agreement between Union Pacific Rail Road Company (UPRR) and the District on December 9,
11 2004 pertaining to mitigation measures and monitoring for the Roseville Railyard; and

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13 **WHEREAS**, In the Agreement, UPRR has committed to the goal of reducing DPM emissions from
14 the Roseville Railyard operation by the end of 2007 and submitted a progress report to the Board to
15 demonstrate the goals having being achieved; and

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17 **WHEREAS**, UPRR has submitted the progress report to the Board on October 9, 2008; and

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19 **WHEREAS**, In the Agreement, UPRR has also committed to provide technical and financial
20 resources to the District's effort to conduct an air monitoring project associated with the emission
21 reduction over three consecutive summers (2005, 2006, and 2007) to measure actual DPM
22 concentrations, to identify the effectiveness of mitigation from the railyard operations, to provide
23 feedback to the public, and to provide a check on the improvement of the computer modeling
24 analysis; and

25
26 **WHEREAS**, the data analysis report of each summer monitoring period for the Roseville Railyard
27 Air Monitoring Project (RRAMP) has been submitted to the Board in 2006, 2007, and 2008
28 respectively to present the possible exposure concentrations from the railyard activities, and;

29

1 **WHEREAS**, the District now has the air ambient monitoring measurements from the RRAMP and
2 the associated railyard activity data from the UPRR progress report; and

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4 **WHEREAS**, the final objective of the RRAMP is to provide a check on the improvement of the
5 future computer modeling analysis and it can be achieved by comparing the actual ambient
6 monitoring measurements with the computer modeling results from the updated activity data; and

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8 **NOW, THEREFORE, BE IT RESOLVED** that the Placer County Air Pollution Control
9 District Board does hereby approve the project to evaluate computer modeled DPM levels
10 around the UPRR Roseville Railyard compared to monitored DPM levels, and authorizes the Air
11 Pollution Control Officer to negotiate, sign, and amend, as needed, a contract with Sierra
12 Research Inc.

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ATTACHMENT #2

SUBJECT:

Draft Contract with Sierra Research Inc.

Contract No. _____

DESCRIPTION: PROFESSIONAL SERVICES CONTRACT TO PROVIDE ROSEVILLE RAILYARD MODELING ASSESSMENT TO PLACER COUNTY AIR POLLUTION CONTROL DISTRICT

This AGREEMENT is between the Placer County Air Pollution Control District (hereinafter "PCAPCD") and Sierra Research, a California Corporation, (hereinafter "CONSULTANT"). In consideration of the promises and covenants set forth herein, the parties agree as follows:

1. **Contract Period**

- (a) The term of this contract shall begin on the date signed by both parties and conclude when the services contemplated herein are completed.
- (b) This contract may be canceled by either party upon serving thirty (30) days notice in writing to the other party.

2. **Services**

- (a) CONSULTANT agrees, during the term of this AGREEMENT, to perform the consulting services set forth below and in Exhibit "A" – Scope of Work (hereinafter "PROJECT").
- (b) CONSULTANT shall be obligated to devote as much of its attention, skill, and effort as may be reasonably required to perform the PROJECT services, in a professional and timely manner, consistent with the elements of the project.

3. **Payment**

- (a) PCAPCD agrees to pay for the services covered by this Contract pursuant to Exhibit "B"- Payment Schedule.
- (b) The amount paid to the CONSULTANT shall constitute full payment for all services set forth herein. CONSULTANT shall not be reimbursed for any additional expenses incurred beyond the maximum sum payable without prior written agreement by the PCAPCD.
- (c) CONSULTANT shall bill PCAPCD not more often than monthly based upon the time spent on the project for that monthly billing period. CONSULTANT agrees to provide an invoice to PCAPCD with reasonable supporting detail by the fifth day following the end of the month. PCAPCD agrees to pay CONSULTANT within thirty (30) days of receipt of invoice. PCAPCD retains the right to require

proof of services performed or costs incurred prior to any payment under this AGREEMENT.

- (d) Notwithstanding any other terms of this AGREEMENT, no payments shall be made to CONSULTANT until PCAPCD is satisfied that work of such value has been rendered pursuant to this AGREEMENT. However, PCAPCD shall not unreasonably withhold payment and, if a dispute exists, the withheld payment shall be proportional only to the item in dispute.

4. **Notices**

- (a) Any notice or demand desired or required to be given hereunder shall be in writing and deemed given when personally delivered or deposited in the mail, postage prepaid, sent certified or registered and addressed to the parties as follows:

TO PCAPCD:
Placer County Air Pollution Control District
Attn: Thomas J. Christofk, APCO
3091 County Center Dr. Suite 240
Auburn, CA 95603

TO CONSULTANT:
Sierra Research, Inc.
Gary Rubenstein
1801 J Street
Sacramento, CA 95811

- (b) Any notice so delivered personally shall be deemed received on the date of delivery and any notice mailed shall be deemed received five (5) days after the date on which it was mailed.

5. **Obligations of Air Pollution Control District**

PCAPCD agrees to provide reasonable access to information necessary for completion of work on the PROJECT. CONSULTANT will be provided workspace at the office located at 3091 County Center Drive, Suite 240, Auburn CA if on-site services are requested and reasonably necessary.

6. **Limitation of Liability**

- (a) CONSULTANT'S liability for claims arising in connection with its work on the PROJECT shall be limited to the amounts paid to it pursuant to this AGREEMENT.
- (b) This provision is not intended to create any cause of action in favor of any third party against CONSULTANT or the PCAPCD or to enlarge in any way the CONSULTANT'S liability.

7. **Insurance Requirements**

- (a) CONSULTANT shall file with the PCAPCD, concurrently herewith, Certificates of Insurance, in companies acceptable to PCAPCD, with a Best's rating of no less than A: VII, showing coverages for Workers Compensation, General Liability, Professional Liability, and Automobile Liability, as set forth below.

WORKER'S COMPENSATION AND EMPLOYERS LIABILITY INSURANCE

- (b) If CONSULTANT does not hire employees, and does not hire subcontractors with employees, then the Workers' Compensation coverage, outlined below, will not apply.
- (c) Evidence of Worker's Compensation Insurance as required by any applicable law or regulation. Employer's liability insurance shall be provided in amounts not less than five hundred thousand dollars (\$500,000) each accident for bodily injury by accident, five hundred thousand dollars (\$500,000) policy limit for bodily injury by disease, and five hundred thousand dollars (\$500,000) each employee for bodily injury by disease.
- (d) If there is an exposure of injury to CONSULTANT'S employees under the U.S. Longshoremen's and Harbor Worker's Compensation Act, the Jones Act, or under laws, regulations, or statutes applicable to maritime employees, coverage shall be included for such injuries or claims.
- (e) CONSULTANT shall require all SUBCONTRACTORS to maintain adequate Workers' Compensation insurance. Certificates of Workers' Compensation shall be filed forthwith with the PCAPCD upon demand.

GENERAL LIABILITY INSURANCE

- (f) Evidence of Comprehensive General Liability or Commercial General Liability insurance covering all operations by or on behalf of CONSULTANT, providing insurance for bodily injury and property damage liability for the limits of liability

indicated below, and including coverage for Contractual liability insuring the obligations assumed by CONSULTANT in this Agreement.

- (g) One of the following forms is required:
1. Comprehensive General Liability;
 2. Commercial General Liability (Occurrence); or
 3. Commercial General Liability (Claims Made).
- (h) If CONSULTANT carries a Comprehensive General Liability policy, the limits of liability shall not be less than a Combined Single Limit for bodily injury, property damage, and Personal Injury Liability of \$1,000,000.
- (i) If CONSULTANT carries a Commercial General Liability (Occurrence) policy then the limits of liability shall not be less than:
- \$1,000,000 each occurrence, combined single limit for bodily injury and property damage.
 - \$1,000,000 for Products-Completed Operations.
 - \$1,000,000 General Aggregate. If the policy does not have an endorsement providing that the General Aggregate Limit applies separately, or if defense costs are included in the aggregate limits, then the required aggregate limits shall be \$2,000,000.
- (j) CONSULTANT shall not provide a Commercial General Liability (Claims Made) policy without the express prior written consent of PCAPCD, which consent, if given, shall be subject to the following conditions: The insurance coverage provided by CONSULTANT shall contain language providing coverage up to six (6) months following the completion of the contract in order to provide insurance coverage for the hold harmless provisions herein if the policy is a claims made policy; and the limits of liability shall not be less than:
- \$1,000,000 each occurrence, combined single limit for bodily injury and property damage.
 - \$1,000,000 aggregate for Products-Completed Operations.
 - \$1,000,000 General Aggregate.

PROFESSIONAL LIABILITY INSURANCE (ERRORS & OMISSIONS):

- (k) If Professional Liability Insurance for Errors and Omissions coverage is not customarily and reasonably available for the particular profession of which CONSULTANT is a member, then this coverage will not apply.
- (l) Evidence of Professional Liability Insurance for Errors and Omissions coverage in the amount of not less than \$1,000,000.

AUTOMOBILE LIABILITY INSURANCE

- (m) Evidence of Automobile Liability insurance covering bodily injury in an amount no less than \$1,000,000 combined single limit for each occurrence, and \$100,000 property damage for each occurrence.
- (n) Covered vehicles should include owned, non-owned, and hired automobiles / trucks.

8. **Facilities, Equipment and Other Materials**

Except as set forth herein CONSULTANT shall, at its sole cost and expense, furnish all facilities, equipment, and other materials, which may be required for furnishing services pursuant to this Agreement. PCAPCD shall furnish CONSULTANT only those facilities, equipment, and other materials, and shall perform only those obligations as listed herein.

9. **Non-Discrimination**

CONSULTANT shall not discriminate in its employment practices because of race, religious creed, color, national origin, ancestry, disability, medical condition, marital status, sex, sexual preference, or in contravention of any other protected classification or practice identified in the California Fair Employment and Housing Act, Government Code section 12900 et seq.

10. **Records and Documents**

- (a) CONSULTANT shall maintain at all times complete, detailed records with regard to work performed under this Agreement, in a form acceptable to PCAPCD, and PCAPCD shall have the right to inspect such records at any reasonable time.
- (b) CONSULTANT agrees to return to PCAPCD, at PCAPCD's request and upon termination of this AGREEMENT, all documents, drawings, photographs, and

other written or graphic material, however produced, received from PCAPCD and used by CONSULTANT in the performance of its services hereunder.

- (c) CONSULTANT and PCAPCD understand and agree that proprietary and confidential information may be supplied by Union Pacific Railroad Company (UPRR) and used in carrying out the PROJECT. PCAPCD and CONSULTANT agree that such use of confidential and/or proprietary information shall not be deemed a waiver of the confidential and proprietary nature of such information.
- (d) Preliminary drafts of the PROJECT and related materials, shall be marked "Draft – Do Not Cite or Quote" and shall be treated as documents that are not retained by the public agency in the ordinary course of business, or reflect the agency's deliberative processes, impressions, evaluations, opinions, recommendations, meeting minutes, research, work products, theories, or strategy, and are therefore exempt from disclosure under California law.
- (e) All work products prepared pursuant to Task 6 as set forth in Exhibit A to this AGREEMENT and submitted to PCAPCD by CONSULTANT shall be jointly owned by PCAPCD and UPRR. PCAPCD and UPRR shall cooperate in publishing or otherwise making the results of the work available to the public.
- (f) PCAPCD and UPRR shall cooperate in providing technical direction to the CONSULTANT. In the event of a disagreement concerning such direction, the CONSULTANT shall cease work and PCAPCD and UPRR shall meet and confer to determine how to resolve such dispute.

11. **Independent Contractor Status**

- (a) CONSULTANT shall perform this contract as an independent contractor and not as an employee of PCAPCD. CONSULTANT acknowledges that CONSULTANT is not entitled to any of the PCAPCD'S fringe benefits, including without limitation, paid holidays, life insurance, sick leave, or travel or any other expenses in connection with services performed hereunder. No part of the compensation payable to CONSULTANT hereunder shall be deducted or withheld for payment of Federal or State income or other employment related taxes. It shall be the responsibility of CONSULTANT to provide all coverage necessary for CONSULTANT'S own benefit and not as an employee of PCAPCD.
- (b) Except as PCAPCD may specify in writing, CONSULTANT shall have no authority, express or implied, to act on behalf of PCAPCD in any capacity whatsoever as an agent. CONSULTANT shall have no authority, express or

implied, pursuant to this AGREEMENT to bind PCAPCD to any obligation whatsoever.

12. **Warranties**

CONSULTANT warrants that its services are performed, with the usual thoroughness and competence of the consulting profession; in accordance with the standard for professional services at the time those services are rendered.

13. **Licenses, Permits, Etc.**

CONSULTANT represents and warrants to PCAPCD that it has all licenses, permits, qualifications, and approvals of whatever nature which are legally required for CONSULTANT to practice its profession. CONSULTANT represents and warrants to PCAPCD that CONSULTANT shall, at its sole cost and expense, keep in effect or obtain at all times during the term of this AGREEMENT, any licenses, permits, and approvals which are legally required for CONSULTANT to practice its profession at the time the services are performed.

14. **Assignment Prohibited**

CONSULTANT may assign its rights and obligations under this AGREEMENT only upon the prior written approval of PCAPCD, said approval to be in the sole discretion of PCAPCD.

15. **Sub-Contractors**

CONSULTANT may, in its sole discretion, retain the services of one or more subcontractors to assist in performing the PROJECT. The parties anticipate that CONSULTANT may retain the services of Dr. Robert G. Ireson as a subcontractor. In the event that Dr. Ireson is unable due to unforeseen events beyond CONSULTANT'S control to perform such services as are required for the PROJECT, the parties agree to suspend the requirements of this AGREEMENT, and to meet and confer and determine how best to proceed.

15 **Modification of Agreement**

This Agreement may be modified in whole or part only by way of a written modification signed by an appropriate representative of the PCAPCD and the authorized agent of the CONSULTANT.

16. **Waiver**

One or more waivers by one party of any major or minor breach or default of any provision, term, condition, or covenant of this AGREEMENT shall not operate as a waiver of any subsequent breach or default.

17. **Entirety of AGREEMENT**

This AGREEMENT contains the entire agreement of the parties with respect to the subject matter hereof, and no other agreement, statement, or promise made by any party, which is not contained in this AGREEMENT shall be binding or valid.

18. **Jurisdiction**

This AGREEMENT shall be governed by and construed in accordance with the laws of the State of California. Any suit, action, or proceeding brought under the scope of this AGREEMENT shall be brought and maintained to the extent allowed by law in the County of Placer, California.

19. **Exhibits**

All exhibits referred to herein and attached hereto are fully incorporated by this reference.

The parties so agree.

PCAPCD:

By: Thomas J. Christofk
Air Pollution Control Officer

Date

CONSULTANT:

Gary Rubenstein, Senior Partner
Sierra Research, Inc.

Date

EXHIBIT A- SCOPE OF WORK

Draft Scope of Work and Cost Estimate Roseville RRAMP AERMOD/ISC Performance Evaluation March 2, 2009

SUMMARY

Task 1: AERSURFACE

- Set modeling domain limits
- Select sectors and seasonality for land use
- Prepare inputs and run AERSURFACE

Task 2: AERMAP

- Obtain digital elevation model (DEM) data
- Specify receptors
- Run AERMAP

Task 3: AERMET

- Surface data min: WS/WD, T, opaque sky cover, P from NWS Sacramento Metro and NWS Sacramento Exec (as backup)
- RRAMP data for T, delta T, sigma θ , WS/WD, RH, P, solar radiation
- ARB Roseville data for WS/WD
- Upper air data from NWS Oakland
- Run AERMET Stages 1, 2 and 3 for scenarios:
 - RRAMP periods (RRAMP tower)
 - RRAMP periods (RRAMP tower w/ARB Roseville winds)
 - RRAMP years (ARB Roseville)

Task 4: PCRRAMMET

- Prepare inputs and run PCRAMMET for RRAMP periods (RRAMP tower) and RRAMP years (ARB Roseville), supplementing with Sacramento Metro or Sacramento Exec

Task 5: AERMOD and ISC

- Emission inventories for 1999-2000, 2005, 2006, 2007 and 2008 (DPM and NO_x)
- Generate emission inputs for each emissions scenario for AERMOD and ISC
- Prepare receptor, met and output records for all scenarios
- Conduct AERMOD and ISC runs per protocol

Task 6: Analysis and Reporting

[Note: Model predictions will be generated for locomotive DPM and NO_x emissions. Comparisons of predictions and observations will be based on these parameters and observed concentrations of NO_x (NO+NO₂), BC, and PM_{2.5}.]

- Tabulate and compare model predictions for period averages for each meteorological period and emission scenario, and generate isopleths plots displaying the comparisons
- Tabulate hourly model predictions for overnight RRAMP periods for each meteorological period and emission scenario, and generate isopleths plots displaying the comparisons
- Tabulate and compare predictions for overnight RRAMP periods with RRAMP station data
- Examine predicted concentration gradients near the Denio and Church stations for evidence of artifacts or potential sensitivity of station siting to modeled emission density patterns. If indicated, tabulate spatially averaged model predictions and compare with observed concentrations
- Generate average overnight RRAMP period hourly profiles for predictions and observations and compare graphically
- Generate scatter plots of predictions and observations for RRAMP period overnight averages for each station and year, both paired in time and space, and paired in space only (i.e., quantile:quantile plot)
- Conduct linear regressions for predictions and observations to generate correlation coefficients, slopes, intercepts, and estimates of bias.
- Document the modeling, modeling results, and model performance evaluation in a technical report, supplemented by electronic files of model inputs and outputs and tables of paired predictions and observations used in the evaluation.

FULL MODELING ASSESSMENT PROTOCOL

The attached Modeling Evaluation Protocol, J.R. Davis (Roseville) Rail Yard Study – Revised, prepared for: Union Pacific Railroad dated November 17, 2008 described the work required to perform the above-described tasks. In the event of a conflict or ambiguity between the summary set forth above and the detailed description that follows, the detailed description shall be followed.

Modeling Evaluation Protocol, J.R. Davis (Roseville) Rail Yard
Study – Revised, prepared for: Union Pacific Railroad dated
November 17, 2008

SAMPLE

EXHIBIT B – PAYMENT SCHEDULE

Contract billing shall not exceed \$50,000 (Fifty Thousand Dollars) for fiscal year 2009-10 unless otherwise amended. CONSULTANT shall bill for its services in accordance with its standard rate schedule attached hereto. CONSULTANT shall pass through the actual costs of any SUBCONTRACTOR subject to a five percent surcharge.

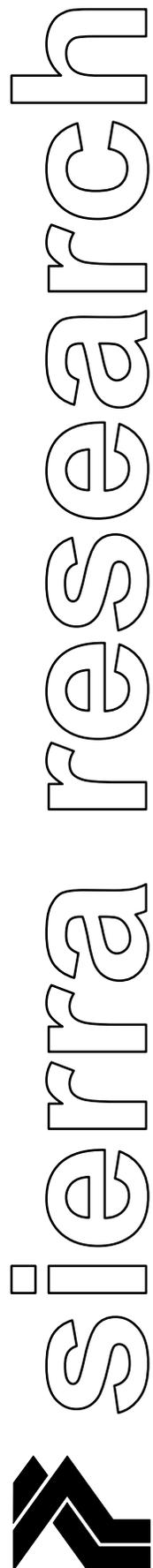
PCAPCD will contribute \$35,000 (Thirty Five thousand Dollars) and UPRR shall contribute \$15,000 (Fifteen Thousand Dollars) which shall be “passed through” PCAPCD to the CONSULTANT as stated on page 1, item 3 (c).

SAMPLE

ATTACHMENT #3

SUBJECT:

Sierra Research Inc., Project Proposal



Modeling Evaluation Protocol J.R. Davis (Roseville) Rail Yard Study – Revised

prepared for:

Union Pacific Railroad

November 17, 2008

prepared by:

Sierra Research, Inc.
1801 J Street
Sacramento, California 95811
(916) 444-6666

and Robert G. Ireson, Ph.D.
Air Quality Management Consulting
161 Vista Grande
Greenbrae, CA 94904-1135
(415) 925-1440

**Modeling Evaluation Protocol
Roseville Rail Yard Study – Revised**

prepared for:

Union Pacific Railroad

November 17, 2008

Principal authors:

Robert G. Ireson
Air Quality Management Consulting

Eric Walther
Gary Rubenstein
Sierra Research, Inc.

Modeling Evaluation Protocol Roseville Rail Yard Study

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1. INTRODUCTION

The purpose of this protocol is to describe the steps needed to evaluate modeled Diesel particulate matter (DPM) levels around the Union Pacific Railroad J.R. Davis (Roseville) Rail Yard compared to monitored DPM levels. This evaluation will help to quantify the level of potential bias in the air dispersion modeling conducted by the California Air Resources Board (ARB) in the Roseville Rail Yard Study (ARB, 2004), and in modeling conducted in support of other rail yard health risk assessments. In addition, this modeling evaluation may provide useful information regarding the interpretation of data collected in the Roseville Rail Yard Air Monitoring Program (RRAMP).

Air dispersion models are mathematical approximations of atmospheric processes that predict ambient concentrations based on emissions and meteorological inputs. The model used in the Roseville Study, Industrial Source Complex Short-Term Version 3 (ISCST3), was designed as a regulatory model to be used to demonstrate the impact of emission controls in efforts to achieve air quality standards, and to determine if a proposed facility complies with Prevention of Significant Deterioration (PSD) allowable ambient air quality increments. As such, its developers at the U.S. Environmental Protection Agency (EPA) sought a model that would not underestimate concentrations for averaging time periods of regulatory interest (i.e., 1 hour to 1 year). The resulting ISCST3 can both over- and underestimate concentrations under specific conditions. ISCST3 has now been replaced by the AERMOD¹ modeling system as EPA's preferred model. The AERMOD system includes enhancements in the preprocessing of meteorological, land-use and terrain data for characterizing dispersion, as well as in the dispersion calculations related to plume rise, downwash, and turbulent diffusion.

Under a Memorandum of Understanding (MOU) between ARB, Union Pacific Railroad (UPRR), and Burlington Northern Santa Fe (BNSF), dispersion modeling has been conducted for UPRR and BNSF rail yards throughout California. The results of this modeling were used by ARB to estimate population exposure and health risks associated with rail yard-related emissions. The objective of this modeling was to provide realistic estimates of actual potential exposure levels in the vicinity of rail yards. The RRAMP data provide a resource that may allow estimation of the level and direction of potential modeling bias, and identification of the conditions under which bias occurs.

Section 2 describes the emission inventory data, meteorological data, monitoring data, and other basic data that need to be assembled to conduct the evaluation. Section 3

¹ AERMOD = American Meteorological Society/Environmental Protection Agency Regulatory Model Improvement Committee (AERMIC) Model.

describes the protocol by which modeling results comparable to those developed in ARB's Roseville Study will be generated and compared with monitoring data collected around the rail yard as part of the RRAMP study. Section 4 provides citations for references used herein.

2. DATA NEEDS

This section discusses the data that will be used to conduct the evaluation. Air quality data from the RRAMP study will be used along with data to develop modeling inputs covering the RRAMP study period. The modeling-related data include emissions, meteorological, land use, and terrain data. Because the RRAMP program also included nitric oxide (NO) and nitrogen dioxide (NO₂) concentration measurements, which were not addressed in the Roseville Study (i.e., the study only included locomotive PM emissions), estimates of locomotive emissions of both PM and nitrogen oxides (NO_x) will be modeled. Due to the greater precision of ambient NO/NO₂ measurements as compared with surrogate ambient DPM measurements, a comparison of modeled versus monitored concentrations of these pollutants may provide a more accurate basis for model evaluation. The three types of data to be assembled are ambient air quality data, emissions data for air dispersion modeling, and meteorological data; each is discussed separately below.

2.1 Ambient Air Quality Data

In the RRAMP study, four monitoring stations, arranged as two pairs across the width of the Roseville rail yard, were operated between mid-June and mid-October of 2005, 2006, 2007, and 2008. Each station was equipped to measure the following air quality parameters:

- Black carbon (BC) (by aethalometer);
- PM_{2.5} (by beta attenuation monitor and by 24-hour integrated gravimetric federal reference method);
- PM_{2.5} elemental carbon (EC) (by thermal optical reflectance²);
- PM_{2.5} organic carbon (OC) (by thermal optical reflectance);
- Nitric oxide (NO) (by chemiluminescence); and
- Nitrogen oxides (NO_x = NO + NO₂) (by chemiluminescence).

The quality-assured data for these variables will be assembled for the four monitoring periods.

² Desert Research Institute. *DRI Standard Operating Procedure: Thermal/Optical Reflectance Carbon Analysis of Aerosol Filter Samples*, DRI SOP 2-204.6, Revised June 2000.

2.2 Modeling Data – Emissions

The Roseville Study developed DPM emission estimates for the 1999-2000 period on each type of locomotive activity within the railyard, and assigned to selected source locations within the yard for purposes of modeling. More detailed and automated procedures have been developed by UPRR in the course of its work supporting the ARB railyard MOU. These detailed procedures have been applied to DPM emissions from locomotive train and service activity data at the Roseville railyard for 1999-2000, 2005, 2006, and 2007 (Ireson, 2008). More recently, the procedures have been applied to calculate NO_x emissions for these four one-year periods. The same procedures will also be applied to generate 2008 NO_x and DPM estimates. These emissions estimates will be processed in the same manner as those supporting the ARB railyard MOU (e.g., Appendixes A, J, and K of Sierra Research, 2007b) to produce spatially and temporally resolved emission inputs for modeling. The emissions estimates reflect changes over time in the amount of freight handled, the number and types of trains, the distribution of locomotive models and emission control technologies, locomotive service and maintenance activity, and fuel quality.

For the four RRAMP monitoring periods, monthly, day of week, and diurnal activity profiles will be developed for train activity. Service and shop release data for these periods will be used to develop monthly activity profiles for each year, and they will be examined to determine if defensible higher resolution temporal activity profiles can be developed.

2.3 Meteorological Data

Meteorological data collected at the Roseville rail yard during the four RRAMP study periods will be assembled. The data were collected with sensors on a tower inside the yard that complied with PSD regulatory requirements. Wind speed and direction data were collected at each of the four monitoring sites. The meteorological and related data will be preprocessed to produce the required inputs for both ISCST3 and AERMOD. For ISCST3, the meteorological tower wind and temperature data will be organized into the required format using either the PCRAMMET ISCST3 preprocessor program or another approach that may better represent atmospheric stability and mixing heights, depending on the availability of concurrent data for sky cover. Concurrent upper air data from Oakland International Airport will be used in this preprocessing.

Inputs for AERMOD will be generated using the AERMET preprocessor program. This preprocessing will follow the protocol developed for modeling conducted under the ARB-UPRR MOU (Sierra Research, 2007a) with the exception that the primary source of surface meteorological data will be the RRAMP tower rather than a nearby National Weather Service station. Meteorological tower data include temperature, delta T (Δ_T , temperature difference between 2 m. and 10 m.), wind speed and direction, sigma theta (σ_θ , variability in wind direction), relative humidity, barometric pressure, and solar radiation. These data will be used in conjunction with concurrent Oakland International

Airport upper air data in AERMET preprocessing. Terrain and land use data will be preprocessed according to the MOU protocol to provide Bowen ratio, surface albedo, and surface roughness inputs for modeling.

Concurrent vector wind data from the ARB Roseville station will be obtained and similarly processed into ISCST3- and AERMOD-ready files. For both sets of surface data, model inputs will be prepared only for the summer RRAMP monitoring periods.

For purposes of model evaluation, the same seven-hour periods (10PM – 5AM PST) used in the RRAMP data analysis (Campbell and Fujita, 2008) will be compared with model predictions. These periods were identified during the RRAMP data analysis as having the most consistent meteorology for detecting upwind-downwind concentration differences presumed to be attributable to rail yard emissions (i.e., light to moderate winds from the southeast).

3. EVALUATION PROTOCOL

3.1 Emission Scenarios

Five emission scenarios will be evaluated: the original 1999-2000 period, and the RRAMP monitoring periods during 2005, 2006, 2007, and 2008. For consistency, all five emission scenarios will be based on the methods described in Ireson (2008).

3.2 Receptors

The modeling domain will consist of a 20 km x 20 km area centered on the rail yard. Within that domain, a fine-resolution Cartesian receptor grid using 50 m spacing will be developed that covers the areas close to the yard, including the locations of the four RRAMP monitoring locations. A coarse-resolution Cartesian receptor grid (200–500 m spacing) will cover the rest of the domain. Discrete receptors will represent the four RRAMP monitoring locations, and a tier of four rows of closely-spaced receptors (i.e., 25 m between rows and between receptors) will be placed along the northwest yard boundary to more precisely determine maximum concentrations that commonly occur near the boundary.

3.3 Meteorological Scenarios

An ISCST3 simulation will be conducted for each emission scenario using the original meteorological scenario in the ARB study (ARB Roseville and McClellan AFB wind data), and a separate ISCST3 run will be made using the corresponding year inputs based on the RRAMP meteorological tower and ARB Roseville wind data. Separate simulations will be conducted with urban and rural dispersion coefficients. AERMOD simulations will be conducted for each emission scenario using AERMET-generated inputs for the corresponding year meteorological data from the RRAMP monitoring tower and the ARB Roseville monitoring station.

3.4 Model Setup and Runs

The base year (1999–2000) emission scenario will be modeled using all of the meteorological scenarios. Each of the 2005, 2006, 2007, and 2008 emission scenarios will be modeled using eight ISCST3 meteorological scenarios—the original Roseville

and McClellan data sets and the concurrent data from the RRAMP meteorological tower and ARB Roseville monitoring station, each using urban and then rural dispersion coefficients. Similarly, each of the four RRAMP emission scenarios will be modeled using two AERMOD meteorological scenarios—the concurrent year RRAMP meteorological tower and ARB Roseville monitoring station inputs.

Output options will be set to predict hourly concentrations at each receptor from each of various groups of sources (e.g., load testing, service and shop idling, ready track and departure yard idling, hump and trim). To assess spatial variability of predictions, period-average receptor grid concentrations for all receptors outside the rail yard boundary will be generated and plotted for selected nightly periods of interest. Comparisons between modeled and monitored concentrations will be based on the aggregate average of the nightly average values for those periods in which quality-assured ambient concentration data are available. A minimum of five hours of quality-assured ambient concentration and meteorological data will be used to develop a nightly data set. Comparisons between ISCST3 and AERMOD scenarios for each year and between years for each model will be made based on period-average concentration patterns (i.e., concentration isopleths).

3.5 Handling of the Air Quality Monitoring Data

To facilitate comparison of monitored and modeled concentrations, the black carbon concentration, measured by aethalometer and the PM_{2.5} concentration measured by the two methods of beta attenuation and thermal optical reflectance will be tabulated side-by-side with concurrent model-predicted concentrations for nightly periods of interest, and for the underlying 1-hour averages during these periods. For the purposes of this comparison, the conversion equations relating estimated DPM to black carbon (BC) as developed in the RRAMP data analysis will be used (Campbell and Fujita, 2008, p. 3-3).

3.6 Comparison of Predictions and Observations

The combined model prediction and RRAMP observation data will be processed to produce a series of plots of predicted concentration difference vs. measured difference between upwind-downwind pairs of RRAMP data. Plots will include scatter plots of predicted and observed concentrations paired in time and space; quantile-quantile plots (ranked and paired in space) of predictions and observations; and means with error bars of all periods of interest for predictions and observations. Linear regression will be used to identify intercepts, slopes, and apparent bias in predictions relative to observations. All comparisons will be based on nightly (seven-hour) averages of model results and monitoring data.

3.7 Comparisons Between Models and Emission Scenarios

Domain-wide predicted concentration isopleths will be developed for each RRAMP period based on modeling results for all times of the day. Statistics will be developed describing these simulation results for receptors outside of the rail yard boundary, and will be compared both between years and between the three modeling approaches (ISCST3-urban, ISCST3-rural, and AERMOD). Statistics will include maxima, spatially averaged concentrations, and land area exposed at and above various concentration levels. If fine receptor grid results suggest that maximum values may be influenced by modeling artifacts (previously observed where model receptors and sources were in close proximity), then spatial averaging to a coarser resolution of 100 m will be used to minimize the potential for misinterpretation of results.

3.8 Documentation and Reporting

The plots described in Sections 3.6 and 3.7 will be assembled and reviewed for consistency and plausible interpretations. To the extent that a specific factor is critical to the findings (e.g., the use of ARB's Roseville monitoring station vector-averaged wind data versus use of scalar-averaged wind data from the on-site meteorological tower, or use of rural versus urban dispersion coefficients), further analysis of related inputs (e.g., stability roses for periods of interest) may be conducted. A brief technical memorandum will be prepared to present these plots, related analyses, and a summary of findings regarding possible bias in the Roseville modeling,

To the extent possible, the memorandum will discuss the implications of observed potential bias in similar modeling for other rail yards, and will identify possible methods to minimize, or at least identify and estimate, the magnitude of such potential biases in similar modeling studies.

4. REFERENCES

ARB (2004). "Roseville Rail Yard Study," California Air Resources Board, Sacramento, CA, October 14, 2004.

Campbell, D. E., and E. M. Fujita (2008). "Roseville Rail Yard Air Monitoring Project (RRAMP) – Third Annual Report, Review and Summary of Year 3 (2007) Data," Desert Research Institute, Reno, NV, July 21, 2008.

Ireson, R. G. (2008). "Assessment of Long-Term Trends in Emissions, Locomotive Activity, and Control Measure Effectiveness at the Union Pacific J. R. Davis Railyard," Robert G. Ireson, Ph.D., Air Quality Management Consulting, Greenbrae, CA, May 16, 2008.

Sierra Research (2007a). "Modeling Protocol, ARB/Railroad Statewide Agreement, Union Pacific Railroad Company," Sierra Research, Inc., Sacramento, CA, August 2006 (revised February 7, 2007).

Sierra Research (2007b). "Toxic Air Contaminant Emissions Inventory and Dispersion Modeling Report for the Commerce Rail Yard, Los Angeles, California," Sierra Research, Inc., Sacramento, CA, February 23, 2007.

ATTACHMENT #4

SUBJECT:

Letter to CARB for a HRA Update
For the Roseville Railyard



July 8, 2009

Mr. James Goldstene
Executive Officer
California Air Resources Board
P.O. Box 2815
Sacramento, CA 95812

Subject: Request for Updated Health Risk Assessment of Roseville Rail Yard

Dear Mr. Goldstene:

In the year 2000, Placer County Air Pollution Control District (PCAPCD) requested help from the ARB in determining the potential public health risks from diesel PM emissions due to locomotive activities at the J. R. Davis Yard in Roseville, California. ARB undertook this project which resulted in the release in October 2004 of ARB's Roseville Rail Yard Study. This study utilized the rail yard activity data for December 1999 through November 2000 and estimated emissions, PM concentrations, and cancer risk to the surrounding population. This study became the prototype for the later rail yard HRAs conducted through the ARB/Railroad Statewide Agreement of 2005.

This Roseville Rail Yard Study was the foundation for a 2004 agreement between Union Pacific Railroad (UPRR) and PCAPCD for mitigation measures and air monitoring at the rail yard. One provision of the agreement was for UPRR to report progress in reducing diesel PM from the yard. In a report to PCAPCD in June 2008, UPRR detailed yard activity and resulting emissions in 2007 and compared this with 2000 activity used in the Roseville Rail Yard Study. The 2007 analysis incorporated the more comprehensive data collection that evolved through later rail yard studies performed under the Statewide Agreement. The 2000 data was also re-analyzed using the later methods. Total emissions of diesel PM in 2007 appear to be 22% lower than those of 2000.

Another provision of the PCAPCD/UPRR agreement was to set up and operate a number of air monitoring stations at the boundaries of the rail yard. These stations were located in two pairs of upwind and downwind positions oriented in line with the predominant summertime wind direction. The purpose of this arrangement was to determine the increase in pollutants as the air moved across the rail yard. Measurements of NO_x, NO, PM_{2.5} and black carbon were recorded during the summer night-time hours (time when the wind direction is aligned with the monitoring station pairs). Data has been recorded for the summers of 2005 through 2008. The stations also recorded weather data at the rail yard.

A new project has been initiated by UPRR, PCAPCD, and Sierra Research to correlate the 2007 rail yard activity and resulting calculated emissions with the monitoring station data using the on-site weather data. The project will develop concentration isopleths for each year of monitoring data using three modeling approaches (ICSCT3-urban, ISCST3-rural, and AERMOD). This correlation effort will be a rare opportunity to compare the rail yard emissions model with actual measured data.

Assuming this project shows reasonable correlation of the modeled emissions with the measured emissions, we would request that ARB take the modeled emission concentration profiles and extend the analysis to a health risk assessment. The value in this effort will be to update the risk analysis from 2000 year activity to 2007 year activity to show the reduction (presumably) in health risk due to the mitigation efforts. The original Roseville Rail Yard Study has been widely disseminated in the Roseville community and this would be an opportunity to demonstrate some positive results from the efforts of UPRR, ARB, and PCAPCD in reducing health risk from this rail yard.

If you, or your staff, have any questions regarding this request, please contact me at (530) 745-2321.

Sincerely,



Thomas J. Christofk
Air Pollution Control Officer

Cc: Michael Scheible
Daniel Donohue
Robert Fletcher
Harold Holmes



MEMORANDUM

TO: The Board of Directors, Placer County Air Pollution Control District

FROM: Jane Bailey, Administrative Services Division Manager

AGENDA DATE: August 20, 2009

SUBJECT: Proposed Final Budget FY 2009-10 Staff Report (Action/Public Hearing)

Action Requested:

- 1) Conduct a Public Hearing regarding the District's Fiscal Year 2009-10 Proposed Final Budget.
- 2) Direct Staff to include or exclude annual Consumer Price Index (CPI) adjustment to permit fees.
- 3) Adopt Resolution #09-09, thereby approving the District's budget for Fiscal Year 2009-10.

Background:

The District Budget is organized into three separate funds, each with its own revenue and expenditure accounts. The three funds are briefly described below:

- **The Operations Fund** is used for the purpose of conducting the business of the District not covered by the other two funds. The revenue sources for this fund are: permit fees, fines, state subvention, interest derived from these sources, Per Capita Assessment, co-funding of projects/programs from the private sector and administrative fees. The Non-Tort Defense Fund is a sub-fund of the Operations Fund and is set aside for the legal defense of the District. Another sub-fund for contingencies in case of unforeseen events was established in the FY 2007-08 budgetary process and funded with \$75,000. The District would like to grow this sub-fund, titled the Reserve Fund, to between 5 and 10% of the budget. In fiscal year 2009-10, the District is proposing to set aside an additional \$25,000 for this purpose. Fifteen thousand of the \$25,000 allocation to the Reserve Fund will be used to establish funding for replacement vehicles in the District's Fleet. The District plans to set aside \$15,000 a year for vehicle replacement and begin replacing vehicles commencing in the FY 2011-2012. In the beginning of FY 2007-08, the District received settlement funds from the Sierra Pacific Industries (SPI) case brought by the State of California's District Attorney on behalf of several air districts. The District received \$2,742,500 from SPI as the District's share of the settlement. The District also received \$700,000 for recovery of litigation and case development costs. With the help of the Placer County Auditor's Office, the District set aside those funds in a sub-fund to the Operations Fund in FY2007-08. These funds are held in an interest bearing account and the interest from those funds are proposed to be used for specific projects, programs and normal operations which are detailed in the proposed budget for FY 2009-10.
- **The DMV Fund** is a restricted fund that is to be used to reduce mobile source emissions and to carry out related California Clean Air Act activities, such as: air monitoring, air modeling, emission inventory assessment and identification, control strategies, air quality planning, public information, and direct incentives to reduce mobile source emissions. The DMV Fund has four sources of revenue –

DMV (AB 2766 and AB 923) Fees, also referred to as Vehicle Surcharge Fees, interest derived from these funds, a portion of the Placer County Planning Department application fees that offset work done by the Placer County Air Pollution Control District's Planner and co-funding from outside agencies and the private sector for projects that meet the DMV approved project/program criteria. This work falls under the guidelines established for the expenditures to the DMV Fund. Therefore, the revenue from the Planning Department's application fees and the co-funding offset the cost of the planners' salary to the DMV Fund and the contracted support to the DMV projects. In April 2005, the Vehicle Surcharge Fees were increased from \$4.00 to \$6.00 per vehicle in Placer County per AB 923 authorizing legislation. The District began receiving the increase in June 2005.

- **The Mitigation Fund** is a restricted fund that is used only for the purposes described in each individual mitigation plan. The revenue sources for this fund come from mitigation plans approved at the discretion of the Land Use Authorities. Because the District cannot predict which of these plans will be approved, the revenue for this fund is not budgeted. After the revenue is received, a budget revision will be prepared and presented to the Board.

Discussion:

The purpose of the following discussion of the actual year-end balances for each of the funds in FY 2008-09 is to establish the beginning fund balances for each of the funds in the proposed budget for FY 2009-10.

Fiscal Year 2008-09 Actual End of Year Fund Balances:

(1) Operation Fund Balance FY 2008-09:

The actual Operation Fund Balance for FY 2008-09 is \$624,520. This is \$267,209 more than budgeted for in FY 2008-09 for the following reasons:

Revenue Analysis:

- The permit fees generated \$68,964 more revenue because there were more renewed permits and more initial permits processed than were budgeted. This also included a CPI increase of 3.3% or \$27,600.
- Revenue from the State was \$32,473 higher, mostly due to the Portable Equipment Registration Program (PERP).
- Revenue from burn permits and hearing board fees and interest were higher than budgeted by \$20,180.
- Fines and penalties generated \$289,827 more in revenue than was budgeted.
- Government Aid for Project Funding was down \$63,804 due to the project not being finished and therefore the District was unable to bill for reimbursement.

Expenditure Analysis:

- Salary and Benefits were \$64,304 lower because of extra-help personnel not being used as much as was budgeted.
- Supplies and Services were more than budgeted by \$99,077.

- Special Projects costs were more by \$45,660 as compared to the budget for FY 2008-09.

(2) DMV Fund Balance for FY 2008-09:

The DMV Fund balance for FY 2008-09 is \$372,400. This is \$297,838 more than budgeted for in FY 2008-09 for the following reasons:

Revenue Analysis:

- The District received \$130,388 less in Vehicle Registration Surcharge fees for FY 2008-09 because the actual number of vehicle registrations in Placer County for FY 2008-09 was less than projected.
- Interest received was \$121,133 lower than budgeted for FY 2008-09.
- The District received \$21,448 less in Land & Environmental Use Fees than was budgeted in FY 2008-09.

Expenditure Analysis:

- There were savings of \$191,789 in the salary for the Planning and Air Monitoring Section.
- Supplies and Services were down by \$273,450 in FY 2008-09 as compared to budget because not all projects were completed at the close of FY 2008-09.
- Clean Air Grants (CAG) were less than budgeted in FY 2008-09 by \$105,568 because there were less funds available for CAG funding from DMV sources.

(3) Mitigation Fund Balance for FY 2008-09:

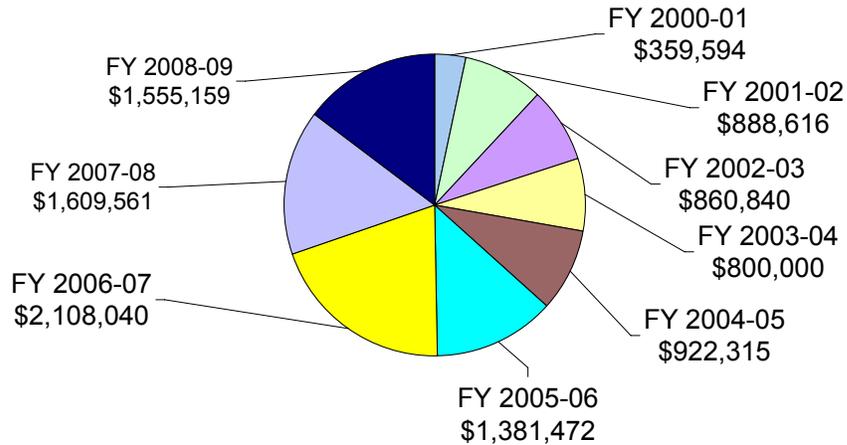
The Mitigation Fund Balance for FY 2008-09 is \$80,939 higher than budgeted because:

The mitigation fees are dependent on the approval of the land use authority for any given project and cannot be predicted from one fiscal cycle to another. Mitigation Revenue is therefore not included in the budget. The ending Mitigation Fund Balance of \$96,714 includes the actual mitigation fees that had been collected to the end of June 30, 2008. These mitigation fees will be available for projects that are determined to fall within the guidelines provided by the District's Board approved policy on Land Use Mitigation Fees.

See the following pie chart showing the total CAGs awarded by the District since July 1, 2000. The District awards Mitigation Funds that have not been committed for specific use in a development agreement to the Clean Air Grant Program. ¹

¹ The total Clean Air Grants awarded for Fiscal Year 2008-09 was \$1,555,159. The grand total of all Clean Air Grants awarded by Placer County Air Pollution Control District since July 1, 2000 is \$10,485,597. With the proposed \$800,000 in Clean Air Grants for Fiscal Year 2009-10, the District will reach the 11.3 million dollar mark. *This is a total of 41.4% of all revenue received by the District being used for Clean Air Grants or 66.97% of DMV Fund revenue used for DMV Clean Air Grants.*

PLACER COUNTY AIR POLLUTION CONTROL
 CLEAN AIR GRANTS
 FOR FISCAL YEARS 2000-01, 2001-02, 2002-03, 2003-04, 2004-05, 2005-06, 2006-07,
 2007-08 and 2008-09
TOTAL DOLLARS GRANTED FOR 9 YEAR PERIOD = \$10,485,597



Proposed Final Budget for Fiscal Year 2009-10:

The District offers the following analysis of the change between the *Proposed Final Budgets* for FY 2009-10 (one without the annual CPI adjustment to the permit fees -- Budget A; and one with the annual CPI adjustment – Budget B) and the *Approved Budget* for FY 2008-09:² See the Comparison Chart for Budget “A” and Budget “B” on the following page.

Proposed Revenue: \$583,038 net decrease in revenue over the approved FY 2008-09 Budget (\$4.25 million budgeted in FY 2008-09 to a \$3.67 million in the Proposed Final Budget “A” **without** the CPI fee adjustment for FY 2009-10). In Budget “A” this is a 13.71% proposed decrease in revenue. Or \$556,492 net decrease over the approved FY 2008-09 Budget (\$4.25 million budgeted in FY 2008-09 to a \$3.7 million in revenue in the Proposed Final Budget “B” **with** the CPI fee adjustment). In Budget “B” this is a 13.08% proposed decrease in revenue. **See the Charts on pages 11 and 12.**

²The Approved Budget for FY 2008-09 has been revised two times since the original budget for that fiscal year. Once to increase Mitigation Revenue by \$100,067; and the second time was to show the \$89,000 support from the County for the services provided by the District on the Department of Energy Biomass Utilization Project.

COMPARISON OF THE PROPOSED FINAL BUDGET "A" AND "B" FOR FY 2009-10.

	Recap of Proposed Budget "A" FY 2009-10*	Recap of Proposed Budget "B" FY 2009-10*	Difference	Percent Change
Funds Available:				
Permit Fees	795,758	821,964	(26,206)	-3.19%
Fines & Penalties	50,100	50,100	-	0.00%
Interest	275,000	275,000	-	0.00%
DMV (AB2766, AB923)	2,101,000	2,101,000	-	0.00%
State-wide PERP	25,000	25,000	-	0.00%
State Subvention	97,000	97,000	-	0.00%
Other Government Assistance	110,339	110,339	-	0.00%
Mitigation Fees	0	-	-	0.00%
Burn / Land / Other Permits	60,009	60,349	(340)	-0.56%
Per Capita Assessment	146,023	146,023	-	0.00%
Miscellaneous	10,200	10,200	-	0.00%
Private Sector - Project Participation	-	-	-	0.00%
TOTAL REVENUE	3,670,429	3,696,975	(26,546)	-0.72%
Operations Fund Carry-Over from the Previous FY	459,520	459,520	-	0.00%
Non-Tort Defense Fund Carry-Over from the Previous FY	90,000	90,000	-	0.00%
Reserve (Contingency) Carry-Over from the Previous FY	75,000	75,000	-	0.00%
DMV (AB2766, AB923) Carry-Over from the Previous FY*	372,400	372,400	-	0.00%
Mitigation Fund Carry-Over from the Previous FY	96,713	96,713	-	0.00%
TOTAL FUND CARRY OVER	1,093,633	1,093,633	-	0.00%
TOTAL FUNDS AVAILABLE	4,764,062	4,790,608	(26,546)	-0.55%
Fund Usage:				
Salary & Benefits	2,205,022	2,205,022	-	0.00%
Supplies & Services	1,041,653	1,041,653	-	0.00%
Clean Air Grants & Incentive Programs	1,166,125	1,166,125	-	0.00%
Equipment	-	-	-	-
TOTAL EXPENSE	4,412,800	4,412,800	-	0.00%
Operations Ending Fund Balance	125,654	152,199	(26,546)	-17.44%
Non-tort Defense Ending Fund Balance	90,000	90,000	-	0.00%
Reserve (Contingency) Ending Fund Balance	100,000	100,000	-	0.00%
DMV (AB2766, AB923) Ending Fund Balance*	1,020	1,020	-	0.00%
Mitigation Ending Fund Balance	34,589	34,589	-	0.00%
TOTAL ENDING FUND BALANCE	351,263	377,808	(26,545)	-7.03%
TOTAL FUND USAGE	4,764,062	4,790,608	(26,546)	-0.55%

*Includes co-funding for approved DMV projects

***Budget "A" does not include the annual CPI adjustment of 3.4% -- Budget "B" does.**

For ease of understanding, only the comparison of the net decrease in revenue and expenditures for Budget "A" follows. The only differences between Budget "A" and "B" are in permit revenues and the "Operations Ending Fund Balance"- both areas are increased by \$26,546 -- the annual CPI adjustment of 3.4%. Also note that the difference between both proposed budgets is a little more than a half of one percent. See the chart above.

The net decrease specifics of the revenue analysis for Budget "A" are below and follow the chart on page 11 of this memo:

- In Budget "A" the District is presenting the Proposed Budget for FY 2009-10 without the Board approved annual CPI adjustment to the permit fees. This results in a increase of \$25,346 in permit revenue over the Final Budget for FY 2008-09. It is a decrease of \$26,546 in permit revenue if the CPI increase is not implemented by the Board. **The District is seeking direction on whether or not the Board desires the CPI annual permit fee adjustment.** The District takes a conservative approach in predicting newly permitted facilities (initial permits) by estimating only 75% of the

current amount of initial permits. Because the District is aware of a slight decline of initial permit applications, the District's proposal for the budgeted permit revenue in FY 2009-10 has been increased to the current amount of permanent permit revenue plus the rollover of initial permits to permanent permits. The District fully expects the growth of permitted sources to level off and takes the cautious approach in predicting the amount of revenue that will be generated.

- "Other Government Assistance" is decreased by \$215,573 from the Final Budget in FY 2008-09. This is because these funds are from project related grants and the applied for funds have not been granted as of the date of this proposed budget. The District will revise the FY 2009-10 Budget if these funds are awarded during this fiscal cycle.
- As discussed on page 2 of this memo under the Mitigation Fund, "Because the District cannot predict which of these plans will be approved, the revenue for this fund is not budgeted. After the revenue is received, a budget revision will be prepared and presented to the Board." This is the reason that the Mitigation Fees are not budgeted and shows a decrease of \$100,067 between the Proposed Budget for FY 2009-10 and the approved FY 2008-09 Budget.
- A conservative estimate of revenue generated by the other permits and miscellaneous other revenue is proposed to be approximately \$26,519 less than budgeted in FY 2008-09.
- The proposed decrease in the Per Capita Assessment is 10% or \$16,225 lower than the budgeted amount in FY 2008-09.
- A decrease of \$150,000 in revenues from the Private Sector -Project Participation is shown in the chart on page 11 of this staff report. In the FY 2008-09 Budget, the District did a budget revision for funds received from Sierra Pacific Industries (SPI) for \$150,000 and Union Pacific Rail Road (UPRR) for \$30,000. SPI, as part of the negotiated settlement, agreed to fund Supplemental Environmental Projects (SEP). In the FY 2008-09 budget, SPI agreed to fund an additional \$150,000. The SEP funds are being applied to the Biomass Project that both the District and Placer County are spearheading. The SPI contributed SEP funds (\$150,000) in FY 2008-09 that were applied to an MOU with the US Forest Service. The MOU has supported scientific studies by the USFS for forest health, wild fire strategies, and carbon sequestration protocols.

Note that the actual Fund Carry-Over for FY 2009-10 was \$508,424 less than in the previous budget for FY 2008-09. The projected decrease of \$583,038 in revenue for FY 2009-10 plus the actual Fund Carry-Over for FY 2009-10 totals \$1,091,462 less in available funds or a decrease of 18.64%.

Proposed Expenditures: \$995,076 less than the FY 2008-09 budget (18.4% decrease). This decrease is reflected by the decrease in available funds explained in the note above.

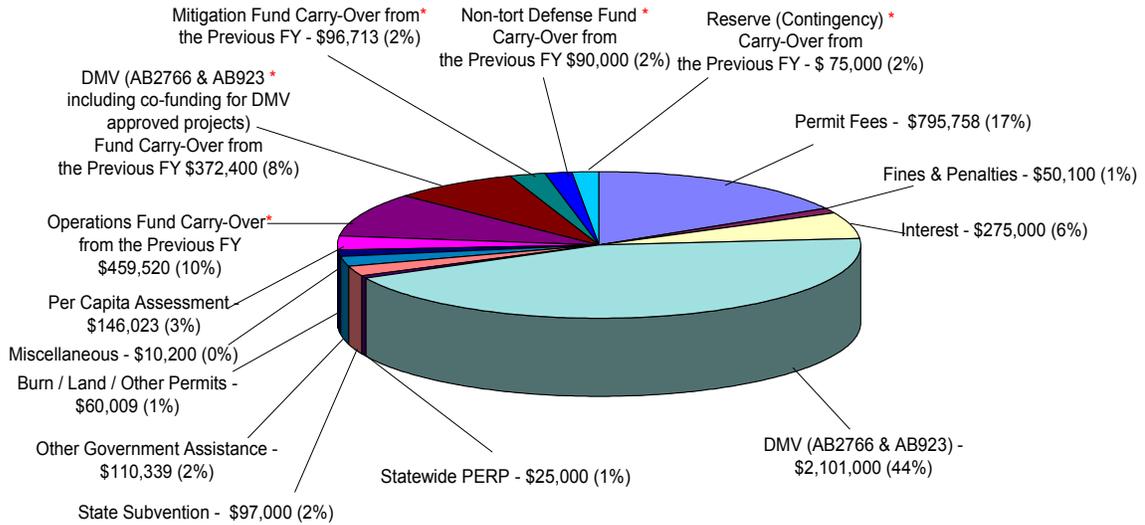
- Proposed Salaries and Benefits are decreased by \$227,102 and are made up of the following.
 1. A \$144,128 decrease in extra-help staffing for the FY 2009-10 Budget. This includes a decrease of 960 hours for an extra-help associate planner. The remainder of the extra-help staff is comprised of the following: 1,000 hours for administrative support and 4,300 hours of air specialist support. This is a reduction of 4,816 hours in extra-help staffing over the FY 2008-09 budget. The extra-help staff will augment the existing staff in doing projects that will end in a foreseeable future and do not warrant the hiring of full-time employees. Extra-help employees do not receive benefits.

2. The negotiated cost of living increase for the existing staff's salaries and the increased cost of the benefits minus the 12 furlough days brings the Salaries and Benefits cost down another \$82,007.
 3. An additional provision of \$967 to fulfill the requirements of the Governmental Accounting Standards Board (GASB) 45 that Districts provide funding for retired personnel benefits that may be incurred in the future. The District has agreed to set aside \$144,967 for Other Post Employee Benefits (OPEB) as required in the actuarial study done for Placer County. The OPEB charges for FY 2009-10 will be determined by a new actuarial done in late calendar year 2009.
- The District is also proposing to set aside an additional \$25,000 for the Reserve (Contingency) Fund. This will reduce the Operations Fund by the same amount so it will not be an increase to the expenditures. See page 10, bullet #2 for one proposed use of the Reserve Fund.
 - In "Professional Services/Temporary" (page 23 of the Proposed Preliminary Budget for FY 2009-10) a decrease of \$159,722 is proposed because the contracted services to support staff for the Biomass project have been encumbered and no new expenditures are needed in FY 2009-10. The District proposes to continue the Technology Assessment Program (TAP) using \$80,000 from the interest derived from the settlement funds. TAP funds will be used to support the development of emerging technologies that achieve air quality goals, to include energy efficiency and emissions reduction projects that may not otherwise be eligible for consideration under the Clean Air Grant Program guidelines.
 - "Professional Services – County" (page 23 of the Proposed Preliminary Budget for FY 2009-10) are proposed to increase by \$42,738 – mostly in County IT charges and a MOU with the County Counsel for services rendered.
 - The "Special Department" expense (page 23 of the Proposed Preliminary Budget for FY 2009-10) is proposed to be about the same as the budget for FY 2008-09 with a small decrease of \$2,200.
 - The proposed net decrease of special "DMV funded projects" (page 26 of the Proposed Preliminary Budget for FY 2009-10) is \$51,940 for the following reasons:
 1. A decrease of \$200,000 in Clean Air Grant funding from the Vehicle Surcharge Fee (AB2766 and AB 923).
 2. An increase in the expenditures of \$152,000 for the ALECS Phase II project of the funds that were collected for the project in FY 2008-09.
 3. A net decrease of \$3,940 for support services to DMV approved projects.
 - The remaining \$7,647 decrease in expenditures is due to the proposed decrease in overhead expenses (i.e., telephone, copying, printing, postage expenses).
 - Mitigation expenditures will be decreased by \$589,202. The District has determined there is \$550,067 less funds available for the CAG program and \$20,134.92 less for the Woodstove Replacement Incentive (WRI) program. Funding for the WRI will be \$60,000 from interest and \$20,000 from the mitigation fund. There is also \$19,000 less in administrative expenditures. As additional Mitigation Funds become available in FY 2008-09 between now and January 2009, a budget revision will be done to apply those funds either to the WRI or the CAG programs.

See the following chart for the sources of revenue and fund usage proposed for Fiscal Year 2009-10 (this pie chart does not include the CPI adjustment to the permit fees):

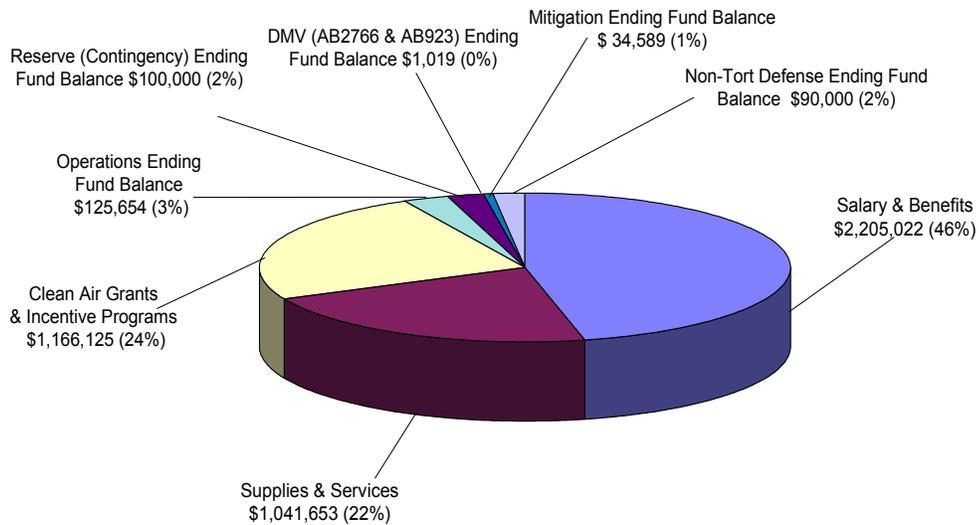
PROPOSED BUDGET FOR FY2009-10

Consolidated Funds Available for FY 2009-10 Proposed Budget Total Funds Available - \$4,764,062



*The total "Fund Carry-Over" from the previous fiscal year is \$1,093,633 (based on actual revenue and expenditures from FY 2008-09).

Consolidated Fund Usage for FY2009-10 Proposed Budget Total Fund Usage - \$4,764,062



The table below provides a brief overview of what the proposed final budget for Fiscal Year 2009-10 will offer.

PLACER COUNTY AIR POLLUTION CONTROL DISTRICT Listing of Programs, Projects and District Enhancements for the PROPOSED BUDGET FOR FY 2009-10		ENCUMBRANCE AVAILABLE IN FY 2009-10
Name:	Amount	Amount
Monterey AQMD MOU - Air Toxic Program Support	-	6,380
Grab Sampling Incident Response (Entek Contract)	-	7,000
Indirect Source Rule Analysis/Rule Development PH II - Jones & Stokes Contract	-	15,192
UPRR Air Monitoring Projects (Richard Countess Contract)	-	16,944
UPRR Data Analysis Support - DRI Contract	-	5,369
Tahoe Inspections - NSAQMD MOU	1,133	4,467
CDRA Administrative Support	2,500	
Computer Replacements (3 desktops)	4,300	
Mowdown (Mower replacement program)	5,000	
Air Monitoring Projects - new Auburn site development (Dewitt Center)	5,000	
Fiscal Audit	7,000	
CAP to CAP attendance - APCO and 1 director	7,000	
Public Relations (Biomass Project) - Endicott Contract	10,000	
Electronic Document Handling Software Support - Mori Contract	10,000	
Spare the Air Program (#5) - CMAQ Match	10,781	
Public Outreach/Public Relations Assistance - Endicott Contract	896	14,104
AG Dept MOU - Gasoline Dispensing Facility Inspections	15,555	
Participation Funding w/ Other Air Districts	20,000	
County DA MOU - enforcement services	20,000	
TIAX Contract (Mobile Source Analysis Support)	20,000	17,963
Rail Yard Emissions Analysis	35,000	
Rule Development (Air Permitting Specialist Contract)	38,914	2,670
Legal Support	37,200	
TSS Associates Contract (Biomass Project Support)	40,000	5,272
Air Permitting Specialists Contract (Operations Support)	80,010	25,887
Database Programming Software Support	55,000	
County IPSS (Data Processing) Charges	75,000	
Technology Assessment Program (TAP)	80,000	75,000
Locomotive Emission Hood Project - Phase II Test	252,000	
Extra-Help - Administrative Support/1,000 hours	16,924	
Extra-Help - Permitting/Inspection Specialist/3,330hours	98,706	
Extra-Help - Continuing Enforcement Specialists/750 hours	21,156	
Extra-Help - Planning Support/1,180 hours	48,275	
Less Furlough Savings	(59,349)	
PPEO/County Negotiated Salary and Benefits Increase - 18 FTEs	29,338	
GASB 45 - Provision for Post Employment Benefits	144,967	
Core of the Operational Budget (Minus the above projects)	1,171,468	
Core of the DMV Fund Budget (Minus the above projects and \$900,000 in CAGs)	1,191,899	
Core of the Mitigation Fund Budget (Minus the above projects)	3,000	
Woodstove Replacement Incentive Program*	114,125	
Clean Air Grants for 2009*	800,000	2,411,768
TOTAL	4,412,799	2,608,016

*The Clean Air Grants and Incentive Programs will be increased by available Mitigation Funds in February 2010. Because the District can not yet determine the amount that will be available from the Mitigation Plans, they are not included in this budget.

Summary:

The Proposed Budget for FY 2009-10 allows the District to cover its operational costs, maintain services and program delivery, and increase selected critical resource needs. (See the pie charts on page 8 of this memo for fund usage.)

With this proposed budget the following scenario is expected:

- An Operations Ending Fund Balance of \$315,654 at June 30, 2010 (this includes the Non-Tort Defense funding of \$90,000 and a Reserve Fund of \$100,000 for contingencies).
- Of the \$25,000 increase to the Reserve Fund, the District proposes to set aside \$15,000 of this reserve per fiscal year, commencing in FY 2011-12, to purchase a new fleet vehicle every 3 years. Since the District fleet is no longer owned by Placer County and the District is *not paying replacement costs to the County*, the District has a need to set aside funds for the replacement of District Fleet vehicles.
- The DMV Fund will be spent down to \$1,019, as previously planned, while maintaining the Clean Air Grant Awards and DMV approved projects at 67% of the DMV vehicle surcharge.
- The Mitigation Fund will be spent down to \$34,589 (this does not reflect the revenue from mitigation plans that have not yet been approved by the Land Use Authorities). Prior to the 2010 Clean Air Grant Program and the Spring 2010 Woodstove Replacement Incentive (WRI) Program, the District will present a budget revision to the Board requesting that the available mitigation funds be allocated to the WRI program and the Clean Air Grant Program.
- This proposed preliminary budget for FY 2009-10 provides the following to sustain or enhance the existing programs.
 1. Technological Assessment Program (TAP) - See page 7 of this memo for a description of this program, second bullet -- \$80,000.
 2. Biomass Project – established at the end of FY 2007-08 but to be carried out in FY 2008-09 and beyond. See page 6 of this memo, fifth bullet, for a discussion on SEP funding from Sierra Pacific Industries. -- \$66,150.
 3. The Woodstove Replacement Incentive (WRI) Program – See page 7, seventh bullet for a discussion on the funding of this program. Mitigation funds for this program are initially funded at \$114,125. (Before the spring program of 2010, available mitigation revenue will be allocated to the WRI program. The amount is yet to be determined). Additional revenue for this program is derived from the interest on the SPI settlement funds. -- \$60,000.
 4. The ALECS – Phase II test (Hood) Project –The total cost of this project is over 1.5 million dollars with UPRR, other air districts, the City of Roseville, the City of Commerce and the private sector co-funding this project. The District is applying \$100,000 (along with the \$152,000 from the above mentioned sources)³ of the DMV Fund towards this project (see page 26 of the Proposed Budget for FY 2009-10).
 5. Roseville Railyard Air Monitoring Project (RRAMP) -- see page 26 of the Proposed Budget for FY 2009-10. The District will finalize this project with the encumbered funds for DRI

³ The funding sources are: South Coast Air Quality Management District - \$50,000, Sac-Metro Air Quality Management District - \$25,000, Bay Area Air Quality Management District - \$50,000, City of Commerce - \$20,000 and City of Roseville - \$7,000.

and Richard Countess. Another \$35,000 is being proposed for a final Railyard Emission Modeling Analysis to validate the dispersion model. Union Pacific Rail Road will contribute and additional \$15,000 which is not yet included in this budget.

6. Various ongoing DMV approved projects -- see page 26 of the Proposed Budget for FY 2009-10. These smaller projects total \$97,695.
7. Clean Air Grants (CAG) -- see page 26 of the Proposed Budget for FY 2009-10. The District is funding \$800,000 for the CAG program from the DMV Fund. Additional funding will come from the Mitigation Fund for an amount yet to be determined. See the discussion on page 7, seventh bullet of this memo. The District expects to fund at least another \$500,000 for Clean Air Grants from the Mitigation Fund. A budget revision will be submitted for approval in funding the Clean Air Grants prior to the 2010 CAG Program (at the February 2010 Board Meeting).

The charts following give a quick snapshot of the differences between the Proposed Final Budget "A" and "B" for FY 2009-10 and the Approved Final Budget for FY 2008-09:

COMPARISON OF THE PROPOSED FINAL BUDGET "A" FOR FY 2009-10 TO THE APPROVED FINAL BUDGET FOR FY 2008-09

	Recap of Proposed Budget "A" FY 2009-10	Recap of Final Budget FY 2008-09	Difference	Percentage Change
Funds Available:				
Permit Fees	795,758	770,412	25,346	3.29%
Fines & Penalties	50,100	50,100	-	0.00%
Interest	275,000	375,000	(100,000)	-26.67%
DMV (AB2766, AB923)	2,101,000	2,101,000	-	0.00%
Statewide PERP	25,000	25,000	-	0.00%
State Subvention	97,000	97,000	-	0.00%
Other Government Assistance	110,339	325,912	(215,573)	-66.14%
Mitigation Fees		100,067	(100,067)	-100.00%
Burn / Land / Other Permits	60,009	86,528	(26,519)	-30.65%
Per Capita Assessment	146,023	162,248	(16,225)	-10.00%
Miscellaneous	10,200	10,200	-	0.00%
Private Sector - Project Participation	0	150,000	(150,000)	-100.00%
TOTAL REVENUE	3,670,429	4,253,467	(583,038)	-13.71%
Operations Fund Carry-Over from the Previous FY	459,520	461,305	(1,785)	-0.39%
Non-tort Defense Fund Carry-Over from the Previous FY	90,000	90,000	-	0.00%
Reserve (Contingency) Carry-Over from the Previous FY	75,000	50,000	25,000	50.00%
DMV (AB2766, AB923) Carry-Over from the Previous FY*	372,400	473,717	(101,317)	-21.39%
Mitigation Fund Carry-Over from the Previous FY	96,713	527,035	(430,322)	-81.65%
TOTAL FUND CARRY OVER	1,093,633	1,602,057	(508,424)	-31.74%
TOTAL FUNDS AVAILABLE	4,764,062	5,855,524	(1,091,462)	-18.64%
Fund Usage:				
Salary & Benefits	2,205,022	2,432,124	(227,102)	-9.34%
Supplies & Services	1,041,653	1,263,424	(221,771)	-17.55%
Clean Air Grants & Incentive Programs	1,166,125	1,712,327	(546,202)	-31.90%
Equipment	-	-	-	-
TOTAL EXPENSE	4,412,799	5,407,875	(995,076)	-18.40%
Operations Ending Fund Balance	125,654	192,311	(66,657)	-34.66%
Non-Tort Defense Ending Fund Balance	90,000	90,000	-	0.00%
Reserve (Contingency) Ending Fund Balance	100,000	75,000	25,000	33.33%
DMV (AB2766 & AB923) Ending Fund Balance*	1,020	74,562	(73,542)	-98.63%
Mitigation Ending Fund Balance	34,589	15,776	18,813	119.25%
TOTAL ENDING FUND BALANCE	351,263	447,649	(96,386)	-21.53%
TOTAL FUND USAGE	4,764,062	5,855,524	(1,091,462)	-18.64%

*Includes co-funding for approved DMV projects

COMPARISON OF THE PROPOSED FINAL BUDGET "B" FOR FY 2009-10 TO THE APPROVED FINAL BUDGET FOR FY 2008-09

Funds Available:	Recap of Proposed Budget "B" FY 2009-10	Recap of Final Budget FY 2008-09	Difference	Percentage Change
Permit Fees	821,964	770,412	51,552	6.69%
Fines & Penalties	50,100	50,100	-	0.00%
Interest	275,000	375,000	(100,000)	-26.67%
DMV (AB2766, AB923)	2,101,000	2,101,000	-	0.00%
Statewide PERP	25,000	25,000	-	0.00%
State Subvention	97,000	97,000	-	0.00%
Other Government Assistance	110,339	325,912	(215,573)	-66.14%
Mitigation Fees		100,067	(100,067)	-100.00%
Burn / Land / Other Permits	60,349	86,528	(26,179)	-30.25%
Per Capita Assessment	146,023	162,248	(16,225)	-10.00%
Miscellaneous	10,200	10,200	-	0.00%
Private Sector - Project Participation	-	150,000	(150,000)	-100.00%
TOTAL REVENUE	3,696,975	4,253,467	(556,492)	-13.08%
Operations Fund Carry-Over from the Previous FY	459,520	461,305	(1,785)	-0.39%
Non-tort Defense Fund Carry-Over from the Previous FY	90,000	90,000	-	0.00%
Reserve (Contingency) Carry-Over from the Previous FY	75,000	50,000	25,000	50.00%
DMV (AB2766, AB923) Carry-Over from the Previous FY*	372,400	473,717	(101,317)	-21.39%
Mitigation Fund Carry-Over from the Previous FY	96,713	527,035	(430,322)	-81.65%
TOTAL FUND CARRY OVER	1,093,633	1,602,057	(508,424)	-31.74%
TOTAL FUNDS AVAILABLE	4,790,608	5,855,524	(1,064,916)	-18.19%
Fund Usage:				
Salary & Benefits	2,205,022	2,432,124	(227,102)	-9.34%
Supplies & Services	1,041,653	1,263,424	(221,771)	-17.55%
Clean Air Grants & Incentive Programs	1,166,125	1,712,327	(546,202)	-31.90%
Equipment	-	-	-	-
TOTAL EXPENSE	4,412,800	5,407,875	(995,075)	-18.40%
Operations Ending Fund Balance	152,199	192,311	(40,112)	-20.86%
Non-Tort Defense Ending Fund Balance	90,000	90,000	-	0.00%
Reserve (Contingency) Ending Fund Balance	100,000	75,000	25,000	33.33%
DMV (AB2766 & AB923) Ending Fund Balance*	1,020	74,562	(73,542)	-98.63%
Mitigation Ending Fund Balance	34,589	15,776	18,813	119.25%
TOTAL ENDING FUND BALANCE	377,808	447,649	(69,841)	-15.60%
TOTAL FUND USAGE	4,790,608	5,855,524	(1,064,916)	-18.19%

*Includes co-funding for approved DMV projects

Recommendation:

The District recommends the approval of Resolution #09-09, thereby adopting the District's budget for Fiscal Year 2009-10. The District is also requesting to be directed as to which budget, Budget "A" or "B" for FY 2009-10, the Board directs.

Attachment #1: Resolution #09-09

Enclosure #1: Proposed Final Budget "A" & "B" Fiscal Year 2009-10

ATTACHMENT #1

SUBJECT:

Resolution #09-09

1 **BEFORE THE BOARD OF DIRECTORS**
2 **PLACER COUNTY AIR POLLUTION CONTROL DISTRICT**
3 **STATE OF CALIFORNIA**

4
5 **RESOLUTION NO: 09-09**

6
7 **In the matter of:** Adoption of the Placer County Air Pollution Control District's Fiscal Year
8 2009-10 Final Budget.

9
10 The following **RESOLUTION** was duly passed by the Board of Directors, Placer County Air
11 Pollution Control District, at a regular meeting held **August 20, 2009**, by the following vote:

12
13 Ayes: Holmes, M. _____ Ucovich _____ Weygandt _____ Holmes, J. _____ Barkle _____

14 Nakata _____ Hill _____ Uhler _____ Allard _____

15 Noes: Holmes, M. _____ Ucovich _____ Weygandt _____ Holmes, J. _____ Barkle _____

16 Nakata _____ Hill _____ Uhler _____ Allard _____

17 Abstain: Holmes, M. _____ Ucovich _____ Weygandt _____ Holmes, J. _____ Barkle _____

18 Nakata _____ Hill _____ Uhler _____ Allard _____

19
20
21
22
23 Signed and approved by me after its passage.

24
25 _____ Chairperson

26
27 Attest:

28
29 _____ Clerk of said Board

1 **WHEREAS**, on June 11, 2009 the District held a Public Hearing for the exclusive purpose of
2 reviewing its budget and providing the public with an opportunity to comment upon the proposed
3 District budget, as required by Health and Safety Code Section 40131 (a)(3); and

4
5 **WHEREAS**, The District made available to the public at least 30 days prior to the June 11,
6 2009, public hearing, a summary of the proposed budget, as required by Health and Safety Code
7 Section 40131(a)(1); and

8
9 **WHEREAS**, The District provided public notice and direct mailings to persons subject to
10 District fees in the preceding year at least 30 days in advance of the scheduled public hearing on
11 June 11, 2009, as required by Health and Safety Code Section 40131(a)(2); and

12
13 **WHEREAS**, on August 20, 2009, the District Board held an appropriately noticed public
14 hearing for the purpose of considering and adopting the District budget for Fiscal Year 2009-10;
15 and

16
17 **WHEREAS**, consideration of the final proposed budget has been made before a public hearing

18
19 **IT IS THEREFORE RESOLVED** that the Placer County Air Pollution Control District's
20 Board of Directors hereby adopts the proposed budget as the final budget of the Placer County
21 Air Pollution Control District for Fiscal Year 2009-10, as shown in Enclosure #1 of the Staff
22 Memorandum on the Fiscal Year 2009-10 Budget.

ENCLOSURE #1

SUBJECT:

Proposed Final Budget FY 2009-10



MEMORANDUM

TO: Board of Directors, Placer County Air Pollution Control District

FROM: Todd K. Nishikawa, Manager, Compliance and Enforcement

AGENDA DATE: August 20, 2009

SUBJECT: Adoption of Amended Rule 245, Surface Coating of Metal Parts and Products (Public Hearing/Action)

Action Requested:

- 1) Conduct a Public Hearing regarding the proposed adoption of amended Rule 245, Surface Coating of Metal Parts and Products
- 2) Approve and adopt the Findings in the Staff Report, Attachment 2, and approve Resolution #09-10 (Attachment #1), thereby adopting Rule 245, Surface Coating of Metal Parts and Products.

Background:

The District is proposing amendments to Rule 245, Surface Coating of Metal Parts and Products. Rule 245 was originally adopted by the District on December 8, 2009 to meet Reasonably Available Control Technology – State Implementation Plan (RACT SIP) requirements. Amendments are being made to address control guidance contained in U.S. Environmental Protection Agency’s “Control Techniques Guidelines for Miscellaneous Metal and Plastic Parts Coatings” (CTG), September 2008, which was issued too late for incorporation in the December 9, 2008, Rule. This proposed rule amendment fulfills the District requirement to adopt a measure that incorporates CTG guidance within one year of a CTG’s release.

Discussion:

Proposed rule amendments include:

- Elimination of exemption for the coating categories of: aircraft; aerospace vehicles; coils; conformal coatings; strippers used for cured coatings, cured adhesive, and cured inks; conformal coatings; electro coating; hand-lettering; optical anti-reflective; mobile equipment; and vacuum metalizing.

Amendments to Rule 245, Surface Coating of Metal Parts and Products

PCAPCD Board of Directors Meeting

Agenda Date: August 20, 2009

Page 2 of 3

- Retention of partial exemption for stencil coatings, safety indicating, solid film lubricants, electric insulating and thermal conducting, and magnetic data storage disk – adding a requirement to meet work practice standards and retaining requirement to meet recordkeeping.
- Clarifying a partial exemption for repair and touchup – only exempt from application method requirements.
- Deletion of VOC limits for the categories of aluminum coatings, nonskid, and solid film lubricant.
- Addition of VOC limits for new sub-categories of military specifications, electrical insulating varnish.
- Requirement that U.S. EPA approve alternative application methods.
- Addition of a new section that addresses work practice requirements for all operations – including minimizing spillage, and usage of closed containers to transport and store and dispose of VOC containing materials.
- Addition of new specifies that a violation may be determined at any specified test method.

The content of the proposed amended rule is addressed in detail in the Staff Report for the Rule (Attachment #2).

Fiscal Impacts:

The proposed amendments to Rule 245 are not expected to have any significant impact on businesses affected by this rule:

- Four (4) existing facilities are directly subject to the amended Rule. No impacts are expected.
- The District is not aware of any operations that will be affected by proposed changes in the Rule exemptions.

California Environmental Quality Act:

District Staff has determined that the adoption of this new rule is categorically exempt from the California Environmental Quality Act (CEQA) requirements per the CEQA Guidelines, Section 15307; Actions by Regulatory Agencies for Protection of Natural Resources.

Public Outreach:

The public hearing before the Board of Directors was noticed by newspaper publications at least 30 days in advance of the August 20, 2009, hearing date. Notice was contained in the Auburn Journal on July 16, 2009, and in the Roseville Press-Tribune on July 18, 2009. The four (4) companies the District believes will be subject to the rule have been notified individually concerning the proposed amended rule.

Recommendation:

The purpose of the Board Hearing is to consider public testimony regarding the proposed new rule and to consider whether the proposed rule should be adopted.

Staff recommends and requests that the Board, in a public hearing:

- (1) Approve and adopt the Findings in the Staff Report, Attachment #2, and
- (2) Adopt Resolution #09-10, Attachment #1, thereby adopting amended Rule 245, as shown in Exhibit I

Attachment(s): #1: Resolution #09-10, adopting amended Rule 245, Surface Coating of Metal Parts and Products, including Exhibit I
#2: Staff Report for Amended Rule 245, Surface Coating of Metal Parts and Products

ATTACHMENT #1

SUBJECT:

Resolution # 09-10

1 **BEFORE THE BOARD OF DIRECTORS**
2 **PLACER COUNTY AIR POLLUTION CONTROL DISTRICT**
3 **STATE OF CALIFORNIA**

4
5 **RESOLUTION NO: 09-10**

6
7 **In the matter of:** Approve Resolution #09-10, thereby adopting the Placer County Air
8 Pollution Control District's proposed amended Rule 245, Surface Coating
9 of Metal Parts and Products, as shown in Exhibit I.

10
11 The following **RESOLUTION** was duly passed by the Board of Directors, Placer County Air
12 Pollution Control District, at a regular meeting held **August 20, 2009** by the following vote:

13
14 Ayes: Holmes, M. _____ Ucovich _____ Weygandt _____ Holmes, J. _____ Barkle _____

15 Nakata _____ Hill _____ Uhler _____ Allard _____

16 Noes: Holmes, M. _____ Ucovich _____ Weygandt _____ Holmes, J. _____ Barkle _____

17 Nakata _____ Hill _____ Uhler _____ Allard _____

18 Abstain: Holmes, M. _____ Ucovich _____ Weygandt _____ Holmes, J. _____ Barkle _____

19 Nakata _____ Hill _____ Uhler _____ Allard _____

20
21 Signed and approved by me after its passage.

22
23 _____ Chairperson

24
25 Attest:

26
27 _____ Clerk of said Board

1 **WHEREAS**, the Board of Directors of the Placer County Air Pollution Control District is
2 authorized to adopt rules and regulations and do such acts as may be necessary or proper to
3 execute the powers and duties granted by Health and Safety Code Sections 40001, 40702, 40716,
4 41010, and 41013 (Health and Safety Code Section 40727(b)(2)); and

5
6 **WHEREAS**, the Board of Directors of the Placer County Air Pollution Control District has
7 determined that the meaning of the amended rule can be easily understood by the persons
8 directly affected by it (Health and Safety Code Section 40727(b)(3)); and

9
10 **WHEREAS**, the Board of Directors of the Placer County Air Pollution Control District has
11 determined that the amended rule is in harmony with, and not in conflict with or contradictory to,
12 existing statutes, court decisions, or state or federal regulations (Health and Safety Code Section
13 40727(b)(4)); and

14
15 **WHEREAS**, the Board of Directors of the Placer County Air Pollution Control District has
16 maintained records of the rulemaking proceedings (Health and Safety Code Section 40728); and

17
18 **WHEREAS**, the Board of Directors of the Placer County Air Pollution Control District held a
19 duly noticed public hearing on August 20, 2009, that was noticed in newspapers of general
20 circulation in the District more than 30 days in advance of said hearing, and the Board has
21 considered public comments on the proposed amended rule with evidence having been received
22 and this Board having duly considered the evidence (Health and Safety Code Sections 40725
23 40726, and 40920.6); and

24
25 **WHEREAS**, the District Board has made the findings pursuant to Health and Safety Code
26 Section 40727, of necessity, authority, clarity, consistency, non-duplication, and reference in
27 regard to the proposed amended rule and,

28
29

1 **WHEREAS**, the District has considered the relative cost effectiveness of the measure as well as
2 other factors, as required by Health and Safety Code Section 40922, and made reasonable efforts
3 to determine the direct costs expected to be incurred by regulated parties pursuant to Health and
4 Safety Code Section 40703; and

5

6 **WHEREAS**, the adoption of this regulation is categorically exempt from CEQA pursuant to
7 Title 14, California Administrative Code, Section 15308, as an action by a regulatory agency for
8 the protection of the environment; and

9

10 **WHEREAS**, portions of the Placer County Air Pollution Control District (PCAPCD) have been
11 designated as “severe” non-attainment areas for the federal 8-hour ozone standard, and as non-
12 attainment for the 1-hour ozone standard, pursuant to the Federal Clean Air Act Amendments of
13 1990 (FCAA): and

14

15 **WHEREAS**, The FCAA requires for non-attainment areas the submittal of VOC Reasonably
16 Available Control Technology (RACT) rules covering all Major Stationary Sources of VOC and
17 the State Clean Air Act requires the adoption of all feasible measures; and

18

19 **WHEREAS**, The Board of Directors of the PCAPCD determined in the 2006 RACT SIP Update
20 Analysis that there were non-Major Stationary Sources of VOC in the PCAPCD in the categories
21 of Metal Parts and Products for which a Reasonably Available Control Technology (RACT)
22 emissions control measure was required to be adopted to comply with requirements of California
23 Health and Safety Code Sections 40001 and 40910, and with Title 1, Part D, Subpart 2, Section
24 182(b)(2), of the 1990 Federal Clean Air Act Amendments for the submittal of Reasonable
25 Available Control Technology (RACT); and

26

27 **WHEREAS**, The Board of Directors of the PCAPCD is considering the RACT control measures
28 contained in U.S. Environmental Protection Agency’s “Control Technique Guidelines for the

1 Miscellaneous Metals and Plastic Parts Coatings” (CTG), as required within one year of the
2 CTG’s publication, September 2008;

3

4 **NOW, THEREFORE, BE IT RESOLVED**, that this Board finds and does hereby declare that
5 there is a need for the adoption of amended Rule 245, Surface Coating of Metal Parts and
6 Products.

7

8 **IT IS THEREFORE ORDERED** that the Rule, as shown in Exhibit I, is adopted for Placer
9 County, and the amended Rule shall be submitted to U.S. EPA as a requested revision to the
10 State Implementation Plan.

11

12 **BE IT FURTHER ORDERED** that the aforesaid Rule shall be effective upon adoption.

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EXHIBIT I

Rule 245

Surface Coating of Metal Parts and Products

Strikeout Version

RULE 245 SURFACE COATING OF METAL PARTS AND PRODUCTS

Adopted 12/11/08 (Amended 8/20/09)

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August 20, 2009 December 11, 2008

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PROPOSED

100 GENERAL

101 PURPOSE: To limit the emission of volatile organic compounds from the application of coatings, coating removers (strippers), surface preparation materials, and cleanup materials in metal parts and products coating operations.

102 APPLICABILITY: The provisions of this rule apply only to facilities located in Placer County.

103 SEVERABILITY: If any section, subsection, sentence, clause, phrase, or portion of this rule is, for any reason, held invalid, unconstitutional or unenforceable by any court of competent jurisdiction, that portion shall be deemed as a separate, distinct, and independent provision, and the holding shall not affect the validity of the remaining portions of the rule.

104 EXEMPTIONS, LOW USAGE OF MATERIALS EXCEEDING VOC CONTENT LIMITS:

104.1 Low Usage of Non-Compliant Coating Materials: The provisions of this rule shall not apply to the VOC requirements of Sections 301 if (1) the total volume of such non-compliant coatings is less than 55 gallons per year, and (2) the requirements of Sections 401 and 501 are met.

105 EXEMPTIONS, SPECIFIC OPERATIONS AND COATINGS: Except for recordkeeping requirements as specified in Section 501, the requirements of this rule shall not apply to:

105.1 Coating of prefabricated architectural components or structures not coated in a shop environment and which are regulated by Rule 218, Architectural Coatings**ARCHITECTURAL COATINGS.**

105.2 Motor vehicles including automotive, truck and heavy equipment which are regulated by Rule 234, Automotive Refinishing Operations**AUTOMOTIVE REFINISHING OPERATIONS.**

105.3 Coating of metal cans, which is regulated by Rule 223, Metal Container Coating**METAL CONTAINER COATING.**

105.4 Adhesives and other materials which are regulated by Rule 235, Adhesives**ADHESIVES.**

105.5 Polyester resin operations and application of polyester resin materials to metal parts and products **which is regulated by Rule 243, POLYESTER RESIN OPERATIONS.**

105.6 Coatings sold in non-refillable aerosol containers having a capacity of 1 liter (1.1 quarts), or less.

~~105.7 Stripping of cured coatings, cured adhesives and cured inks, but not stripping of such materials from spray application equipment.~~

~~105.8 Other specific coating operations as follows: _____~~

~~_____ Aircraft, aerospace vehicles, coils, conformal coatings, hand lettering, electrocoating, magnetic wire and storage disks, optical anti-reflective coatings, products requiring safety indicating coatings, mobile equipment, powder coating, repair, stencil coating, touch-up and vacuum metalizing.~~

105.7 Powder coatings.

105.8 Partial exemptions:

105.8.1 Coating operations used for repair and touchup are only exempt from the application method requirements of Section 302.

105.8.2 Coating operations used for stencil, safety indicating, solid film lubricating, electric insulating, thermal conduction, and magnetic data storage, are only required to meet the recordkeeping requirements of Section 501 and work practice requirements of Section 304.

200 DEFINITIONS

- 201 ADHESIVE:** Any substance that is used to bond one surface to another by attachment.
- 202 AEROSOL CONTAINER:** A hand-held, nonrefillable container which expels pressurized product ingredients by means of a propellant-induced force.
- 203 AEROSPACE VEHICLE:** The completed unit of any aircraft, helicopter, missile or space vehicle.
- 204 AIR-DRIED COATING:** Any coating which is not heated above 194⁰F (90⁰C) for the purpose of curing or drying.
- 205 ALUMINUM COATING FOR WINDOW FRAMES AND DOOR FRAMES:** A coating which is applied in a shop environment and is used to protect prefabricated aluminum window frames, window walls and door frames, and which is required to meet the specifications of Architectural Aluminum Manufacturers Association AAMA 605.2-1980.
- 206 APPLICATION EQUIPMENT:** A device used to apply coatings or used in preparing a coating material, such as stir sticks or funnels.
- 207 APPURTENANCES:** Accessories to a stationary structure, including, but not limited to: hand railings, cabinets, bathroom and kitchen fixtures, fences, rain-gutters and down-spouts, window screens, lamp-posts, heating and air conditioning equipment, other mechanical equipment, large fixed stationary tools and concrete forms.
- 208 BAKED COATING:** Any coating which is heated above 194⁰F (90⁰C) for the purpose of curing or drying.
- 209 CAMOUFLAGE COATING:** A coating applied as a topcoat on equipment to conceal such equipment from detection.
- 210 CLEANUP MATERIAL:** A VOC-containing material used to clean parts and application equipment used in miscellaneous metal parts and products coating operations.
- 211 CLOSED CONTAINER:** A container whose cover meets with the main body of the container without any visible gaps between the cover and the main body of the container.
- 212 CAN COATING:** Any coating containing organic materials and applied or intended for application by spray, roller, or other means onto the interior and/or exterior of metal cans, drums, pails or lids.
- 213 COATING:** A material applied to a surface to identify, beautify, protect, convey a message, or minimize detection of such surface. Such materials include, but are not limited to paints, varnishes, sealers and stains.

- 214 COATING REMOVER:** (See STRIPPER, Section 263**265**)
- 215 COILS:** Material sheets or strips which are rolled into coils for further industrial or commercial use.
- 216 CONFORMAL COATING:** A coating applied to electronic circuit boards or the assembled components for the purpose of moisture resistance, corrosion resistance, bacteria resistance, or fungi resistance.
- 217 CURED MATERIAL:** An adhesive, coating or ink that is dry to the touch.
- 218 DIP COAT:** A coating method which is applied by dipping an object into a vat of coating material, and allowing any excess coating material to drain off.
- 219 ELECTRICAL INSULATING COATING:** A coating which is applied to electrical components expressly for the purpose of electrical insulation.
- 220 ELECTRICAL INSULATING VARNISH:** A varnish coating which is applied to electrical components.
- 221 ELECTROCOATING:** A process that uses coating concentrates or pastes added to a water bath. The coating is applied by using an electrical current in either an anodic or cathodic process.
- 221—222 ELECTROSTATIC APPLICATION:** A process that applies coating particles or coating droplets to a grounded substrate by electrically charging them.
- 222—223 ENCLOSED GUN WASHER:** A spray gun washing system that has an enclosed solvent container, and which uses non-atomized solvent flow to flush the spray equipment and then collects and returns the discharged solvent to the enclosed container.
- 223—224 ETCHING FILLER:** A coating that contains less than 23 percent solids, by weight, and at least 0.5 percent acid by weight, and which is used instead of applying a pretreatment coating followed by a primer.
- 224—225 EXEMPT COMPOUNDS:** For a current listing of exempt compounds, see Rule 102, Definitions**DEFINITIONS**.
- 225226 EXTREME HIGH GLOSS COATING:** A coating which, when tested in accordance with ASTM Test Method D-523-1989, has a reflectance of 85 percent or more on a 60° meter.
- 226227 EXTREME PERFORMANCE COATING:** A coating applied to a metal surface where the coated surface, in its intended use, is frequently or chronically exposed to any of the following:
- **226227.1** Corrosive, caustic or acidic agents, chemicals, chemical fumes, chemical — mixtures or solution.
 - **226227.2** Repeated exposure to temperatures in excess of 250°F (121°C).
 - **226227.3** Repeated heavy abrasion, including mechanical wear and repeated — scrubbing with industrial grade solvents, cleansers or scouring agents.

~~227~~—**228 FLOW COAT:** A coating method which is applied by flowing a stream of coating over an object and allowing any excess material to drain.

~~228~~**229 HAND COATING:** The application of coatings by manually-held, non-mechanically operated equipment. Such equipment includes paint brushes, hand rollers, caulking guns, trowels, spatulas, syringe daubers and sponges.

~~229~~**230 HAND LETTERING:** A method utilizing hand application equipment to add letters and/or numbers on a substrate:

~~230~~—**231 HEAT-RESISTANT COATINGS:** A coating which is applied to a substrate that must withstand a temperature of at least 400°F (204°C) during normal use.

~~231~~**232 HIGH PERFORMANCE ARCHITECTURAL COATING:** A coating used to protect architectural subsections and which is required to meet the specifications of the Architectural Aluminum Manufacturer Association's publication number AAMA 605.2-1980.

~~232~~**233 HIGH TEMPERATURE COATING:** A coating applied to a substrate that must withstand a temperature of 1000°F (538°C) during normal use.

~~233~~**234 HIGH VOLUME, LOW PRESSURE (HVLP) APPLICATION EQUIPMENT:** Equipment used to apply coatings by means of a gun which is designed to be operated, and which is operated between 0.1 and 10 psig air pressure, measured dynamically at the center of the air cap and at the air horns.

~~234~~—**235 IRIDESCENT COATING:** Any coating which contains more than 0.042 lb/gal (5.0 g/l) of iridescent particles, as applied, where such particles are visible in the dried film.

~~235~~—**236 KEY SYSTEM OPERATING PARAMETER:** A variable that is critical to the operation of an emission control system and that ensures both operation of the system within the system manufacturer's specifications, and compliance with the overall system efficiency standard required by Section 304. Such variables may include, but are not limited to, hours of operation, temperature, flow rate and pressure.

~~236~~—**237 LOW VOLUME, LOW PRESSURE (LVLP) APPLICATION EQUIPMENT:** Equipment used to apply coatings by means of a gun which is designed to be operated, and which is operated between 0.1 and 10 psig air pressure, with air volume less than 15.5 cfm per spray gun, and which operates at a maximum fluid delivery pressure of 50 psig.

~~237~~—**238 MAGNETIC DATA STORAGE DISC:** A flat film or plate with a magnetic coating on which digital information can be stored by selective magnetization of portions of the flat surface.

~~238~~—**239 MAINTENANCE CLEANING:** The cleaning of tools, forms, molds, jigs, machinery and equipment, and the cleaning of work areas where maintenance or manufacturing occurs.

~~239~~—**240 METAL PARTS AND PRODUCTS:** Any components or complete units fabricated from metal, except those subject to the provisions of other District source-specific rules.

~~240~~—**241 METALLIC COATING:** A coating which contains more than 0.042 lb/gal (5.0 g/l) ~~5 grams of metal per liter of coating~~ **particles**, as applied, where such particles are visible in the dried film.

~~241~~—**242 MILITARY SPECIFICATION:** A coating which has a formulation approved by a

United States Military Agency for use on military equipment.

- 243** **MOLD-SEAL COATING:** The initial coating applied to a new mold or repaired mold and associated tooling to provide a smooth surface which, when coated with a mold release material, prevents products from sticking to the mold or to the tooling.
- 242—244** **MOTOR VEHICLE:** A passenger car, light duty truck, medium-duty vehicle, or heavy-duty vehicle as defined in Section 1902, Title 13, of the California Administrative Code.
- 243—245** **MULTI-COMPONENT COATING:** A coating requiring the addition of a separate reactive resin, commonly known as a catalyst or hardener, before application to form an acceptable dry film.
- 244—246** **NON-ABSORBENT CONTAINER:** A container made of non-porous material that does not allow the migration of solvents through the container.
- 245—247** **NON-SKID COATING:** Any coating which has, as its primary purpose, the creation of traction to prevent slippage.
- 246—248** **ONE-COMPONENT COATING:** A coating that is ready for application as it comes out of its container to form an acceptable dry film.
- 247—249** **OPTICAL ANTI-REFLECTIVE COATING:** A coating with a low reflectance in the infrared and visible wavelength range, and is used for anti-reflection on or near optical and laser hardware.
- 248—250** **PAN BACKING COATING:** A coating applied to the surfaces of pots or other cooking implements that are exposed directly to a flame or other heating elements.
- 249—**
- 251** **PERFORMANCE TEST:** The application of coatings and the use of cleaning solvents at paint manufacturing facilities, while conducting tests on the materials to verify performance with the requirements of this rule.
- 250—252** **POLYESTER RESIN MATERIALS:** Materials including, but not limited to, unsaturated polyester resins such as isophthalic, orthophthalic, halogenated, biphenol A, vinyl ester, furan resins, cross-linking agents, catalysts, gel coats, inhibitors, accelerators, promoters, and any other VOC-containing materials in polyester resin coating operations.
- 251—253** **POLYESTER RESIN OPERATIONS:** All mixing, pouring, forming, spraying and other production operations, including rework and cleanup activities.
- 252—254** **POWDER COATING:** Any coating applied as a dry (without solvent or other carrier) finely divided solid, which when melted and fused, adheres to the substrate as a paint film.
- 253—255** **PREFABRICATED ARCHITECTURAL COMPONENT:** Prefabricated metal parts and products which are to be used as architectural appurtenances or structures and which are coated in a shop environment, not including window frames and door frames.
- 254—256** **PRETREATMENT WASH PRIMER:** A coating which contains no more than 12 percent solids (by weight) and at least 0.5 percent acid (by weight), and which is used to provide surface etching, and is applied directly to metal surfaces to provide corrosion resistance, adhesion and ease of stripping.
- 255—257** **REPAIR COATING:** A coating used to recoat portions of a product which has

sustained mechanical damage to the coating following normal painting operations.

256—258 ROLL COATER: A coating device that contains a series of mechanical rollers that apply a thin coating film onto the surface of a roller, which is then applied to a substrate by moving the substrate beneath the roller.

257—259 SAFETY- INDICATING COATING: A coating which is formulated to produce a color change when it is exposed to an unsafe condition, such as a high temperature or an unsafe concentration of gas.

258—260 SILICONE RELEASE COATING: A coating which contains silicone resin, and which is intended to prevent food from sticking to metal surfaces such as baking pans.

259—261 SOLAR-ABSORBENT COATING: A coating which has as its prime purpose the absorption of solar radiation.

260—262 SOLID FILM LUBRICANT: A very thin coating consisting of a binder system containing as its chief pigment material one or more of the following materials: molybdenum disulfide, graphite, polytetrafluoroethylene (PTFE), or other solid that acts as a dry lubricant between closely-fitting surfaces.

261—263 STATIONARY SOURCE: Any building, structure, facility, or emissions unit which emits or may emit any affected pollutant directly or as a fugitive emission.

—262**263.1** “Building, structure, facility, or emission unit” includes all pollutant emitting activities —which:

—262**263.1.1** Belong to the same industrial grouping, and

—262**263.1.2** Are located on one property or two or more contiguous properties, and

—262**263.1.3** Are under the same common ownership, operation, or control, or which are —owned or operated by entities which are under common control.

—261.3—**263.2** Pollutant emitting activities shall be considered as part of the same industrial —grouping if:

—261.3**263.2.1** They belong to the same two-digit Standard Industrial Classification (SIC) —code, or

—261.3**263.2.2** They are part of a common production process, which includes industrial —processes, manufacturing processes and any connected processes involving —acommon material.

262—264 STENCIL COATING: A coating which is applied by a template or stamp in order to add designs, letters and/or numbers to the product.

263—265 STRIPPER (OR COATING REMOVER): A material applied to the surface of any metal part or product to completely remove maskants, coatings or coating residues. A stripper is not a surface preparation material or cleanup material. Material used for the removal of overspray is not considered a coating remover.

- 264—266 SURFACE PREPARATION:** A process where a VOC-containing material is applied to the surface of any miscellaneous metal part or product to clean the substrate or to promote adhesion of subsequent coatings, prior to the application of those coatings.
- 265—267 TEXTURED FINISH:** A rough surface produced by spraying and splattering large drops of coating onto a previously applied coating. The coatings used to form the appearance of the textured finish are referred to as “textured coatings”.
- 266—268 TOUCH-UP COATING:** A coating used to cover minor coating imperfections appearing after the main coating operation.
- 267—269 TRANSFER EFFICIENCY:** The ratio of the weight or volume of coating solids adhering to an object, to the total weight or volume, respectively, of coating solids used in the application process, expressed as a percentage.
- 268—270 VACUUM-METALIZING COMPOUND:** The undercoat applied to the substrate on which the metal is deposited, or the overcoat applied directly to the metal film.
- 269—271 VOLATILE ORGANIC COMPOUND (VOC):** For the purposes of this rule, “volatile organic compound” has the same meaning as in Rule 401—~~Definitions~~ **102, DEFINITIONS.**
- 270—**
- 272 VOLATILE ORGANIC COMPOUND (VOC) AS APPLIED:** For the purposes of this rule, “volatile organic compound as applied” means the VOC content including thinners, reducers, hardeners, retarders, catalysts and additives, calculated pursuant to Sections 403 or 404, as applicable.

300 STANDARDS

- 301 LIMITS: VOC CONTENT OF COATINGS FOR METAL PARTS AND PRODUCTS:** Except for materials and processes listed in Sections 104 or 105, no person shall apply any coatings to a metal part or product, or use VOC-containing solvents, if such materials have a VOC content exceeding the applicable limits specified in the following Table 1. The VOC content of coating materials shall be determined in accordance with Sections 403. The VOC content of solvents, strippers and cleanup materials, shall be determined in accordance with Sections 404.

Table 1 - VOC Content Limits for Coatings and Materials Used to Coat Metal Parts and Products

Coating or Material Type	VOC Limit, grams/liter (lb/gal), (Less water and exempt compounds)	
	Baked	Air-Dried
Coating or Material Type	VOC Limit, grams/liter (lb/gal), (Less water and exempt compounds)	
	Baked	Air-Dried
General (One Component)	275 (2.3)	275 (2.3)
General (Multi-Component)	275 (2.3)	340 (2.8)
Specialty Coatings		
Aluminum Coatings (for window frames and door frames)	420 (3.5)	420 (3.5)
Camouflage	360 (3.0)	420 (3.5)
Electrical Insulating Coating	275 (2.3) 420 (3.5)	340 (2.8) 420 (3.5)
Varnish		
Etching Filler	420 (3.5)	420 (3.5)

Extreme Performance	360 (3.0)	420 (3.5)
Extreme High Gloss	360 (3.0)	340 (2.8)
Heat Resistant	360 (3.0)	420 (3.5)
High Performance Architectural	420 (3.5)	420 (3.5)
High Temperature	420 (3.5)	420 (3.5)
Metallic and Iridescent Coating	420 360 (3.5) 0	420 (3.5)
Metallic Coating Military Specification	360 (3.0) 275 (2.3)	420 (3.5) 340 (2.8)
Mold Seal Coating	420 (3.5)	420 (3.5)
Non-Skid Coating	360 (3.0)	420 (3.5)
Pan Backing Coating	420 (3.5)	420 (3.5)
Pretreatment Wash Primer	275 (2.3)	340 (2.8)
Prefabricated Architectural	275 (2.3)	420 (3.5)
Repair Coating	360 (3.0)	420 (3.5)
Silicone Release Coating	420 (3.5)	420 (3.5)
Solar Absorbent Coating	360 (3.0)	420 (3.5)
Solid Film Lubricant	880 (7.3)	880 (7.3)
Touch-Up Coating	360 (3.0)	420 (3.5)
Vacuum Metalizing	420 (3.5)	420 (3.5)
All Other Coatings	275 (2.3)	275 (3.3)

302 APPLICATION METHODS: A person shall not apply coatings to metal parts and products subject to the provisions of this rule unless the coatings are applied using properly operated equipment, and by using either: one of the following application methods or any other high transfer efficiency application method which has been approved in advance, in writing, by the Air Pollution Control Officer **and United States Environmental Protection Agency:**

- 302.1 Electrostatic attraction, operated in accordance with manufacturer's recommendations.
- 302.2 High-Volume, Low-Pressure (HVLP) spray system operated in accordance with manufacturer's recommendations.
- 302.3 Low-Volume, Low-Pressure (LVLP) spray system operated in accordance with manufacturer's recommendations.
- 302.4 Flow Coat
- 302.5 Dip Coat
- 302.6 Hand Coat
- 302.7 Roll Coat

303 SURFACE PREPARATION AND CLEAN-UP AND STORAGE REQUIREMENTS:

- 303.1 A person shall not use materials which have a VOC content in excess of 200 grams per liter (1.67 pounds/gallon) of material for stripping any coating governed by this rule.
- 303.2 ~~Prior to (Before rule)~~ August 20, 2010, a person shall not perform product cleaning with any material containing VOC in excess of 72 grams per liter (0.6 pounds per gallon).

August 20, 2009 December 11, 2008

303.3 ~~Except~~**Before** August 20, 2010, **except** for electrostatic spray guns, a person shall not use VOC-containing materials for the clean-up of equipment used in coating operations unless:

~~303.3. (1) Such material is collected in a container which is closed when not in use; and:~~

~~303.3.2) The spray-~~ **the** equipment is disassembled and cleaned in an enclosed gun washer or other low-emission washing system that has been demonstrated to (1) be at least equivalent to an enclosed system, and which has been approved in writing by the Air Pollution Control Officer, or (2) the VOC content of the cleaning material used does not exceed 72 grams per liter (0.6 pounds per gallon).

~~303.4 A person shall use closed containers for the disposal of cloth, paper, or other materials including solvent and spent solvent, used for surface preparation, clean up, and paint removal.~~

~~303.5 Effective (After rule)~~ August 20, 2010, a person shall not perform cleanup of application equipment (including spray gun nozzles), **product cleaning, or surface preparation**, with a material containing VOC in excess of 25 grams per liter (0.21 pounds per gallon).

~~303.6 Effective (one year after adoption) a person shall not perform product cleaning or surface preparation with a material containing VOC in excess of 25 grams per liter (0.21 pounds per gallon).~~

304 WORK PRACTICE REQUIREMENTS:

~~303.7~~**304.1** Spillage of VOC-containing materials shall be minimized.

304.2 VOC-containing materials and used shop towels or sponges shall be stored and disposed of in closed containers. Storage and disposal containers must be kept closed, except when depositing or removing the materials. Disposal shall be conducted in a manner that the VOC are not emitted to the atmosphere.

304.3 VOC-containing materials shall be conveyed in closed containers or pipes.

305 EMISSION CONTROL EQUIPMENT: As an alternative to using materials that meet the VOC limits in Sections 301, a person may comply with the VOC provisions of this rule by using a District-approved emission control equipment system. Such compliance may be demonstrated by a system to capture and control emissions, which will reduce VOC emissions by at least 95% by weight.

400 ADMINISTRATIVE REQUIREMENTS

401 PROHIBITION OF SPECIFICATION: No person shall require for use or specify the application of any coating subject to the provisions of this rule that does not meet the limits and requirements of this rule. The prohibition of this Section shall apply to all written or oral contracts under the terms of which any coating is to be applied to any metal parts or product at any physical location within the District.

402 PRODUCT INFORMATION REQUIREMENTS FOR SELLERS: Any person who sells any

coating, coating remover (stripper), surface preparation or cleanup material subject to this rule, shall provide the following information on material data sheets made available to the purchaser at the time of sale:

- 402.1 The material type by name/code/manufacturer.
- 402.2 For coating materials, the maximum VOC content of the material, as applied, after any mixing or thinning as recommended by the manufacturer: VOC content shall be displayed as grams per liter (pounds per gallon) of coating, excluding water and exempt compounds, pursuant to Section 403.
- 402.3 For coating removers (strippers), surface preparation and cleanup materials, the maximum VOC content of the material, as applied, after any mixing or thinning as recommended by the manufacturer: VOC content shall be displayed as grams per liter (pounds per gallon) of material, including water and exempt compounds, pursuant to Section 404.
- 402.4 For all materials, recommendations regarding thinning, reducing, or mixing with any VOC-containing material, as defined in Section 270.
- 402.5 For all materials, VOC content may be calculated using product formulation data, or may be determined using the test method in Section 503.1.

403 DETERMINATION OF VOC CONTENT OF COATINGS, LESS WATER AND EXEMPT COMPOUNDS: The weight of VOC per combined volume of VOC and coating solids shall be calculated by the following equation:

$$G = \frac{W_v - W_w - W_{ec}}{V_m - V_w - V_{ec}}$$

- Where: G = Weight of VOC per liter of coating, less water and exempt compounds
- W_v = Weight of volatile compounds, in grams
- W_w = Weight of water, in grams
- W_{ec} = Weight of exempt compounds, in grams
- V_m = Volume of coating material, in liters
- V_w = Volume of water in liters
- V_{ec} = Volume of exempt compounds, in liters.

404 DETERMINATION OF VOC CONTENT PER LITER OF COATING REMOVERS (STRIPPERS), SURFACE PREPARATION MATERIALS, AND CLEANUP MATERIALS: The weight (in grams) of VOC per liter of coating materials shall be calculated by the following equation:

$$G = \frac{W_v - W_w - W_{ec}}{V_m}$$

- Where: G = Weight of VOC per total volume of material, in grams per liter.
- W_v = Weight of all volatile compounds, in grams

501.3.2 A person using emission control equipment as a means of alternate compliance with this rule pursuant to Section 304, shall maintain daily records of key system operating and maintenance procedures which will demonstrate continuous operation and compliance of the emission control system during periods of emission-producing activities. Key system operating parameters are those necessary to ensure compliance with the requirements of Section 304, and as defined in Section 235.

501.4 Retention of Records: All records required by this rule shall be retained for at least three years, except for sources subject to Rule 507, ~~Federal Operating Permit Program~~ **FEDERAL OPERATING PERMIT PROGRAM**, which shall be retained for at least five years. Such records shall be made available to the Air Pollution Control Officer, upon request.

502 VOC EMISSION THRESHOLD: If VOC emissions for any calendar year exceed 10,000 pounds, additional recordkeeping documentation will be required per Rule 511, ~~Potential to Emit~~ **POTENTIAL TO EMIT**.

503 TEST METHODS:

503.1 DETERMINATION OF VOC CONTENT: VOC content of coatings, solvents, strippers and surface preparation materials shall be determined in accordance with United States Environmental Protection Agency (USEPA) Method 24 or Method 24A.

503.2 DETERMINATION OF COMPOUNDS EXEMPT FROM VOC DEFINITION: Exempt compounds referenced in Section 224 and listed in Rule 102, ~~Definitions~~ **DEFINITIONS**, shall be determined in accordance with ASTM D 4457-85 "**Standard Test Method for Determination of Dichloromethane and 1,1,1-Trichloroethane in Paints and Coatings by Direct Injection into a Gas Chromatograph**" or California Air Resources Board Method 432 "**Determination of Dichloromethane and 1,1,1-Trichloroethane in Paints and Coatings**". If any perfluorocarbons or volatile cyclic and linear methyl siloxanes are being claimed as exempt compounds, the person making the claim must state in advance which compounds are present and the USEPA-approved test method used to make the determination of these compounds.

503.3 DETERMINATION OF CONTROL EFFICIENCY: Control efficiency of emissions control equipment referenced in Section 304, shall be determined in accordance with USEPA Method 48, ~~25~~, or 25A: ~~or~~ **and** USEPA Method 2 or 2C (whichever is applicable). **USEPA Method 18 or CARB Method 422 "Determination of Volatile Organic Compounds in Emissions from Stationary Sources" may be used to determine emissions of exempt compounds.**

503.4 DETERMINATION OF COLLECTION EFFICIENCY: Collection efficiency of the control equipment referenced in Section 304 shall be determined in accordance with USEPA's "Guidelines for Determining Capture Efficiency, January 9, 1995". Individual collection efficiency test runs subject to the USEPA's technical guidelines shall be determined by:

503.4.1 ~~Applicable USEPA methods 204, 204A, 204B, 204C, 204E and/or 204F; or~~

503.4.1 40 CFR 51, Appendix M, Methods 204-204F; or

503.4.2 The South Coast AQMD "Protocol for Determination of Volatile Organic

- W_w = Weight of water, in grams
 W_{ec} = Weight of exempt compounds, in grams
 V_m = Volume of coating material, including any added VOC-containing solvents or reducers, but excluding any colorants added to tint the base, in liters.

405 OPERATION AND MAINTENANCE PLAN: A person using an emission control system pursuant to Section 304, as a means of alternate compliance with this rule, must submit an Operation and Maintenance Plan for the emission control system to the Air Pollution Control Officer for approval. A person proposing to install a new emission control as a means of alternate compliance with this rule shall submit in addition to an Operation and Maintenance Plan, an application for Authority to Construct, pursuant to Rule 501, ~~General Permit Requirements~~ **GENERAL PERMIT REQUIREMENTS**. The plan shall specify operating and maintenance procedures which will demonstrate continuous operation of the emission control system during periods of emission-producing operations. The Plan shall also specify which records must be kept to document these operating and maintenance procedures. These records shall comply with the requirements of Sections 501. The plan shall be implemented upon approval of the Air Pollution Control Officer.

500 MONITORING AND RECORDS

501 RECORDKEEPING: In addition to any applicable record-keeping requirements of either Rule 502, ~~New Source Review~~ **NEW SOURCE REVIEW**, Rule 507, ~~Federal Operating Permit Program~~ **FEDERAL OPERATING PERMIT PROGRAM**, Rule 511, ~~Potential to Emit~~ **POTENTIAL TO EMIT**, or any other District Rule which might be applicable, any person applying coating products, surface preparation solvents, cleanup solvents, or strippers subject to any provision of this rule shall maintain the following records for non-exempt materials in order to evaluate compliance:

501.1 **Product Data:** A list of currently used coating products, surface preparation solvents, cleanup solvents or strippers subject to this rule. This list shall include all of the following data for each material used:

501.1.1 The material's manufacturer, product name and product number or code.

501.1.2 Classification according to the terminology used in Sections 301, 302 and 303. (e.g. "Extreme-Performance Coating", "Mold-Seal Coating", "Stripper", etc.).

501.1.3 The material's VOC content as applied, determined according to Sections 403 and 404, when used in the mixing ratios recommended by the manufacturer.

501.1.4 The actual mixing ratio, if different from the manufacturer's recommendation, used in applying the material.

501.2 **Product Usage and Frequency:** Any person using materials regulated by this rule shall record and maintain records of the ~~monthly usage~~ **volume used per month** of each individual material as listed pursuant to Section 501.1.

501.3 **Emission Control Equipment Records:**

501.3.1 A person using emission control equipment as a means of alternate compliance pursuant to Section 304, shall maintain records on a daily basis, showing the type and volume of coatings and solvents used.

Compound (VOC) Capture Efficiency"; or

503.4.3 Any other method approved by the USEPA, the California Air Resources Board, and the Air Pollution Control Officer.

503.5 ~~Determination of VOC Content of Emissions: The VOC content of emissions shall be determined by USEPA Method 18.~~

503.6 ~~Metallic/Iridescent Topcoat: The determination of a coating as metallic/iridescent shall be made using the South Coast Air Quality Management District "Spectrographic Method for the Analysis of Carbon Dust and Carbon Laminates, December 1985" Test Method 318 "Determination of Weight Percent Elemental Metals in Coatings by X-Ray Diffraction".~~

503.7 ~~6~~ **Acid Content:** The acid content of pretreatment wash primers shall be measured and reported in accordance with South Coast Air Quality Management District ~~Test Method "Laboratory Methods for Analysis for Enforcement Samples,"~~ **and** ASTM D1613-06 "Standard Test Method for Acidity in Volatile Solvents and Chemical Intermediates Used in Paint, Varnish, Lacquer, and Related Products".

503.8 ~~7~~ **Emissions From Spray Gun Cleaning Systems:** Determination of emissions of VOC from spray gun cleaning systems shall be made using South Coast Air Quality Management District ~~Test Method "General Method for Determining Solvent Losses From Spray Gun Cleaning Systems",~~ October 1989.

503.8 **Transfer Efficiency: Determination of transfer efficiency shall be made using South Coast Air Quality Management District Test Method "Spray Equipment Transfer Efficiency Test Procedure for Equipment Users",** May 24, 1989.

503.9 **Multiple Test Methods: When more than one test method or a set of test methods is specified for any testing, a violation of any requirement of this rule established by any one of the specified test methods or set of test methods shall constitute a violation of this rule.**

ATTACHMENT #2

SUBJECT:

Staff Report Rule 245

**PLACER COUNTY
AIR POLLUTION CONTROL DISTRICT**

STAFF REPORT

RULE 245

SURFACE COATING OF METAL PARTS AND PRODUCTS

AMENDMENTS

August 20, 2009

BACKGROUND

Rule 245, Surface Coating of Metal Parts and Products, was originally adopted by the District on December 8, 2009 to meet Reasonably Available Control Technology – State Implementation Plan (RACT SIP) requirements.

In September 2008, toward the end of the time period that Rule 245 was being finalized, the U.S. Environmental Protection Agency released “Control Techniques Guidelines for Miscellaneous Metal and Plastic Parts Coatings” (CTG). The CTG provided updated guidance for determination of Reasonably Available Control Technology for metal surface coating operations. Due to the timing of the CTG, the District was not able consider the CTG in Rule 245.

This Staff Report addresses amendments that are proposed to Rule 245 based on the CTG guidance. This rule amendment fulfills the District requirement to adopt a measure that incorporates the CTG guidance within one year of the CTG’s release.

The District has four non-major sources in the category of Surface Coating of Metal Parts and Products. The business names for these current sources are:

- Freedom International Coatings
- Progressive Vanguard
- Greenheck Fans
- Recoating West

DISCUSSION

Rule 245 amendments were made based on review of the CTG, and comments on Rule 245 from review by staff with the U.S. Environmental Protection Agency, California Air Resources Board, and local Air Districts.

Additionally, the District reviewed Surface Coating of Metal Parts and Products Rules of other local Air Districts, including:

- Sacramento. Rule 451, amended September 25, 2008.
- El Dorado. No current rule, Rule 246 planned for adoption in 2009.
- Yolo-Solano. Rule 2.25, amended May 14, 2008.

These Districts are designated as non-attainment areas for the Federal national ambient air quality standard for ozone. Thus, like Placer, they will be required to implement CTGs in their applicable rules.

Rule amendments, in underline/strikeout, are shown in Attachment #1.

Changes to the Rule include:

Section 105 Exemptions for Specific Operations and Coatings

- Elimination of the exemption for the coating categories of aircraft, aerospace vehicles, coils, conformal coatings.
- Elimination of the exemption for strippers used for cured coatings, cured adhesive, and cured inks.
- Elimination of exemption for conformal coatings, electro coating, hand-lettering, optical anti-reflective, mobile equipment, and vacuum metalizing.
- Retention of a partial exemption for stencil coatings, safety indicating, solid film lubricants, electric insulating and thermal conducting, and magnetic data storage disk – adding a requirement to meet work practice standards and retaining recordkeeping requirements.

- Clarifying a partial exemption for repair and touchup – only exempt from application method requirements.

Section 301 VOC Limits

- Deletion of VOC limits for categories of aluminum coatings, nonskid, and solid film lubricant.
- Addition of VOC limits for categories of military specifications, electrical insulating varnish.
- Placement of iridescent coatings with the metallic coating category.
- Elimination of “All Other” coating category.

Section 302 Application Methods

- Requirement that U.S. EPA approve alternative application methods.

Section 304 Work Practice Requirements

- Addition of a new section that addresses work practice requirements for all operations – including minimizing spillage, and usage of closed containers to transport and store and dispose of VOC containing materials.

Section 503 Test Methods

- New Section 503.9 specifies that a violation may be determined at any specified test method.

Additional miscellaneous changes were made which have no impact on the compliance requirements of the Rule.

FINDINGS

- A. **Necessity** – The adoption of proposed amended Rule 245 is necessary to satisfy the requirement that U.S. Environmental Protection Agency “Control Techniques Guidelines for Miscellaneous Metal and Plastic Parts Coatings” (CTG) be implemented with one year of its release.
- B. **Authority** – California Health and Safety Code, Sections 40000, 40001, 40701, 40702, and 40716 are provisions of law that provide the District with the authority to adopt this proposed Rule.
- C. **Clarity** – There is no indication, at this time, that the proposed Rule is written in such a manner that persons affected by the Rule cannot easily understand them.
- D. **Consistency** – The regulation is in harmony with, and not in conflict with or contradictory to, existing statutes, court decisions, or state or federal regulations.
- E. **Non-duplication** – The regulation does not impose the same requirements as an existing state or federal regulation.
- F. **Reference** – All statutes, court decisions, and other provisions of law used by PCAPCD in interpreting this regulation is incorporated into this analysis and this finding by reference.

SUMMARY

Rule 245, Surface Coating of Metal Parts and Products, is amended to address control guidance contained in U.S. Environmental Protection Agency’s recently released “Control Techniques Guidelines for Miscellaneous Metal and Plastic Parts Coatings.”

*Directions to:
The Placer Event Center
Rocklin, California*

Get Directions to Here



From South Lake Tahoe
97 mi – about 2 hrs 2 mins

- | | |
|------------------------------------------------------------------------|---------|
| 1. Head south on Lake Tahoe Blvd/US-50 toward Los Angeles Ave | 2.4 mi |
| 2. Turn left at CA-89/Emerald Bay Rd/US-50
Continue to follow US-50 | 35.5 mi |
| 3. Continue on CA-50 | 7.3 mi |
| 4. Continue on US-50 W | 38.8 mi |
| 5. Take exit 21 for Hazel Ave | 0.5 mi |
| 6. Turn right at Hazel Ave (signs for Orangevale) | 6.0 mi |
| 7. Continue on Sierra College Blvd | 1.8 mi |
| 8. Continue straight to stay on Sierra College Blvd | 3.8 mi |
| 9. Turn left at Rocklin Rd | 1.2 mi |
| 10. Turn right at Meyers St | 0.3 mi |
| 11. Turn right at Grove St
Destination will be on the left | 0.2 mi |

From Marysville
34.5 mi – about 59 mins

- | | |
|---------------------------------------------------------------|---------|
| 1. Head south on B St toward 6th St | 85 ft |
| 2. Turn right at 6th St | 246 ft |
| 3. Turn left at S Erle St | 1.8 mi |
| 4. Turn right at Ostrom Rd | 2.3 mi |
| 5. Slight left at S Beale Rd | 2.9 mi |
| 6. Slight right to stay on S Beale Rd | 177 ft |
| 7. Turn left at CA-65 | 24.3 mi |
| 8. Take the exit onto I-80 E | 2.0 mi |
| 9. Take exit 108 for Rocklin Rd | 0.3 mi |
| 10. Turn left at Rocklin Rd | 0.4 mi |
| 11. Turn right at Meyers St | 0.3 mi |
| 12. Turn right at Grove St
Destination will be on the left | 0.2 mi |

From Sacramento

- | | |
|-----------------------------------------------------------------------------------------|---------|
| Head north on 16th St/CA-160 toward Capitol Ave N St Alley
Continue to follow CA-160 | 4.1 mi |
| 2. Merge onto I-80 Bus E | 4.8 mi |
| 3. Merge onto I-80 E | 12.5 mi |
| 4. Take exit 108 for Rocklin Rd | 0.3 mi |
| 5. Turn left at Rocklin Rd | 0.4 mi |
| 6. Turn right at Meyers St | 0.3 mi |
| 7. Turn right at Grove St
Destination will be on the left | 0.2 mi |

From Reno

- | | |
|---------------------------------------------------------------|---------|
| 7. Merge onto I-80 W | 76.9 mi |
| 8. Take exit 108 for Rocklin Rd | 0.3 mi |
| 9. Slight right at Rocklin Rd (signs for Rocklin) | 0.3 mi |
| 10. Turn right at Meyers St | 0.3 mi |
| 11. Turn right at Grove St
Destination will be on the left | 0.2 mi |

Parking will be provided.



PLEASE CONSIDER THE ENVIRONMENT BEFORE PRINTING THIS DOCUMENT.