California Environmental Protection Agency

Air Resources Board

PUBLIC MEETING AGENDA

Thursday, February 20, 2014

LOCATION:
Air Resources Board
Byron Sher Auditorium, Second Floor
1001 I Street
Sacramento, California 95814
http://www.calepa.ca.gov/EPAbldg/location.htm

This facility is accessible by public transit. For transit information, call (916) 321-BUSS, website: http://www.sacrt.com
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TO SUBMIT WRITTEN COMMENTS ON AN AGENDA ITEM IN ADVANCE OF THE MEETING GO TO: http://www.arb.ca.gov/lispub/comm/bclist.php

February 20, 2014
9:00 a.m.

CONSENT CALENDAR:

The following item on the consent calendar will be presented to the Board immediately after the start of the public meeting, unless removed from the consent calendar either upon a Board member's request or if someone in the audience wishes to speak on it.

Consent Item #

14-2-1: Public Meeting to Consider Minor Updates to Yuba City-Marysville PM2.5 Maintenance Plan and Redesignation Request

The Board will consider approval of an update to the Yuba City-Marysville PM2.5 Nonattainment Area Redesignation Request and Maintenance Plan for the 2006 24-hour PM2.5 Standard (Update). This area meets the federal standard and qualifies for redesignation to attainment. The Update provides additional information and clarifications requested by the United States Environmental Protection Agency (U.S. EPA). If approved, the Update will be submitted to U.S. EPA as a revision to the California State Implementation Plan.

DISCUSSION ITEMS:

Note: The following agenda items may be heard in a different order at the Board meeting.

Agenda Item #

14-2-2: Annual Report from the Office of the Ombudsman 2013

Staff will update the Board on the implementation of the business plan for the Office of the Ombudsman with emphasis on California small businesses.

14-2-3: Public Meeting to Report to the Board on the Science of Ozone and PM2.5 Atmospheric Chemistry in the South Coast and San Joaquin Valley

Staff will present to the Board an informational item on the latest science regarding the chemistry of ozone and PM2.5 formation in the South Coast and San Joaquin Valley and the role of NOx and VOC reductions in California's control strategy to meet the federal ozone and PM2.5 standards.

14-2-4: Public Meeting to Report to the Board on the Proposed First Update to the Climate Change Scoping Plan

Staff will present to the Board a report on the Proposed First Update to the Scoping Plan (Update). The Update presents a unified approach for ongoing action to address climate change in California, including a report on California's success to date in meeting its 2020 emission goals, information on the latest climate science, and priorities and recommendations for achieving the State's longer term emission reduction goals.

CLOSED SESSION

The Board will hold a closed session, as authorized by Government Code section 11126(e), to confer with, and receive advice from, its legal counsel regarding the following pending or potential litigation, and as authorized by Government Code section 11126(a):

POET, LLC, et al. v. Corey, et al., Superior Court of California (Fresno County), Case No. 09CECG04850; plaintiffs' appeal, California Court of Appeal, Fifth District, Case No. F064045; California Supreme Court, Case No. S213394.

Rocky Mountain Farmers Union, et al. v. Corey, U.S. District Court (E.D. Cal. Fresno), Case No. 1:09−CV−02234−LJO−DLB; interlocutory appeal, U.S. Court of Appeals, Ninth Circuit, Case Nos. 09-CV-02234 and 10-CV-00163.

American Fuels and Petrochemical Manufacturing Associations, et al. v. Corey, et al., U.S. District Court (E.D. Cal. Fresno), Case No. 1:10-CV-00163-AWI-GSA; interlocutory appeal, U.S. Court of Appeals, Ninth Circuit, Case Nos. 09-CV-02234 and 10-CV-00163.

Association of Irritated Residents, et al. v. United States Environmental Protection Agency, 2011 WL 310357 (C.A.9), (Feb. 2, 2011).

California Dump Truck Owners Association v. Nichols, U.S. District Court (E.D. Cal. Sacramento), Case No. 2:11-CV-00384-MCE-GGH; plaintiffs' appeal, U.S. Court of Appeals, Ninth Circuit, Case No. 13-15175.

Engine Manufacturers Association v. California Air Resources Board, Sacramento Superior Court, Case No. 34-2010-00082774; defendant's appeal, California Court of Appeal, Third District, Case No. C071891.

Truck and Engine Manufacturers Association v. California Air Resources Board, Sacramento Superior Court, Case No. 34-2013-00150733.

Alliance of Automobile Manufacturers v. California Air Resources Board; Sacramento Superior Court, Case No. 34-2013-00152974.

Citizens Climate Lobby and Our Children's Earth Foundation v. California Air Resources Board, San Francisco Superior Court, Case No. CGC-12-519554, plaintiffs' appeal, California Court of Appeal, First District, Case No. A138830.

California Chamber of Commerce et al. v. California Air Resources Board, Sacramento Superior Court, Case No. 34-2012-80001313.

Morning Star Packing Company, et al. v. California Air Resources Board, et al., Sacramento Superior Court, Case No. 34-2013-800001464.

Delta Construction Company, et al. v. United States Environmental Protection Agency, U.S. Court of Appeals, District of Columbia Circuit, Case No. 11-1428.

City of Los Angeles through Department of Water and Power v. California Air Resources Board, et al., Los Angeles Superior Court, Case No. BS140620 (transferred to Sacramento Superior Court, Case No. 34-2013-80001451-CU-WM-GDS).

Alliance for California Business v. Nichols et al., Glenn County Superior Court, Case No. 13CV01232.

Dalton Trucking, Inc. v. United States Environmental Protection Agency, U.S. Court of Appeals, District of Columbia Circuit, Case No. 13-1283.

Owner-Operator Independent Drivers Association Inc. et al. v. Richard W. Corey et al., U.S. District Court, Case No. 1:13-CV-01998-LJO-SAB (Dec. 6, 2013).

OPPORTUNITY FOR MEMBERS OF THE BOARD TO COMMENT ON MATTERS OF INTEREST

Board members may identify matters they would like to have noticed for consideration at future meetings and comment on topics of interest; no formal action on these topics will be taken without further notice.

OPEN SESSION TO PROVIDE AN OPPORTUNITY FOR MEMBERS OF THE PUBLIC TO ADDRESS THE BOARD ON SUBJECT MATTERS WITHIN THE JURISDICTION OF THE BOARD

Although no formal Board action may be taken, the Board is allowing an opportunity to interested members of the public to address the Board on items of interest that are within the Board's jurisdiction, but that do not specifically appear on the agenda. Each person will be allowed a maximum of three minutes to ensure that everyone has a chance to speak.

TO ELECTRONICALLY SUBMIT WRITTEN COMMENTS ON AN AGENDA ITEM IN ADVANCE OF THE MEETING GO TO:

http://www.arb.ca.gov/lispub/comm/bclist.php

(Note: not all agenda items are available for electronic submittals of written comments.)

IF YOU HAVE ANY QUESTIONS, PLEASE CONTACT THE CLERK OF THE BOARD:
1001 I Street, 23rd Floor, Sacramento, California 95814
(916) 322-5594
ARB Homepage: www.arb.ca.gov

SPECIAL ACCOMMODATION REQUEST

Consistent with California Government Code Section 7296.2, special accommodation or language needs may be provided for any of the following:

- An interpreter to be available at the hearing;
- Documents made available in an alternate format or another language;
- A disability-related reasonable accommodation.

To request these special accommodations or language needs, please contact the Clerk of the Board at (916) 322-5594 or by facsimile at (916) 322-3928 as soon as possible, but no later than 7 business days before the scheduled Board hearing. TTY/TDD/Speech to Speech users may dial 711 for the California Relay Service.

Consecuente con la sección 7296.2 del Código de Gobierno de California, una acomodación especial o necesidades lingüísticas pueden ser suministradas para cualquiera de los siguientes:

- Un intérprete que esté disponible en la audiencia
- Documentos disponibles en un formato alterno u otro idioma
- Una acomodación razonable relacionados con una incapacidad

Para solicitar estas comodidades especiales o necesidades de otro idioma, por favor llame a la oficina del Consejo al (916) 322-5594 o envié un fax a (916) 322-3928 lo más pronto posible, pero no menos de 7 días de trabajo antes del día programado para la audiencia del Consejo. TTY/TDD/Personas que necesiten este servicio pueden marcar el 711 para el Servicio de Retransmisión de Mensajes de California.

SMOKING IS NOT PERMITTED AT MEETINGS OF THE CALIFORNIA AIR RESOURCES BOARD

California Environmental Protection Agency

Air Resources Board

PUBLIC MEETING AGENDA

INDEX

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February 20, 2014

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CALIFORNIA AIR RESOURCES BOARD

NOTICE OF PUBLIC MEETING TO CONSIDER THE APPROVAL OF MINOR UPDATES TO THE YUBA CITY-MARYSVILLE PM2.5 MAINTENANCE PLAN AND REDESIGNATION REQUEST

The Air Resources Board (ARB or Board) will conduct a public meeting at the time and place noted below to consider approval of Minor Updates to the Yuba City-Marysville PM2.5 Nonattainment Area Redesignation Request and Maintenance Plan for the 2006 24-hour PM2.5 Standard (Minor Updates). If approved by the Board, ARB will submit the Minor Updates to the United States Environmental Protection Agency (U.S. EPA) for approval as a revision to the California State Implementation Plan (SIP).

DATE: February 20, 2014

TIME: 9:00 a.m.

PLACE: California Environmental Protection Agency
Air Resources Board
Byron Sher Auditorium
1001 I Street
Sacramento, California 95814

This item may be considered at a two-day meeting of the Board, which will commence at 9:00 a.m., February 20, 2014. This item is scheduled to be heard on the Board's Consent Calendar. All items on the consent calendar can be voted on by the Board immediately after the start of the public meeting. An item will be removed from the consent calendar if requested by a Board member or if someone in the audience requests to speak on that item.

In December 2006, U.S. EPA lowered the 24-hour national ambient air quality standard (standard) for PM2.5 from 65 $\mu g/m^3$ to 35 $\mu g/m^3$. Effective December 14, 2009, U.S. EPA designated the Yuba City-Marysville Area as nonattainment for this more stringent 24-hour PM2.5 standard. The federal Clean Air Act establishes planning requirements for those areas that exceed the health-based standards.

Since the Yuba City-Marysville nonattainment area adequately reduced its 24-hour PM2.5 emissions to meet the standard prior to the SIP submittal deadline of December 14, 2012, the area was eligible for reduced regulatory requirements under the U.S. EPA *Clean Data Policy for the Fine Particulate National Ambient Air Quality Standards* (Clean Data Policy). The Feather River Air Quality Management District (District) adopted the *Yuba City-Marysville PM2.5 Nonattainment Area Redesignation Request and Maintenance Plan* (Redesignation Request/Maintenance Plan) on April 1, 2013 to address the remaining SIP requirements and to request to be redesignated as attainment for the PM2.5

standard. The Redesignation Request/Maintenance Plan was approved by the Board on April 25, 2013.

On May 23, 2013, ARB submitted the Redesignation Request/Maintenance Plan to U.S. EPA for approval as a revision to the California SIP. As a result of a United States Court of Appeals ruling that directed U.S. EPA to implement the PM2.5 standard under subpart 4 of the Clean Air Act rather than subpart 1, U.S. EPA staff requested the emission inventory for the Redesignation Request/Maintenance Plan be expanded to include VOCs and ammonia emissions. U.S. EPA also asked for clarification of several other issues. ARB staff drafted the Minor Updates to address these requests. The Minor Updates also include as an attachment a letter from the District clarifying the contingency provisions in the plan.

The Minor Updates will be available for public review at least 30 days prior to the Board meeting. Copies of the Minor Updates may be obtained from ARB's Public Information Office, 1001 I Street, First Floor, Environmental Services Center, Sacramento, California, 95814, (916) 322-2990. The Minor Updates may also be obtained from ARB's website at: http://www.arb.ca.gov/planning/sip/sip.htm.

Interested members of the public may present comments orally or in writing at the meeting and comments may be submitted by postal mail or by electronic submittal before the meeting. To be considered by the Board, written comments not physically submitted at the meeting must be received **no later than 5:00 p.m., Tuesday, February 18, 2014,** and addressed to the following:

Postal mail: Clerk of the Board, Air Resources Board
1001 I Street, Sacramento, California 95814

Electronic submittal: http://www.arb.ca.gov/lispub/comm/bclist.php

Please note that under the California Public Records Act (Government Code section 6250 et seq.), your written and verbal comments, attachments, and associated contact information (e.g., your address, phone, email, etc.) become part of the public record and can be released to the public upon request.

ARB requests that written and email statements on this item be filed at least 10 days prior to the meeting so that ARB staff and Board members have additional time to consider each comment. Further inquiries regarding this matter should be directed to Mr. Webster Tasat, Manager, Central Valley Air Quality Planning Section, Air Quality Planning and Science Division at (916) 323-4950 or Ms. Kasia Turkiewicz, Air Resources Engineer, Central Valley Air Quality Planning Section, Air Quality Planning and Science Division at (916) 445-6497.

SPECIAL ACCOMMODATION REQUEST

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CALIFORNIA AIR RESOURCES BOARD

Richard W. Corey
Executive Officer

Date: January 15, 2014

The energy challenge facing California is real. Every Californian needs to take immediate action to reduce energy consumption. For a list of simple ways you can reduce demand and cut your energy costs, see our website at www.arb.ca.gov.

State of California

California Environmental Protection Agency

Staff Report

Minor Updates to Yuba City-Marysville PM2.5 Maintenance Plan and Redesignation Request

Release Date: January 17, 2014
Scheduled for Consideration: February 20, 2014

This document has been reviewed by the staff of the California Air Resources Board and approved for publication. Approval does not signify that the contents necessarily reflect the views and policies of the Air Resources Board, nor does the mention of trade names or commercial products constitute endorsement or recommendation for use.

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I. BACKGROUND

In December 2006, the U.S. Environmental Protection Agency (U.S. EPA) lowered the 24-hour national ambient air quality standard (standard) for PM2.5 from 65 $\mu g/m^3$ to 35 $\mu g/m^3$. Effective December 14, 2009, U.S. EPA designated the Yuba City-Marysville Area as nonattainment for this more stringent 24-hour PM2.5 standard. The federal Clean Air Act (CAA) establishes planning requirements for those areas that exceed the health-based standards. These nonattainment areas must develop and implement a State Implementation Plan (SIP) that demonstrates how they will attain the standards by specified dates.

Since the Yuba City-Marysville nonattainment area attained the 24-hour PM2.5 standard prior to the SIP submittal deadline, the area was eligible for reduced regulatory requirements under the U.S. EPA's *Clean Data Policy for the Fine Particulate National Ambient Air Quality Standards*. The Feather River Air Quality Management District (District) addressed the remaining SIP requirements in the *Yuba City-Marysville PM2.5 Nonattainment Area Redesignation Request and Maintenance Plan (*Redesignation Request/Maintenance Plan). The Redesignation Request/Maintenance Plan was approved by the District Board and by the Air Resource Board (ARB) on April 1, 2013 and April 25, 2013, respectively. On May 23, 2013, ARB submitted the plan to U.S. EPA.

In 2013, U.S. EPA was directed by the Courts to implement the PM2.5 standard under subpart 4 of the Clean Air Act (Act) rather than subpart 1. In order to evaluate and approve the Redesignation Request/Maintenance Plan under subpart 4 of the Act, U.S. EPA staff requested additional technical information on several elements of the Plan. The *Minor Updates to Yuba City-Marysville PM2.5 Maintenance Plan and Redesignation Request* (Minor Updates) provides U.S. EPA with the additional information to approve the Redesignation Request/Maintenance Plan and redesignate the Yuba City-Marysville PM2.5 nonattainment area to attainment for the PM2.5 standard.

II. REVISED EMISSION INVENTORY

In order to address subpart 4 requirements, emission inventories that were originally submitted as part of the Redesignation Request/Maintenance Plan are expanded to include ammonia (NH3) and Volatile Organic Carbon (VOC). To support the maintenance demonstration and document the emission reductions that provided for attainment, the 2011 attainment year emission inventory was augmented with an earlier year inventory, 2005, when the region was still over the 24-hour PM2.5 standard. Table 1 lists NOx, PM2.5, SOx, NH3, and VOCs emissions for 2005, 2011, 2017, and 2024.

Table 1. Yuba City-Marysville PM2.5 Nonattainment Area Emission Inventories*

Category	2005	2011	2017	2024
NOx				
Stationary Sources	4.4941	4.3908	4.7717	4.3239
Areawide Sources	1.1075	1.0876	1.2791	1.2748
Mobile Total	20.9369	13.8089	9.7553	6.3056
On-Road Mobile	12.8955	8.3763	5.3**	3.1**
Other Mobile	8.0414	5.4326	4.6179	3.3593
Grand Total	26.5385	19.2873	15.9687	12.0580
PM2.5				
Stationary Sources	0.9812	0.8732	1.0446	1.1248
Areawide Sources	4.0302	3.8288	4.0732	3.9642
Mobile Total	0.7698	0.5568	0.389	0.3171
On-Road Mobile	0.3557	0.2688	0.2**	0.2**
Other Mobile	0.4141	0.288	0.2182	0.1438
Grand Total	5.7812	5.2588	5.5360	5.4328
SOx				
Stationary Sources	0.1295	0.1254	0.2375	0.2387
Areawide Sources	0.1555	0.1478	0.2518	0.2471
Mobile Total	0.2887	0.0806	0.0845	0.0848
On-Road Mobile	0.0887	0.0246	0.028	0.28
Other Mobile	0.2	0.056	0.0563	0.0567
Grand Total	0.5737	0.3538	0.5738	0.5706
NH3				
Stationary Sources	0.306	0.3575	0.4131	0.483
Areawide Sources	4.5568	4.4945	4.3461	4.2563
Mobile Total	0.2245	0.1946	0.1702	0.1629
On-Road Mobile	0.2225	0.1926	0.1682	0.1609
Other Mobile	0.002	0.002	0.002	0.002
Grand Total	5.0873	5.0466	4.9294	4.9022
VOCs				
Stationary Sources	3.8225	4.0252	4.5383	4.107
Areawide Sources	5.754	5.4627	6.2757	6.4784
Mobile Total	6.6997	5.1509	3.4347	2.8421
On-Road Mobile	3.7252	2.8017	1.4752	1.1129
Other Mobile	2.9745	2.3492	1.9595	1.7292
Grand Total	16.2762	14.6388	14.2487	13.4275

* Displayed to ten thousandths place to show change in emission.

** Future year on-road mobile inventory for NOx and PM2.5 replaced with motor vehicle emission budgets.

III. ADDITIONAL ANALYSES SUPPORTING ATTAINMENT RESULTS FROM PERMANENT AND ENFORCEABLE EMISSION REDUCTIONS

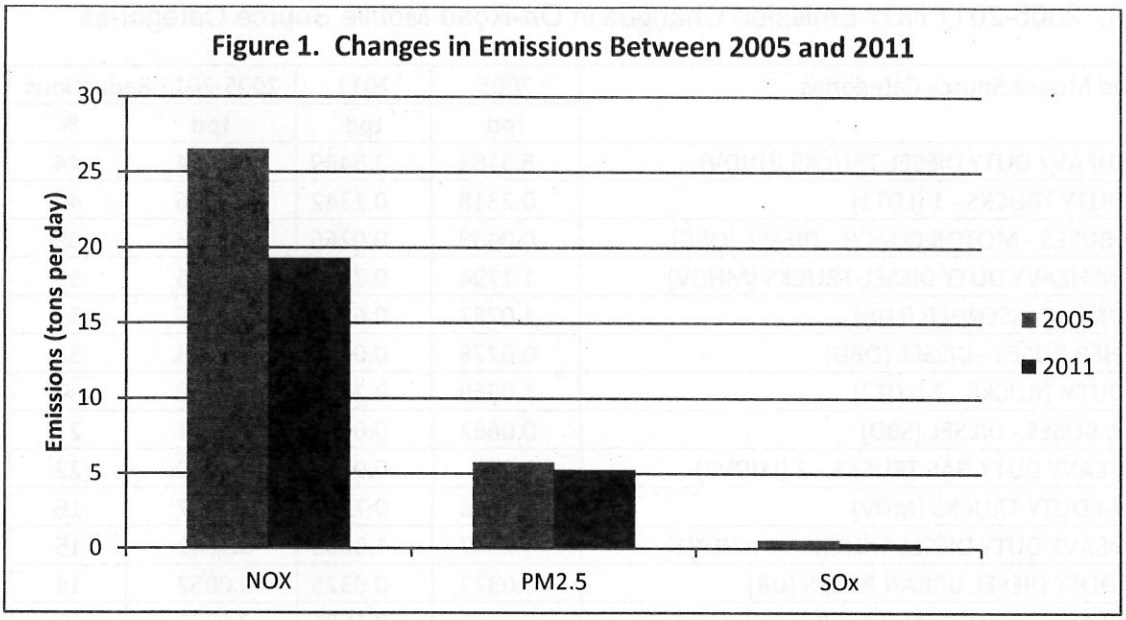
The CAA requires demonstration that the air quality improvement that resulted in attainment of the standard can be reasonably attributed to permanent and enforceable emission reductions. The Yuba City-Marysville Area first attained the standard in 2008 and continues to attain through 2012. The 24-hour design value decreased from 36 $\mu g/m^3$ in 2005 to 26 $\mu g/m^3$ in 2012. This is a 10 $\mu g/m^3$ decrease, which represents a 28 percent reduction. The 2012 design value is 26 percent below the standard.

The analyses presented in this section provides additional information requested by U.S. EPA that the improvement in PM2.5 air quality can be reasonably attributed to permanent and enforceable emission reductions of directly emitted PM2.5 and PM2.5 precursors and was not a result of adverse economy or unusually favorable meteorological conditions.

Permanent and enforceable emission reductions

Between 2005 and 2011, emissions of directly emitted PM2.5 and PM2.5 precursors declined significantly as a result of control measures listed in Tables VI-5 and VI-6 of the Redesignation Request/Maintenance Plan. These permanent and enforceable reductions in directly emitted PM2.5 and PM2.5 precursors resulted in improvements in air quality. The majority of reductions are a result of ARB's statewide motor vehicle regulations listed in Table VI-6, including NOx control programs and fleet rules to reduce both NOx and PM from diesel engines.

Tables 2 through 8 and Figure 1 compare 2005 and 2011 emission year inventories, demonstrating that the controls listed in Tables VI-5 and VI-6 of the Redesignation Request/Maintenance Plan contributed to reductions in PM2.5 emissions, which in turn lead to reductions in PM2.5 concentrations. Table 2 summarizes 2005 and 2011 emissions by major source category and by pollutant. Comparison of the 2005 and 2011 inventories reveals that directly emitted PM2.5 emissions decreased 9 percent, NOx emissions decreased 27 percent, and SOx emissions decreased 38 percent. These reductions were primarily associated with mobile source categories, both on-road and off-road. Tables 3 through 8 show changes in these two categories.



Data in Tables 2 through 8 displayed to ten thousandths place to show change in emissions.

Table 2. Yuba City-Marysville PM2.5 Nonattainment Area 2005 and 2011 Emission Changes

Source Category	2005 tpd	2011 tpd	2005-2011 Reductions tpd	%
NOx				
Stationary Sources	4.4941	4.3908	0.103	2
Areawide Sources	1.1075	1.0876	0.020	2
On-Road Mobile Sources	12.8955	8.3763	4.519	35
Other Mobile Sources	8.0414	5.4326	2.609	32
All Sectors	**26.5385**	**19.2873**	**7.251**	**27**
PM2.5				
Stationary Sources	0.9812	0.8732	0.108	11
Areawide Sources	4.0302	3.8288	0.201	5
On-Road Mobile Sources	0.3557	0.2688	0.087	24
Other Mobile Sources	0.4141	0.288	0.126	30
All Sectors	**5.7812**	**5.2588**	**0.522**	**9**
SOx				
Stationary Sources	0.1295	0.1254	0.004	3
Areawide Sources	0.1555	0.1478	0.008	5
On-Road Mobile Sources	0.0887	0.0246	0.064	72
Other Mobile Sources	0.2	0.056	0.144	72
All Sectors	**0.5737**	**0.3538**	**0.220**	**38**

Table 3. 2005-2011 NOx Emission Changes in On-Road Mobile Source Categories

On-Road Mobile Source Categories	2005	2011	2005-2011 Reductions	
	tpd	tpd	tpd	%
HEAVY HEAVY DUTY DIESEL TRUCKS (HHDV)	6.3103	3.5449	2.7654	44
LIGHT DUTY TRUCKS - 1 (LDT1)	0.2318	0.1342	0.0976	42
OTHER BUSES - MOTOR COACH - DIESEL (OBC)	0.0439	0.0266	0.0173	39
MEDIUM HEAVY DUTY DIESEL TRUCKS (MHDV)	1.1794	0.7189	0.4605	39
LIGHT DUTY PASSENGER (LDA)	1.0787	0.6751	0.4036	37
ALL OTHER BUSES - DIESEL (OBD)	0.0278	0.0185	0.0093	33
LIGHT DUTY TRUCKS - 2 (LDT2)	1.0969	0.74	0.3569	33
SCHOOL BUSES - DIESEL (SBD)	0.0662	0.0481	0.0181	27
LIGHT HEAVY DUTY GAS TRUCKS - 2 (LHDV2)	0.018	0.014	0.0040	22
MEDIUM DUTY TRUCKS (MDV)	0.9216	0.7769	0.1447	16
LIGHT HEAVY DUTY DIESEL TRUCKS - 1 (LHDV1)	1.2607	1.0665	0.1942	15
HEAVY DUTY DIESEL URBAN BUSES (UB)	0.0377	0.0325	0.0052	14
LIGHT HEAVY DUTY DIESEL TRUCKS - 2 (LHDV2)	0.1761	0.1526	0.0235	13
OTHER BUSES - GAS (OBG)	0.0094	0.0083	0.0011	12
MEDIUM HEAVY DUTY GAS TRUCKS (MHDV)	0.0507	0.0453	0.0054	11
LIGHT HEAVY DUTY GAS TRUCKS - 1 (LHDV1)	0.271	0.2487	0.0223	8
HEAVY DUTY GAS URBAN BUSES (UB)	0.009	0.0084	0.0006	7
MOTOR HOMES (MH)	0.0412	0.0385	0.0027	7
SCHOOL BUSES - GAS (SBG)	0.0034	0.0032	0.0002	6

Table 4. 2005-2011 NOx Emission Changes in 'Other Mobile Source Categories'

Other Mobile Source Categories	2005	2011	2005-2011 Reductions	
	tpd	tpd	tpd	%
OFF-ROAD EQUIPMENT	2.3139	1.1788	1.135	49
TRAINS	1.9447	1.2534	0.699	36
FARM EQUIPMENT	3.3499	2.5708	0.779	23
RECREATIONAL BOATS	0.0575	0.0536	0.004	7

Table 5. 2005-2011 PM2.5 Emission Changes in On-Road Mobile Source Categories

On-Road Mobile Source Categories	2005	2011	2005-2011 Reductions	
	tpd	tpd	tpd	%
MEDIUM HEAVY DUTY DIESEL TRUCKS (MHDV)	0.0459	0.028	0.0179	39
ALL OTHER BUSES - DIESEL (OBD)	0.0013	0.0008	0.0005	38
HEAVY HEAVY DUTY DIESEL TRUCKS (HHDV)	0.1941	0.1273	0.0668	34
OTHER BUSES - MOTOR COACH - DIESEL (OBC)	0.0012	0.0008	0.0004	33
SCHOOL BUSES - DIESEL (SBD)	0.0041	0.0029	0.0012	29
LIGHT HEAVY DUTY DIESEL TRUCKS - 1 (LHDV1)	0.0187	0.0175	0.0012	6
MEDIUM DUTY TRUCKS (MDV)	0.0181	0.0174	0.0007	4

Table 6. 2005-2011 PM2.5 Emission Changes in 'Other Mobile Source Categories'

Other Mobile Sources	2005	2011	2005-2011 Reductions	
	tpd	tpd	tpd	%
OFF-ROAD EQUIPMENT	0.1135	0.0586	0.055	48
TRAINS	0.0517	0.0323	0.019	38
FARM EQUIPMENT	0.1903	0.1424	0.048	25
RECREATIONAL BOATS	0.0181	0.0145	0.004	20
OFF-ROAD RECREATIONAL VEHICLES	0.0015	0.0012	<0.001	20

Table 7. 2005-2011 SOx Emission Changes in On-Road Mobile Source Categories

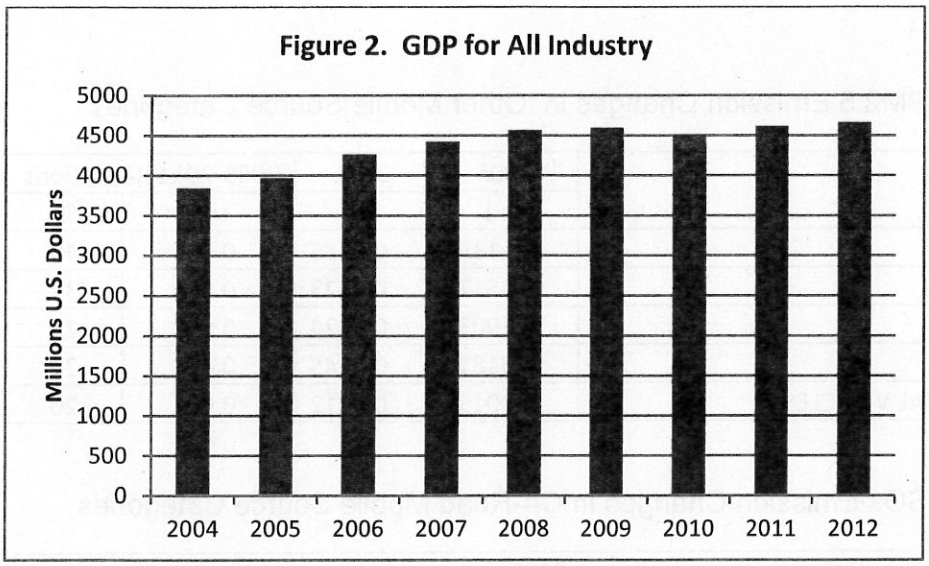
On-Road Mobile Source Categories	2005	2011	2005-2011 Reductions	
	tpd	tpd	tpd	%
SCHOOL BUSES - DIESEL (SBD)	0.0005	<0.0001	>0.0004	>90
OTHER BUSES - MOTOR COACH - DIESEL (OBC)	0.0003	<0.0001	>0.0002	>90
ALL OTHER BUSES - DIESEL (OBD)	0.0003	<0.0001	>0.0002	>90
MOTOR HOMES (MH)	0.0002	<0.0001	>0.0001	>90
MEDIUM HEAVY DUTY DIESEL TRUCKS (MHDV)	0.0101	0.0009	0.0092	91
HEAVY HEAVY DUTY DIESEL TRUCKS (HHDV)	0.0511	0.0048	0.0463	91
LIGHT HEAVY DUTY DIESEL TRUCKS - 1 (LHDV1)	0.009	0.0010	0.0080	89
LIGHT HEAVY DUTY DIESEL TRUCKS - 2 (LHDV2)	0.0013	0.0002	0.0011	85
HEAVY DUTY DIESEL URBAN BUSES (UB)	0.0005	0.0001	0.0004	80

Table 8. 2005-2011 SOx Emission Changes in 'Other Mobile Source Categories'

Other Mobile Source Categories	2005	2011	2005-2011 Reductions	
	tpd	tpd	tpd	%
TRAINS	0.1113	0.0010	0.110	99
OFF-ROAD EQUIPMENT	0.0105	0.0003	0.010	97
FARM EQUIPMENT	0.0263	0.0028	0.024	89

Role of economic conditions and meteorology

The improvement in air quality was not due to a decline in the economy. On the contrary, the economy grew about 20 percent between 2004 and 2012. Figure 2 shows Gross Domestic Product (GDP) for the Yuba City-Marysville Metropolitan Statistical Area. The increase in GDP between 2004 and 2012 is an indicator of economic progress.



Data source: U.S. Department of Commerce, Bureau of Economic Analysis

In addition, the air quality improvement was not due to favorable meteorological conditions. During the five year period, when the design values were below the standard, the area experienced a variety of meteorological conditions. For example, 2011 was extremely conducive to PM2.5 pollution, including a stagnation period that persisted for over 20 days. Despite this, 2011 and 2012 design values are significantly below the standard. The standard meteorological parameters, including annual average temperature and precipitation, were similar during the three recent years showing attainment (2010-2012) as well as the 2004-2006 nonattainment period (Table 9).

Table 9. Average Temperature and Precipitation

Year	Avg Temp (°F)	Avg Precipitation (in/year)
2004	62.6	20
2005	62.6	26
2006	62.6	20
2007	62.6	12
2008	62.6	16
2009	66.2	17
2010	62.6	23
2011	59.0	20
2012	62.6	25
2004-2006 Avg	62.6	22
2010-2012 Avg	62.6	23

IV. DISCUSSION OF FUTURE YEAR COMPOSITION USED IN CALCULATION OF THE 2024 DESIGN VALUE

In the Redesignation Request/Maintenance Plan, the District assumed that the PM2.5 composition on high concentration days did not change between 2004-2006 and 2011. Due to the nature of the PM2.5 problem in the Yuba City-Marysville Area and the form of the standard, it is appropriate to assume that composition would not change significantly. Furthermore, control programs targeting all key contributors to PM2.5 mass lead to fairly equivalent reduction in key components.

Chemical composition data are not routinely collected at the Yuba City monitor. The only chemical composition data available for this area are 2004-2006 data analyzed by U.S. EPA to support the initial designations. Staff expect that despite a significant decline in emissions between 2005 and 2011, the chemical composition on a typical exceedance day would not change significantly. The meteorological phenomenon leading to high PM2.5 concentrations is the same today as it was in 2005. Under stagnant winter weather, elevated concentrations are due to the formation of secondary pollutants and the accumulation of primary-emitted PM2.5. The declines in emissions reduced the frequency and magnitude of high concentration day events, but are expected to have little impact on exceedance day composition.

In addition, control programs targeted all key contributors to the PM2.5 mass. The two largest contributors to PM2.5 mass in the Yuba City-Marysville area are wood burning and ammonium nitrate. Concurrent reductions in both directly emitted PM2.5 and NOx emission that contribute to these components. Therefore composition remains the same despite the decrease in PM2.5 levels.

Figures 3 and 4 show the changes in chemical composition on a typical exceedance at the Sacramento-T Street site (the closest site with chemical composition data and similar meteorological conditions) between 2004-2006 and 2010-2012. Despite the decrease in emissions over the years the composition in 2010-2012 is very similar to that in 2004-2006.

Figure 3. Sacramento-T Street (2004-2006)

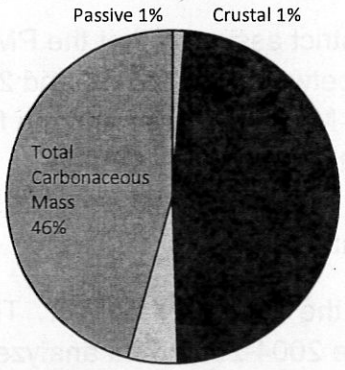
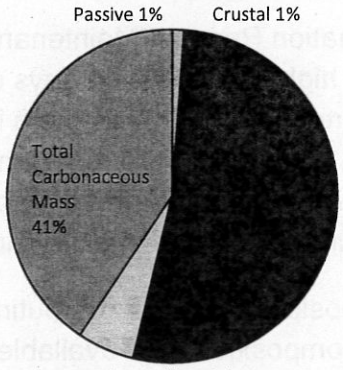


Figure 4. Sacramento-T Street (2010-2012)



IV. CONTINGENCY PLAN

U.S. EPA requested additional clarification from the District related to timing associated with the contingency plan if the area were to fall out of attainment. On December 19, 2013, the District clarified several aspects of the contingency measure commitment in a letter to U.S. EPA and ARB. The District letter is included in Appendix A.

V. STAFF RECOMMENDATION

The *Minor Updates to Yuba City-Marysville PM2.5 Maintenance Plan and Redesignation Request* include additional supporting information and analysis as requested by U.S. EPA to facilitate their approval and redesignation to attainment for the PM2.5 standard. ARB staff recommends that the Board adopt the *Minor Updates* as a revision to the California SIP for submittal to U.S. EPA.

Appendix A

Feather River Air Quality Management District Letter

Serving Sutter and Yuba Counties

1007 Live Oak Blvd. Suite B-3
Yuba City, CA 95991
(530) 634-7659
FAX (530) 634-7660
www.fraqmd.org

Christopher D. Brown, AICP
Air Pollution Control Officer

December 19, 2013

Deborah Jordan, Director Air Programs Division
Environmental Protection Agency Region 9
75 Hawthorne Street
San Francisco, CA 94105

Richard Corey, Executive Officer
Air Resources Board
PO Box 2815
Sacramento, CA 95812

Dear Ms. Jordan and Mr. Corey,

The Feather River Air Quality Management District would like to clarify the contingency plan in the Yuba City-Marysville PM2.5 Nonattainment Area Redesignation Request and Maintenance Plan (Plan) adopted by the District's Board of Directors on April 1, 2013.

The Clean Air Act requires that each maintenance plan contain provisions to assure that the District will promptly correct any violation of the standard which occurs after the redesignation of the area as an attainment area (42 USC 7505a (d)). The contingency measures in the Plan are included in Chapter VII. In the Plan, the District described a process and timeline to occur should the standard be violated. The District identified the 24-hour PM2.5 design value as the "trigger" that would initiate the contingency plan. Within 60 days of the trigger the District shall commence analysis to determine if the exceedance was caused by an exceptional event or instrument malfunction, and also evaluate the meteorological conditions and the emissions inventory. Following the analysis, the contingency plan stated that the District shall consult with interested parties, community organizations, and industry to identify voluntary and incentive based measures to reduce directly emitted PM2.5 or precursor emissions that can be implemented prior to the next January 1st. If it is determined that the violation occurred due to sources within the District, then by November 1 of the year following the year in which the trigger was activated, the District will begin adoption of rules for ensuring attainment. The Plan committed to adopting rules by the following August 31 and required compliance within two years of rule adoption.

The U.S. Environmental Protection Agency Region 9 (US EPA R9) has requested clarification regarding the contingency plan measures. The District would like to clarify the contingency plan by committing to actions occurring within a number of months rather than calendar dates.

The voluntary and incentive based measures would be implemented within nine (9) months after the trigger activation.

The District would like to clarify that, if new or revised rules are necessary to ensure attainment, each rule would be adopted and implemented promptly and expediently, but not later than 18 to 24 months after trigger activation. The intent of this clarification is for the 18-24 month time frame described immediately above to replace the time frame described in the maintenance plan adopted on April 1, 2013.

The District contingency plan also listed several measures that may be considered for adoption upon trigger activation. These included: Reasonably Available Control Technology on stationary sources, opening burning restrictions, fugitive dust and opacity restrictions, and restrictions on residential wood burning devices. The US EPA R9 asked the District to clarify which measures would be considered. The District would consider the following measures in its analysis:

Source Category:	Control Measures To Consider:
Stationary Sources	Combustion Devices (Boilers, incinerators, engines, and turbines)
	Industrial Processes (Manufacturing, industrial, agricultural, oil and gas)
Opening Burning Restrictions	Managed Burning (Agricultural and residential opening burning)
	Prescribed Burning
Fugitive Dust	Paved Roads (Truck covering, construction site measures, storm water drainage)
	Unpaved Roads (Paving and surface improvements, chemical stabilization, speed reduction)
	Construction and Demolition (Truck covering, access areas, watering)
	Storage Piles (wet suppression and dust control)
	Agricultural Processes (Reducing dust from tilling, harvesting, processing; also conservation)
Opacity Restrictions	Visible emissions limitations
Residential Wood Burning Devices	Mandatory curtailment, conversion/upgrade of existing devices, restrictions on new devices)

The list is for clarification purposes and would not limit the District in considering additional rules based on the results of the analysis as to the source of the exceedance.

The District is committed to working with US EPA R9 staff to provide any additional clarifying information you may need to ensure expeditious approval of the Maintenance Plan and Redesignation Request for the Yuba City-Marysville PM2.5 Nonattainment Area. If you have questions or would like additional information, please have your staff contact Ms. Sondra Spaethe, Air Quality Planner, at (530) 634-7659 ext. 210.

Regards,

Christopher D. Brown, AICP
Air Pollution Control Officer

CDB/sls
File: Chron

Cc: Sylvia Vanderspek, Branch Chief, Air Quality Planning
ARB, PO Box 2815, Sacramento, CA 95812

Webster Tasat, Manager, Central Valley Air Quality Planning Section
ARB, PO Box 2815, Sacramento, CA 95812

John Ungvarsky, Air Planning Office, Air Division
USEPA Region 9, 75 Hawthorne Street, San Francisco, CA 94105

PROPOSED

State of California
AIR RESOURCES BOARD

Minor Updates to Yuba City-Marysville PM2.5 Maintenance Plan and Redesignation Request

Resolution 14-6

February 20, 2014

Agenda Item No.: 14-2-1

WHEREAS, the Legislature in Health and Safety Code section 39602 has designated the State Air Resources Board (ARB or Board) as the air pollution control agency for all purposes set forth in federal law;

WHEREAS, ARB is responsible for preparing the State Implementation Plan (SIP) for attaining and maintaining the National Ambient Air Quality Standards (NAAQS) as required by the federal Clean Air Act (42 U.S.C. section 7401 et seq. (Act)), and to this end is directed by Health and Safety Code section 39602 to coordinate the activities of all local and regional air pollution control and air quality management districts (districts) necessary to comply with the Act;

WHEREAS, section 39602 of the Health and Safety Code also provides that the SIP shall include only those provisions necessary to meet the requirements of the Act;

WHEREAS, ARB has responsibility for ensuring that the districts meet their responsibilities under the Act pursuant to sections 39002, 39500, 39602, and 41650 of the Health and Safety Code;

WHEREAS, ARB is authorized by section 39600 of the Health and Safety Code to do such acts as may be necessary for the proper execution of its powers and duties;

WHEREAS, sections 39515 and 39516 of the Health and Safety Code provide that any duty may be delegated to the Board's Executive Officer as the Board deems appropriate;

WHEREAS, the local districts have primary responsibility for controlling air pollution from nonvehicular sources and for adopting control measures, rules, and regulations to attain the NAAQS within their boundaries pursuant to sections 39002, 40000, 40001, 40701, 40702, and 41650 of the Health and Safety Code;

WHEREAS, the Feather River Air Quality Management District (Feather River District) is responsible for carrying out these responsibilities in Yuba and Sutter Counties pursuant to section 40300 of the Health and Safety Code;

WHEREAS, in December 2006, the United States Environmental Protection Agency (U.S. EPA) lowered the 24-hour NAAQS for fine particulate matter (PM2.5) from 65 $\mu g/m^3$ to 35 $\mu g/m^3$;

WHEREAS, effective December 14, 2009, U.S. EPA designated the Yuba City-Marysville Planning Area as nonattainment for the 35 $\mu g/m^3$ PM2.5 NAAQS and established a SIP due date of December 14, 2012;

WHEREAS, in March 2007, U.S. EPA finalized the PM2.5 implementation rule (Rule) which established the requirements states must meet in developing PM2.5 SIPs;

WHEREAS, nonattainment areas that attain the standard prior to the SIP submittal due date are eligible for reduced regulatory requirements as described in U.S. EPA's *Clean Data Policy for the Fine Particulate National Ambient Air Quality Standards* (Clean Data Policy) released on December 14, 2004;

WHEREAS, when a nonattainment area has air quality levels below the standard, the Clean Data Policy specifies that the attainment demonstration, reasonable further progress, reasonably available control measures, and contingency SIP elements are no longer required;

WHEREAS, consistent with section 107(d)(3)(E) of the Act, the Feather River District has demonstrated attainment of the PM2.5 NAAQS in the 2006-2008 period for the Yuba City-Marysville PM2.5 nonattainment area, based on quality-assured federal reference method monitoring data from the State and local monitoring network;

WHEREAS, on June 8, 2010, ARB submitted a request to the U.S. EPA to issue a Clean Data Finding for the Yuba City-Marysville PM2.5 nonattainment area based on 2009-2011 data;

WHEREAS, on January 10, 2013, U.S. EPA determined that the Yuba City-Marysville PM2.5 nonattainment area has attained the 24-hour PM2.5 NAAQS based on 2009-2011 data;

WHEREAS, section 107(d)(3)(D) of the Act provides that a state may request U.S. EPA to redesignate an area from nonattainment to attainment of the NAAQS;

WHEREAS, section 107(d)(3)(E) of the Act sets forth the requirements which must be met for the U.S. EPA to redesignate an area from nonattainment to attainment of the NAAQS;

WHEREAS, the Feather River District developed the *Yuba City-Marysville PM2.5 Nonattainment Area Redesignation Request and Maintenance Plan* (Redesignation Request/Maintenance Plan) to address the requirements of the Act;

WHEREAS, following a public hearing on April 1, 2013, the Governing Board of the Feather River District voted to approve the Redesignation Request/Maintenance Plan;

WHEREAS, on April 8, 2013, the Feather River District transmitted the Redesignation Request/Maintenance Plan to ARB for approval as a revision to the California SIP, along with proof of public notice publication, and environmental documents in accordance with State and federal law;

WHEREAS, on April 25, 2013, the Board approved the Redesignation Request/Maintenance Plan as a revision to the California SIP;

WHEREAS, on May 23, 2013, ARB transmitted the approved Redesignation Request/Maintenance Plan to U.S. EPA for inclusion into the SIP to be effective, for purposes of federal law, upon approval by U.S. EPA;

WHEREAS, U.S. EPA was directed by a January 4, 2013 ruling from the United States Court of Appeals for the District of Columbia Circuit to implement the PM2.5 standard under subpart 4 of the Act rather than subpart 1;

WHEREAS, to evaluate the Redesignation Request/Maintenance Plan under subpart 4 requirements, U.S. EPA staff requested that the emission inventory be expanded to include volatile organic compounds (VOCs) and ammonia emissions, and that other clarifications be made;

WHEREAS, ARB staff drafted the Minor Updates to the Yuba City-Marysville PM2.5 Maintenance Plan and Redesignation Request (Minor Updates) as a proposed revision to the SIP to address this request;

WHEREAS, that portion of the ARB's regulatory program that involves the adoption, approval, amendment, or repeal of standards, rules, regulations, or plans has been certified by the Secretary of Resources Agency pursuant to Public Resources Code section 21080.5 of the California Environmental Quality Act (CEQA Guidelines section 15251(d)), and ARB conducts it CEQA review pursuant to this certified program (California Code of Regulations, title 17, sections 60001-60007);

WHEREAS, ARB staff reviewed the Minor Updates and concluded it is exempt from the requirements of CEQA pursuant to CEQA Guidelines section 15061, subdivision (b)(3) because there is no possibility that the Minor Updates may result in a significant adverse impact on the environment since the revisions are limited to an expanded emissions inventory and other minor clarifications requested by

U.S. EPA, and it does not contain any new proposals for emission control measures or other actions that could result in adverse impacts to the environment;

WHEREAS, 110(l) of the Act and 40 CFR section 51.102 require one or more public hearings, preceded by at least 30-day notice and opportunity for public review, be conducted prior to the adoption and submittal to U.S. EPA of any SIP revision;

WHEREAS, on January 17, 2014, ARB provided a 30-day notice and circulated for public review the proposed Minor Updates;

WHEREAS, the Minor Updates include the following:

1. Additional information documenting that the Yuba City-Marysville area attained the 24-hr PM2.5 standard due to permanent and enforceable emission reductions;
2. Supporting documentation for calculating the projected 2024 maintenance design value; and
3. Consistent with subpart 4 of the Act, an emission inventory for directly emitted PM2.5 and all PM2.5 precursors, updated to include VOCs and ammonia.

WHEREAS, the Board finds that:

1. The proposed Minor Updates meet the applicable requirements established by the Act and U.S. EPA regulations;

2. The Board certifies pursuant to 40 CFR section 51.102 that the proposed Minor Updates meet the notice and public hearing requirements specified in 40 CFR section 51.102; and

3. The Minor Updates are exempt from the requirements of CEQA pursuant to CEQA Guidelines section 15061(b)(3) because it can be seen with certainty that there is no possibility that the proposed SIP revision may result in a significant adverse impact on the environment since the Minor Updates are limited to an expanded emissions inventory and other minor clarifications requested by U.S. EPA, and it does not contain any new proposals for emission control measures or other actions that could result in adverse impacts to the environment.

NOW, THEREFORE, BE IT RESOLVED that the Board hereby approves the Minor Updates to the Yuba City-Marysville PM2.5 Maintenance Plan and Redesignation Request as a revision to the California SIP.

BE IT FURTHER RESOLVED that the Board hereby directs the Executive Officer to forward the Minor Update to U.S. EPA for inclusion in the SIP to be effective, for purposes of federal law, upon approval by U.S. EPA.

BE IT FURTHER RESOLVED that the Board directs the Executive Officer to work with the Feather River District and U.S. EPA and take appropriate action to resolve any completeness or approvability issues that may arise regarding the SIP submission.

BE IT FURTHER RESOLVED that the Board authorizes the Executive Officer to include in the SIP submittal any technical corrections, clarifications, or additions that may be necessary to secure U.S. EPA approval.