# SACRAMENTO METROPOLITAN AIR QUALITY MANAGEMENT DISTRICT

### **STAFF REPORT**

# Rule 202 – NEW SOURCE REVIEW Rule 214 – FEDERAL NEW SOURCE REVIEW Rule 215 – AGRICULTURAL PERMIT REQUIREMENTS AND NEW AGRICULTURAL PERMIT REVIEW

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### **EXECUTIVE SUMMARY**

The District is currently designated as a nonattainment area for both state and federal ozone, PM10<sup>1</sup> and PM2.5<sup>2</sup> standards. A strategy to control air pollution is to reduce emissions from new and modified stationary sources through a New Source Review (NSR) program. The federal Clean Air Act and its associated regulations contain NSR requirements for major stationary sources and major modifications including the recent addition of PM2.5 as a regulated pollutant. Similarly, the California Clean Air Act sets requirement to offset the impact of new sources. Under the California Health and Safety Code (HSC) and California Code of Regulations, the District is required to establish a no net increase program for emissions of nonattainment pollutants from all new or modified stationary sources which emit, or have the potential to emit, 10 tons or more per year.

Rule 202 was first adopted on September 20, 1976, and was last amended in 2005. The New Source Review (NSR) rule adopted into the State Implementation Plan (SIP) by the U.S. Environmental Protection Agency (EPA) is the NSR Rule 202 as adopted November 20, 1984. Rule 215 was adopted on August 24, 2006 to govern agricultural sources.

In addition to the changes needed to meet Clean Air Act (CAA) requirements for permitting new and modified sources in severe ozone and PM2.5 nonattainment areas, amendments to Rule 202 must conform to the requirements of SB288, the Protect California Air Act of 2003. This California law, discussed in more detail later in this paper, prevents the District from adopting NSR requirements less stringent than the "new source review rules that existed on December 30, 2002<sup>3</sup>" and specifies that the rule for comparison as:

"those new source review rules and regulations for both nonattainment and prevention of significant deterioration for new, modified, repaired, or replaced sources that have been adopted by the district governing board on or prior to December 30, 2002, that have been submitted to the EPA by the state board for inclusion into the SIP and are pending approval or have been approved by the EPA<sup>4</sup>."

The proposed revisions to Rule 202 will contain **the most stringent** of state or federal laws and regulations, and apply to **both** major and minor sources. The revisions are intended to:

- 1. <u>Meet severe ozone and PM2.5 nonattainment area requirements</u> Meet federal CAA NSR requirements generally described in Appendix S to 40 CFR Part 51.
- 2. Meet the requirements of Clean Air Act Sections 110(I) and 193<sup>5</sup> These sections prohibit changes to the State Implementation Plan that interfere with attainment or progress goals or make other modifications that do not provide equivalent or greater emissions reductions. In general, these requirements can be met by avoiding changes to the proposed NSR rule that are less stringent than the SIP approved NSR rule (adopted November 20, 1984.) The SIP approved Rule 202 is intended to be removed from the SIP and replaced with proposed Rule 214 and a later submittal of a new Rule 203 Prevention of Significant Deterioration. Current Rule 202 has some provisions that are less stringent

Particulate matter with an aerodynamic diameter of 10 microns or less, Code of Federal Regulations, Title 40, Part 50.6.

<sup>&</sup>lt;sup>2</sup> Particulate matter with an aerodynamic diameter of 2.5 microns or less, Code of Federal Regulations, Title 40, Part 50.7.

<sup>&</sup>lt;sup>3</sup> California Health and Safety Code § 42504(a)

California Health and Safety Code § 42505

<sup>&</sup>lt;sup>5</sup> 42 USC 7410(I) and 42 USC 7515

than the 1984 SIP rule, therefore, the proposed rule will include revisions that match or are equivalent to the 1984 rule requirements.

- 3. <u>Meet state regulations for transport mitigation</u> The transport mitigation requirements for Sacramento contained in the California Code of Regulations. These requirements in the current rule will be maintained.
- 4. Meet the requirements of SB288 State law prohibits the NSR rule from containing certain requirements that are less stringent than the NSR rule submitted as of December 30, 2002, that was the 1991 NSR rule. Some of the current rule provisions are less stringent than the 1991 rule, therefore, the proposed rule will also include revisions that match or are equivalent to the 1991 rule.

As noted above, only those requirements noted in items 1 and 2 above are required by federal law to be submitted as a revision to the SIP. Therefore, a proposed new, separate rule, Rule 214 – FEDERAL NEW SOURCE REVIEW, will be submitted as a SIP revision that contains the requirements necessary to satisfy federal laws and regulations, and omit provisions required by more stringent state laws noted in items 3 and 4 above. Requirements necessary to meet items 3 and 4 above are proposed to be included in Rule 202. It is our intention that Rule 214 is written such that the review of major stationary sources (including both non-major and major modifications) complying with proposed Rule 202 will also be in compliance with Rule 214. Major sources are cautioned that because they are subject to both state and federal laws, that both Rules 202 and 214 apply. However, Clean Air Act requirements related to EPA enforcement and citizen lawsuits only pertain to major source requirements in Rule 214.

Additionally as part of the rule package, Rule 213 – FEDERAL MAJOR MODIFICATIONS will be rescinded and Rule 215 will be amended. The requirements of Rule 213 are added to the proposed language of Rule 202 and Rule 214. Rule 215 will be amended to clarify Rule 214 applies in addition to Rule 202.

# **BACKGROUND**

The proposed rules provide for the review of new and modified stationary air pollution sources and provide mechanisms, including emissions offsets and air pollution controls, by which Authorities to Construct for such sources may be granted without interfering with the attainment or maintenance of health-based ambient air quality standards. Rule 202 sets requirements for reviewing permit applications for new and modified sources for Best Available Control Technology (BACT), emission offsets, emission calculation procedures and other administrative requirements. Rule 214, Federal New Source Review, is proposed to incorporate those sections of Rule 202 that apply to major sources for inclusion into the State Implementation Plan (SIP.)

Rule 202 was first adopted on September 20, 1976 and was amended in 1979, 1983, 1984, 1991, 1996, and last amended on February 24, 2005. The District submitted Rule 202 as adopted February 26, 1991 to the EPA for approval into the SIP. The District was reclassified to severe nonattainment for ozone effective June 1, 1995. The 1991 version of Rule 202 did not meet Clean Air Act requirements for severe nonattainment areas. Consequently EPA has not taken action on the submitted 1991 version of Rule 202.

#### **HEALTH IMPACTS**

Ground level ozone is a secondary pollutant formed from photochemical reactions of NOx and volatile organic compounds (VOCs) in the presence of sunlight. Ozone is a strong irritant that adversely affects human health and damages crops and other environmental resources. As documented by the U.S. Environmental Protection Agency (EPA) in the most recent Criteria Document for ozone (U.S. EPA 2006), both short-term and long-term exposure to ozone can irritate and damage the human respiratory system, resulting in:

- decreased lung function;
- development and aggravation of asthma;
- increased risk of cardiovascular problems such as heart attacks and strokes;
- increased hospitalizations and emergency room visits; and
- premature deaths.

According to the U.S. EPA, health studies have linked exposure to particulate matter, especially fine particles, to several significant health problems, including:

- increased respiratory symptoms, such as irritation of the airways, coughing, or difficulty breathing:
- decreased lung function;
- aggravated asthma;
- development of chronic bronchitis;
- irregular heartbeat;
- · nonfatal heart attacks; and
- premature death in people with heart or lung disease.

Exposure to PM pollution can cause coughing, wheezing, and decreased lung function even in otherwise healthy children and adults. EPA estimates that thousands of elderly people die prematurely each year from exposure to fine particles. In addition, a recent study (Dominici et. al, 2006) of the correlation between PM2.5 concentrations and hospital admission rates concluded that short-term exposure to PM2.5 increases the risk of hospitalization for cardiovascular and respiratory diseases.

# **LEGAL MANDATES**

<u>Federal Clean Air Act requirements (general):</u> The Clean Air Act<sup>6</sup> requires state implementation plans to include provisions to "...require permits for the construction and operation of new or modified major stationary sources anywhere in the nonattainment area<sup>7</sup>..." Sacramento County is nonattainment for federal ozone, PM10, and PM2.5 standards.

NSR Ozone Reclassification Requirements: The District's reclassification request from "serious" to "severe-15" for the 1997 8-hour ozone standard is effective June 4, 2010<sup>8</sup>. EPA established deadline

<sup>&</sup>lt;sup>6</sup> Including Sections 110(a)(2)C), 172(c)(5), 173, and 182(d)(2), at 42 USC 7410(a)(2)(C), 7502(c)(5), 7503, and 7511a(d)(2) respectively.

<sup>&</sup>lt;sup>7</sup> 42 USC 7502(c)(5)

<sup>&</sup>lt;sup>8</sup> "Designations of Areas for Air Quality Planning Purposes; California; San Joaquin Valley, South Coast Air

of June 4, 2011 for submittal of revisions to the SIP to meet the NSR requirements of a "severe-15" area. Proposed Rule 214 is intended to satisfy the NSR requirements for a severe-15 ozone area.

<u>U.S. EPA Consent Decree to satisfy Clean Air Act:</u> The District has also received notice of an EPA Consent Decree to address a lawsuit filed by WildEarth Guardians in the United States District Court for the Northern District of California<sup>9</sup>. The Consent Decree sets a timeline of May 10, 2011, for the EPA to either approve a NSR rule that addresses both the 1997 NAAQS for 8-hour ozone and PM2.5, promulgate a Federal Implementation Plan (FIP) or some combination. The District must satisfy NSR requirements and submit to California Air Resources Board (ARB) and EPA well in advance of May 10, 2011 or EPA could either approve in part the 1991 rule and/or promulgate NSR requirements for Sacramento County. If EPA promulgates a FIP, then EPA region 9 would become the federal NSR permitting authority for Sacramento County.

<u>U.S. EPA Comments and Approvability Issues:</u> The District received written U.S. EPA comments on SIP approvability of earlier versions of Rule 202 identifying the following necessary changes<sup>10</sup>. These issues will also be addressed in the proposed rules:

- Eliminate exemptions for temporary and emergency equipment at major sources
- Define replacement equipment
- Clarify Historic Potential Emissions

In addition, the District has received verbal comments on the applicability of the emergency equipment exemption for multiple units at a source that otherwise would be a major stationary source.

<u>Federal PM2.5 NSR Requirements:</u> Sacramento was recently designated as a federal PM2.5 nonattainment area for the 2006 PM2.5 national ambient air quality standards<sup>11</sup>. EPA has issued a PM2.5 NSR Implementation Rule<sup>12</sup> to interpret CAA requirements as they pertain to the 1997 and 2006 PM2.5 standards. Pursuant to CAA Section 110(a)(2)(C)<sup>13</sup> and EPA's Implementation Rule<sup>14</sup>, PM2.5 NSR requirements apply to both major and minor sources effective December 14, 2009. The Implementation Rule also included; offset trigger levels, offset ratios, and defining the emissions levels that constitute "major source" and "major modification". The proposed rules match the offset ratios for direct PM2.5 emissions to those of PM10. The proposed offset ratios meet EPA's requirements of at least 1.0 to 1.0<sup>15</sup>. In addition, the proposed rule matches EPA requirements that all PM2.5 and PM2.5 precursor offsets must be obtained within the Sacramento Federal Nonattainment

Basin, Coachella Valley, and Sacramento Metro 8-Hour Ozone Nonattainment Areas; Reclassification", Federal Register 75 (May 5, 2010) p. 24409

<sup>10</sup> U.S. EPA Comments for Rule 202 dated March 4, 1996, October 28, 1996 and August 14, 2000.

<sup>13</sup> 42 USC 7410(a)(2)(c)

WildEarth Guardians v. Jackson No. 4:09-CV-02453-CW (N.D. CA) "Proposed Consent Decree, Clean Air Act Citizen Suit", Federal Register 74 (December 7, 2009) p. 64076

<sup>&</sup>lt;sup>11</sup> "Air Quality Designations for the 2006 24-Hour Fine Particle (PM2.5) National Ambient Air Quality Standards, Final Rule", Federal Register 74 (November 13, 2009) p. 58688

<sup>12 &</sup>quot;Implementation of the New Source Review (NSR) Program for Particulate Matter Less Than 2.5 Micrometers (PM2.5), Final Rule", Federal Register 73 (May 16, 2008) p. 28321

Effective upon nonattainment designation, "Implementation of the New Source Review (NSR) Program for Particulate Matter Less Than 2.5 Micrometers (PM2.5), Final Rule", Federal Register 73 (May 16, 2008) p. 28324

<sup>&</sup>quot;Implementation of the New Source Review (NSR) Program for Particulate Matter Less Than 2.5 Micrometers (PM2.5), Final Rule", Federal Register 73 (May 16, 2008) p. 28321

Area for PM2.5<sup>16</sup>.

Chapter 4.5 Protect California Air Act 2003 / SB288 Requirements: On December 21, 2002, the U.S. EPA promulgated regulations that substantially weakened the basic federal new source review program (67 Fed. Reg. 80186-80289) (Dec. 31, 2002)). In an effort to minimize the impact of this regulation, the state legislature passed Senate Bill 288, the Protect California Air Act of 2003 (SB288), starting with HSC Section 42500. The Act is intended to minimize the impact of the relaxation of the federal new source review program on air quality in California.

SB288 requires that a district's NSR program cannot be relaxed from the NSR rule that had been adopted by the district governing board on or prior to December 30, 2002, and that had been submitted to the EPA by the state board for inclusion into the SIP<sup>17</sup>. ARB's website<sup>18</sup> indicates that the February 26, 1991 version of Rule 202 is the District's NSR baseline rule for SB288. The requirements of SB288<sup>19</sup> prevent the District from amending Rule 202 to be less stringent than the baseline rule. Amendments or revisions cannot exempt, relax or reduce the obligations of a stationary source for any of the requirements listed below:

- Applicability determination for NSR
- Definition of modification, major modification, routine maintenance, or replacement
- Calculation methodology, thresholds or other procedures of NSR
- Any definitions or requirements of the NSR regulations
- Any requirements to obtain NSR or other Permits to construct
- Any requirements for BACT, Air Quality Impact Analysis, recordkeeping or public participation
- Any requirements for regulating any air pollutant covered by the NSR rules and regulations

Of particular concern for the proposed amendments, BACT requirements cannot be changed from the requirements that existed prior but offsets can be changed so long as the overall offset requirements are not less stringent.

<u>BACT</u>: Proposed rule language requires BACT for any emission increase. The currently adopted rule requires BACT only if the <u>emissions increase</u> from an <u>emissions unit</u> meets or exceeds 10 lbs/day. In addition, Section 204.2 allows for a determination of the overall effect of a BACT determination. This is used in circumstances such as control devices where there is a restrictive control on one pollutant but may cause an small increase of another pollutant. For example, a thermal oxidizer for controlling VOC may cause an increase in NOx emission. This requires discussion in the Preliminary Decision as to the choice of BACT relating to the pollutant requiring the lowest emission rates.

The proposed rule is more stringent than the current rule. The proposed reduction in the thresholds is required to comply with three separate provisions in state law: HSC Sections 40919, 41010(b), and 42504, as discussed below.

In 1991, the District changed the BACT trigger levels from 150 pounds per day to 0 pounds per day due to California Clean Air Act (CCAA) requirements for stationary source permitting programs. The

<sup>17</sup> Section 42505 of the California Health and Safety Code

<sup>19</sup> Section 42504 of the California Health and Safety Code

<sup>&</sup>lt;sup>16</sup> 42 USC 7503(c)

<sup>&</sup>lt;sup>18</sup> California Air Resources Board, District NSR Rules as they existed on December 31, 2002, last accessed May 10, 2010, <a href="http://www.arb.ca.gov/nsr/sb288/rules/rules.htm#24">http://www.arb.ca.gov/nsr/sb288/rules/rules.htm#24</a>>

1988 CCAA required district permitting programs to achieve no net increase in emissions of nonattainment pollutants or their precursors from all permitted new or modified stationary sources. ARB Guidance<sup>20</sup> recommended requiring BACT for all new sources to minimize the likely increased demand for offsets caused by law.

In 1993, the California Clean Air Act was revised to relax the no net increase requirement and allowed districts to set higher trigger levels for BACT (HSC Section 40919). HSC Section 40919 requires BACT when a <u>stationary source</u> (rather than an emission unit) has the potential to emit 10 lbs/day or more of any nonattainment pollutant or its precursors excluding particulate matter.

HSC Section 41010(b) requires that the rules and regulations adopted by the Sacramento district board pursuant to subdivision (a) shall require the use of best available control technology for new or modified sources. Staff interprets this to mean for any emissions increase. This is consistent with South Coast Air Quality Management District which has identical statutory language, HSC Section 40440(b)(1).

The 1991 version of the rule required BACT for any emissions increase therefore SB288<sup>21</sup> requires BACT for all new and modified sources.

A BACT trigger for PM2.5 of 0 lbs/day is proposed to match the proposed BACT trigger for PM10. The BACT trigger for PM2.5 matches the PM10 BACT trigger because PM2.5 is a subset of PM10. Additionally, no further guidance has been provided to choose a different PM2.5 BACT trigger level. SB288 Analysis - Offset Changes: SB288 prohibits the District from amending or revising NSR rules to be less stringent than the NSR rules that existed on December 30, 2002. A few very limited exemptions apply. A NSR rule may be amended or revised to be less stringent if several narrowly designed requirements are met, such as the rule being unworkable due to engineering or other technical problems or otherwise will cause substantial hardship to business, industry, or category of sources. In such cases, SB288 requires a narrowly tailored relief and requires the district provide equivalent reductions in emissions<sup>22</sup>.

Staff analyzed whether the proposed amendment to Rule 202 was less stringent than the baseline rule as discussed below. Staff's findings are that the proposed changes to Rule 202 will not adversely impact air quality in the District and will not result in the relaxation of the rule requirements that were in existence prior to December 2002.

The table below summarizes the requirements of Rule 202 that are contained in the SB288 baseline rule<sup>23</sup>, current rule, and proposed rule.

<sup>22</sup> Section 42504 of California Health and Safety Code

<sup>&</sup>lt;sup>20</sup> "Permitting Program Guidelines for New and Modified Sources in Nonattainment Areas", Air Resources Board Stationary Source Division, July 1990, p. 7

<sup>&</sup>lt;sup>21</sup> HSC Section 42504

<sup>&</sup>lt;sup>23</sup> See discussion in Background section, <u>Chapter 4.5 Protect California Air Act 2003 / SB288 Requirements</u>, for discussion of the baseline rule for this SB 288 analysis.

Requirement	SB288 Baseline Rule (1991)	Current Rule (2005)	Proposed Rule
Major Source Definition	50 tpy	25 tpy	25 tpy
Offset Triggers	150 lbs/day	25 tpy (for major)	25 tpy (for major)
ROC & NOx	(27.4 tpy)	15 tpy (non-major)	15 tpy (non-major)
Offset Trigger	80 lbs/day	7,500 lbs/qtr	7,300 lbs/qtr
PM10	(14.6 tpy)	(15 tpy)	(14.6 tpy)
Offset ratios –	1.0 <sup>24</sup>	1.3 (major VOC &	1.3 (major VOC &
on-site reductions		NOx >25 tpy)	NOx >25 tpy)
		1.0 (non-major - all	1.0 (non-major – all
		other pollutants	other pollutants >15
0.00	4.0	>15 tpy)	tpy)
Offset ratios All	1.2	1.3 (major >25 tpy) <sup>25</sup>	1.3 (major >25 tpy) <sup>25</sup>
Nonattainment Pollutants –		1.2 (non-major > 15	1.2 (non-major > 15
Offsite <15 miles		tpy)	tpy)
Offset ratios ROC & NOx	2.0	1.5 (major and	2.0 (major and
- Offsite >15 miles		non-major >15 tpy)	non-major >15 tpy)
Offset ratio PM10 – Offsite	2.0	1.5 (major and	2.0 (major and
>15 miles	26	non-major >15 tpy)	non-major >15 tpy)
Offset ratios	>2.0 <sup>26</sup>	>1.5 <sup>26</sup>	>2.0 <sup>26</sup>
ROC & NOx – Offsite $> 50$			
miles or Outside Air Basin			
Offset ratio PM10 – Offsite	>2.0	>1.5	>2.0
> 50 miles or Outside Air		(major and	(major and
Basin		non-major >15 tpy)	non-major >15 tpy)

The list below highlights key provisions, in the current rule, that are less stringent than the SB288 baseline rule. The proposed change is also discussed below.

- Difference The SB288 baseline rule had daily offset trigger levels for all pollutants Change – The proposed rule will maintain quarterly offset trigger levels. The 1991 Rule 202 version calculated proposed emissions from an emissions unit for each calendar quarter and actual emissions reductions calculated for each calendar quarter, in pounds per day. This flexibility allows the proposed language to maintain the offset trigger and calculation procedure in pounds per quarter.
- 2. Difference Slightly lower offset trigger level of 14.6 tpy for PM10. Change The proposed rule will slightly lower the offset trigger for PM10.

The offset ratios in the SB288 baseline rule were 0.1 higher than the numbers shown in this table. The extra 10% in the offset ratio was to accumulate funding for the Community Bank pursuant to Rule 202, Section 413 (1991 version). This mechanism was moved to Rule 204 when the banking rule was adopted in 1992. Therefore, to make a direct comparison to current offset ratios, the Community Bank portion has been removed.

<sup>&</sup>lt;sup>25</sup> 42 USC 7511 a(d)(2)

The APCO shall analyze the impact on the air quality increments as such offsets in the category could be subject to higher offset ratio.

- 3. Difference The SB288 baseline rule had higher offset ratios for ROC, NOx and PM10 where the offsets come from distances greater than 15 miles from the source using the offsets. Change The offset ratios are proposed to be increased to 2.0 to 1.0.
- 4. Difference The SB288 baseline rule had higher offset ratios for offsets for ROC, NOx and PM10 where the offsets come from distances greater than 50 miles from the source (although it was slightly less stringent in that it allowed using the offsets from Outside the Air Basin.) Change The offset ratios are proposed to be increased to 2.0 to 1.0 with the restriction and maintain the requirement that offsets come from within the Sacramento Valley Air Basin consistent with state law.

#### SUMMARY OF PROPOSED AMENDMENTS

Overview: The proposed amendments are:

- Rule 202 NEW SOURCE REVIEW contains requirements to meet state and federal laws and regulations and applies to both major and minor sources.
- Proposed new Rule 214 FEDERAL NEW SOURCE REVIEW contains the requirements needed to satisfy federal law. To assist the reader we show the language as compared to the language in proposed Rule 202 New Source Review. Only Rule 214 will be submitted to EPA for inclusion in the State Implementation Plan<sup>27</sup>. Major sources are subject to both proposed Rules 202 and 214. Clean Air Act requirements related to EPA enforcement<sup>28</sup> and citizen lawsuits<sup>29</sup> only pertain to the SIP approved version. Rule 202 will not be submitted for SIP approval.
- Rule 215 AGRICULTURAL PERMIT REQUIREMENTS AND NEW AGRICULTURAL PERMIT REVIEW contains requirements for non-major agricultural sources. Proposed amendments to Rule 215 specify that both Rule 214 and Rule 202 apply to major agricultural sources.
- Limited the Emergency Equipment exemption to apply only if the equipment is not a major source or major modification in Rule 202 and 214. (110(I)/193 SIP issue, included in both Rule 202 and 214)
- Temporary Source exemption is limited to emissions units with daily emissions increases that
  do not exceed the specified levels in the '91 Rule (SB288 issue, the emission increase
  provision is only included in Rule 202).
- Added new exemption for agricultural sources that are not major sources or major modifications. (HSC Section 42301.16, only included in Rule 202)
- Limited the Replacement Equipment exemption applicability to an identical emissions unit(s)
  or functionally equivalent, if the functionally equivalent unit not a major source or major
  modification. (SB288 issue, included in both Rule 202 and 214)
- Added alternative siting requirements previously in Rule 213. (Clarity issue, included in both Rule 202 and 214)
- BACT required for all emission increases. (state law and 110(l)/193 SIP issue included in both Rule 202 and 214)

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Replacing the approved version of Rule 202 adopted Nov. 20, 1984 and approved by EPA into the SIP June 19, 1985 Federal Register, Volume 50, page 25417.

<sup>&</sup>lt;sup>28</sup> 42 USC 7413

<sup>&</sup>lt;sup>29</sup> 42 USC 7604

- Lowered offset trigger level for PM10 to 14.6 tons per year consistent with '91 Rule. (SB288 issue, only included in Rule 202, Rule 214 establishes the offset trigger level at 15 tpy because we area federal nonattainment area for PM2.5)
- Increased emission offset ratios consistent with the '91 Rule. (SB288 issue and 110(l)/193 SIP issue, included in both Rule 202 and 214)
- Added PM2.5 stationary source NSR Clean Air Act requirements. (CAA requirement designated nonattainment for 2006 PM2.5 NAAQS, included in both Rule 202 and 214)
- Required emission offset for PM2.5 and PM2.5 precursors to be obtained within the Sacramento Federal Nonattainment Area for PM2.5. (CAA requirement, included in both Rule 202 and 214)
- Added 40 CFR Part 51.165 requirements to the definitions of Historic Actual Emissions and Historic Potential Emissions. (federal requirement, included in both Rule 202 and 214)

#### **COST IMPACTS**

Section 40703 of the California Health and Safety Code requires that the District consider and make public its findings relating to the cost effectiveness of implementing an emissions control measure.

**Impact on Businesses in Sacramento:** Proposed amendments to Rules 202 and 214 are required to meet state and federal requirements respectively. The primary changes that potentially impact businesses include; increased offsets, and additional BACT controls. Increase offsets arise from the following two changes: 1) Sources that are required to provide offsets, must provide a larger amount because the offset ratios are increased if the offsets are obtained from sources located further than 15 miles from the new or expanding source, and 2) more sources may be required to provide offsets because the PM10 offset trigger is lowered from 15 tons per year (tpy or 7500 pounds/quarter) to 14.6 tpy (7,300 pounds/quarter). The most recent offset costs are noted in the Table below.

Pollutant	Sacramento and Surrounding Areas for 2007 <sup>30</sup> (\$/ton)	Community Bank <sup>31</sup> (\$/ton)
VOC	\$10,000 - \$75,000	\$16,440 - \$27,906
NOx	\$10,000 - \$16,000	\$31,920
PM10	\$20,000	\$31,416 – \$33,685
SOx	\$500	\$5,000
CO	\$1	\$2,500 - \$20,000

Some sources that exceed the revised offset triggers may instead choose to reduce their allowed emissions levels since most sources operate well below permitted levels. The amount of offsets required also may be limited by the imposition of the second modified requirement for BACT on all new sources and any emission increase. The BACT requirement may increase the cost for new or

<sup>&</sup>lt;sup>30</sup> California Air Resources Board, "Emission Reduction Offsets Transaction Cost Summary Report for 2007", December 2008

<sup>31</sup> SMAQMD, "Annual Review of Emission Reduction Credit Loan Renewal Administrative Fee and Emission Reduction Credit Loan Rate", March 24, 2005

modified equipment that would have been exempt from BACT under the current rule if that equipment does not meet BACT. The actual requirements for BACT are determined on a case-by-case basis considering technical feasibility and control levels achieved-in-practice by similar sources. In some cases, the BACT requirements are the same controls required by other District rules, resulting in no additional costs. Even when BACT controls are not already required, the BACT requires emissions levels or controls that have been achieved in practice, therefore, the actual costs are limited by what has been economically feasible for other businesses. In addition, the cost of the BACT is explicitly capped for non-major sources. The current cost caps are noted in the table below. Staff has a BACT manual that identifies what equipment is generally considered BACT for common sources such as boilers and internal combustion engines. Staff is expanding the manual to include additional sources and equipment.

Pollutant	Maximum Cost (\$/ton)
VOC	17,500*
NOx	24,500
PM10	11,400
SOx	18,300
CO	TBD if BACT triggered

<sup>\*</sup> Coating operations that have reduced VOC emissions by:

- 35 to 80% through the use of low-VOC coatings (lower than specified by the applicable rule): \$13,750/ton for VOC
- More than 80%: \$10,000/ton for VOC

The actual impact on businesses will depend on 1) the number of business that will modify their operations in the future, 2) the incremental costs of any additional controls, 3) the increases in permitted emissions levels associated with the modifications, and 4) the location of the offsets. Therefore, staff cannot accurately predict the total costs.

**Cost to District:** Staff estimates an additional 0.36 FTE are needed to implement the revised BACT requirement. Staff does not anticipate a need for staff resources for changes to the offset requirements.

#### **EMISSIONS IMPACT**

Overall, the proposed revisions that require some sources to use additional emission controls and/or find emission mitigation (offsets) will achieve emission reductions of pollutants that exceed state and federal health standards. However, as discussed in the Cost Impacts - Impacts on Business above, the actual impacts, and associated emissions reductions, depend on the four factors noted and, therefore, staff cannot estimate the quantity of emission reduction benefits anticipated from the proposed rule amendments.

#### SOCIOECONOMIC IMPACT ANALYSIS

CHSC Section 40728.5 requires a district to perform an assessment of the socioeconomic impacts before adopting, amending, or repealing a rule that will significantly affect air quality or emission limitations. The District Board is required to actively consider the socioeconomic impacts of the proposal and make a good faith effort to minimize adverse socioeconomic impacts.

CHSC Section 40728.5 requires discussion of:

- 1. The type of industry or business, including small business, affected by the proposed rule or rule amendments.
- 2. The impact of the proposed rule or rule amendments on employment and the economy of the
- 3. The range of probable costs, including costs to industry or business, including small business.
- 4. The availability and cost-effectiveness of alternatives to the proposed rule or rule amendments.5. The emission reduction potential of the rule or regulation.
- 6. The necessity of adopting, amending, or repealing the rule or regulation to attain state and federal ambient air standards.

Type of industry or business, including small business, affected by the proposed rule: Rule 202 applies to any stationary source that installs or modifies emissions units. Rule 214 applies to any major stationary source that installs or modifies emissions units. The sources could include chemical production plants, food processors, manufacturing plants, coating facilities, public schools using equipment such as large natural gas space or water heaters, hospitals, and office buildings.

Impact on employment and economy in the District of the proposed rule: The amendments to the proposed rules may impose additional offset costs for sources with emissions greater than 14.6 tons per year of PM10 or greater than 15 tons per year of PM2.5 that modify their operations or for sources that obtain offsets from sources located further than 15 miles from the new or expanding source. BACT is proposed for all new sources and any emission increase regardless of emissions of the device. The lower BACT trigger level reduces the need for sources to obtain offsets. Many of these sources will choose to take emissions limitation rather than provide emissions offsets. Staff does not know how many facilities will take a permit limit below the offset trigger levels and how many will require offset credits. Staff does not anticipate a significant impact on the employment and economy in Sacramento.

Range of probable costs, including costs to industry or business, including small business of the proposed rule: See Cost Impacts discussion above.

Availability and cost effectiveness of alternatives to the proposed rule: The primary purpose of these rule amendments are to retain local air quality permitting authority by revising the SIP before the consent decree deadline in WildEarth Guardians v. Jackson. The proposed amendments also satisfy Clean Air Act requirements associated with our reclassification to 'severe' ozone nonattainment area and redesignation to nonattainment for the federal PM2.5 air quality standards. In proposing the rules, Staff is threading the needles of state and federal laws and has not identified any alternatives that meet these purposes. Staff does not propose to only make revisions necessary to satisfy only federal laws and requirements and not the more stringent state laws, because SB288 prohibits an air quality management district from amending or revising their new source review rule to be less stringent than the rule that existed on December 30, 2002. If California Air Resources Board finds, after a public

hearing, that a district's NSR rules are not equivalent to or more stringent than those that existed on December 30, 2002, CARB shall promptly adopt for that district the rules or regulations that may be necessary to establish equivalency.

That leaves the only alternative is to not amend the rules. A likely result of not amending the rules is that, on or about May 11, 2011 EPA would impose a federal implementation plan (FIP) imposing the federal requirements and the EPA Region 9 office in San Francisco would issue permits to affected new and modified sources. In addition, this would trigger two sanction clocks that would be turned off when the EPA approves a satisfactory new source review rule. The first sanction occurs 18 months after EPA's FIP and establishes an emission offset sanction. Under the emission offset sanction, each ton of emissions created by a new stationary source of pollution is offset by a two ton reduction in existing stationary sources. The second sanction applied 24 months after EPA's FIP and imposes a highway fund sanction. Under the highway fund sanction, Sacramento County would lose funding for transportation projects if the funds have not been obligated by the Federal Highway Administration by the date the highway sanctions are imposed. (Projects that have already received approval to proceed and had funds obligated may proceed.)

One alternative is for EPA to approve in part the 1991 rule and promulgate a FIP for the remaining NSR requirements. That would reduce the number of sources for which we would no longer have permitting authority and the two sanction clocks would be still be triggered. A FIP would be needed for the parts of the 1991 rule that do not meet federal requirements. Those parts pertain to; 1) the noticing exemption, 2) the rule compliance exemption, 3) same source offset ratio must be 1.3:1, and 4) lower certain offset trigger levels. EPA could strike the two exemptions. Without the noticing exemption, all permit applications subject to Rule 202 would require a public notice and the associated fees and delays for that notice. Striking the rule compliance exemption could require all modifications that increase emissions above the offset trigger levels, not just major modifications, to offset their increased emissions. In addition, if EPA approved the 1991 rule daily emission limits could be required on all permits, the daily offset trigger would apply to all sources (rather than just peaking power plants), and the exemption from offsets for replacement equipment exemption would apply only to identical (except serial number) equipment at non-major sources. In summary, if EPA was to approve in part the 1991 version of Rule 202, not only would most of Rule 214 requirements apply, but several additional burdens that would not be required by federal regulations, and not included in the proposed Rule 214 or Rule 202 amendments, could be required.

<u>Emission reduction potential of the proposed amendments:</u> The proposed amendments will result in an overall benefit to air quality in the District. See the discussion of Emissions Impacts, above.

<u>Necessity of adopting the amendments:</u> Staff proposed amendments in order to comply with federal regulations, Clean Air Act requirements and state law.

#### **ENVIRONMENTAL REVIEW AND COMPLIANCE**

Staff finds that the proposed rules are exempt from the California Environmental Quality Act as an action by a regulatory agency for protection of the environment (Class 8 Categorical Exemption, Section 15308 State CEQA Guidelines) and because it can be seen with certainty that there is no possibility that the activity in question may have a significant adverse effect on the environment (Section 15061(b)(3), State CEQA Guidelines).

California Public Resources Code (Section 21159) requires an environmental analysis of the reasonably foreseeable methods of compliance. Staff compared the impact of the amendments of the rules with the existing rules. The proposed rules require additional sources to implement BACT level controls, set lower offset trigger levels, and increase offset ratios. The analysis concludes the amendments to Rule 202 and Rule 214 will result in an air quality emission benefits. Rule 215 requires compliance with Rule 214 for major agricultural sources. As noted previously in this report, the actual offsets impacts from additional control requirements cannot be quantified or identified. New and modified sources require local agency approvals, including District permits, and compliance with CEQA for any associated significant environmental impacts, therefore Staff has concluded that no environmental impacts will be caused by compliance with the proposed rules.

### **PUBLIC COMMENTS**

Staff held a public workshop to discuss the proposed amendments on August 10, 2010. A public notice was mailed to interested parties, including the affected sources, and was posted on the District website. The draft rules and staff report were available for public review at that time.

Staff received comments and questions at the workshop. All comments and responses re included in Appendix C. In response to public comments, Staff has aligned the PM2.5 emission offset ratios (and ammonia if needed) to the PM10 emission offset ratios, adjusted the PM2.5 offset trigger to 15 tpy matching Placer County and made a few minor grammatical changes. Although the increase in triggers will subject fewer sources to offset requirements, for sources that trigger offsets there will be an increase in the amount of direct PM2.5 offsets surrendered depending on the distance of the generated emission offsets.

#### **FINDINGS**

The California Health and Safety Code (HSC), Division 26, Air Resources, requires local districts to comply with a rule adoption protocol as set forth in Section 40727 of the Code. This section has been revised through legislative mandate to contain six findings that the District must make when developing, amending, or repealing a rule. These findings, effective January 1, 1992, and their definitions are listed in the table below.

# Rule 202 – Required Findings

Finding	Finding Determination
<b>Authority:</b> The District must find that a provision of law or of a state or federal regulation permits or requires the District to adopt, amend, or repeal the rule.	The District is authorized to adopt and amend Rule 202 by California Health and Safety Code (HSC) Sections 40001, 40702, 41010, and 42300. [HSC Section 40727(b)(2)].
<b>Necessity:</b> The District must find that the rulemaking demonstrates a need exists for the rule, or for its amendment or repeal.	It is necessary to adopt the proposed amendments to Rule 202 to comply with the Federal Clean Air Act (42 USC 7410(a)(2)(C), 7410(I), 7515 7502(c)(5), 7503, and 7511a(d)(2)), 40 Code of Federal Regulations Part 51, the Consent Decree, and no net increase program requirements of Health and Safety Code 40919, 41010(b),

Staff Report Rule 202, NEW SOURCE REVIEW

Rule 214, FEDERAL NEW SOURCE REIVEW AND

Rule 215, AGRICULTURAL PERMIT REQUIREMENTS AND NEW AGRICULTURAL PERMIT REVIEW August 18, 2010

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Finding	Finding Determination
Clarity: The District must find that the rule is written or displayed so that its meaning can be easily understood by the persons directly affected by it.	and 42504. [HSC Section 40727(b)(1)].  Staff has reviewed the proposed rule and determined that it can be understood by the affected parties. In addition, the record contains no evidence that people directly affected by the rule cannot understand the rule. [HSC Section 40727(b)(3)].
<b>Consistency:</b> The rule is in harmony with, and not in conflict with or contradictory to, existing statutes, court decisions, or state or federal regulations.	The proposed rule does not conflict with, and is not contradictory to, existing statutes, court decisions, or state or federal regulations. [HSC Section 40727(b)(4)].
Non-Duplication: The District must find that either:  1) The rule does not impose the same requirements as an existing state or federal regulation; or (2) that the duplicative requirements are necessary or proper to execute the powers and duties granted to, and imposed upon the District.	The proposed rule duplicates federal regulations for permitting programs (40 CFR Part 51.165). The duplicative requirements are necessary in order to execute the powers and duties imposed upon the District because the Federal Clean Air Act (42 USC 7410(a)(2)(c)) requires New Source Review to be included in the State Implementation Plan. This rule contains those provisions and other requirements necessary to comply with state law, specified in HSC Section 39610(b). [HSC Section 40727(b)(5)].
Reference: The District must refer to any statute, court decision, or other provision of law that the District implements, interprets, or makes specific by adopting, amending or repealing the rule.	In adopting the proposed rule, the District is implementing the requirements of HSC Sections 40919, 41010(b) and 42504, and Federal Clean Air Act (42 USC 7410(a)(2)(C), 7502(c)(5), 7503, and 7511a(d)(2)). [HSC Section 40727(b)(6)]
Additional Informational Requirements: In complying with HSC Section 40727.2, the District must identify all federal requirements and District rules that apply to the same equipment or source type as the proposed rule or amendments.	Appendix B includes a comparison with federal requirements. [HSC Section 40727.2].

# Rule 214 – Required Findings

Finding	Finding Determination
<b>Authority:</b> The District must find that a provision of law or of a state or federal regulation permits or requires the District to adopt, amend, or repeal the rule.	The District is authorized to adopt and amend Rule 214 by California Health and Safety Code (HSC) Sections 40001, 40702, 41010, and 42300. [HSC Section 40727(b)(2)].
<b>Necessity:</b> The District must find that the rulemaking demonstrates a need exists for the rule, or for its amendment or repeal.	It is necessary to adopt the proposed amendments to Rule 202 to comply with the Federal Clean Air Act (42 USC 7410(a)(2)(C), 7410(l), 7515 7502(c)(5), 7503, and 7511a(d)(2)), 40 Code of Federal Regulations Part 51, the Consent Decree. [HSC Section 40727(b)(1)].
Clarity: The District must find that the rule is written or displayed so that its meaning can be easily understood by the persons directly affected by it.	Staff has reviewed the proposed rule and determined that it can be understood by the affected parties. In addition, the record contains no evidence that people directly affected by the rule cannot understand the rule. [HSC Section 40727(b)(3)].
<b>Consistency:</b> The rule is in harmony with, and not in conflict with or contradictory to, existing statutes, court decisions, or state or federal regulations.	The proposed rule does not conflict with, and is not contradictory to, existing statutes, court decisions, or state or federal regulations. [HSC Section 40727(b)(4)].
Non-Duplication: The District must find that either:  1) The rule does not impose the same requirements as an existing state or federal regulation; or (2) that	The proposed rule duplicates federal regulations for permitting programs (40 CFR Part 51.165). The duplicative requirements are necessary in order to execute

Finding	Finding Determination
the duplicative requirements are necessary or proper to execute the powers and duties granted to, and imposed upon the District.	the powers and duties imposed upon the District because the Federal Clean Air Act (42 USC 7410(a)(2)(c)) requires New Source Review to be included in the State Implementation Plan. This rule contains those provisions and other requirements necessary to comply with state law, specified in HSC Section 39610(b). [HSC Section 40727(b)(5)].
<b>Reference:</b> The District must refer to any statute, court decision, or other provision of law that the District implements, interprets, or makes specific by adopting, amending or repealing the rule.	In adopting the proposed rule, the District is implementing the requirements of Federal Clean Air Act (42 USC 7410(a)(2)(C), 7502(c)(5), 7503, and 7511a(d)(2)). [HSC Section 40727(b)(6)]
Additional Informational Requirements: In complying with HSC Section 40727.2, the District must identify all federal requirements and District rules that apply to the same equipment or source type as the proposed rule or amendments.	Appendix B includes a comparison with federal requirements. [HSC Section 40727.2].

# Rule 215 - Required Findings

Finding	Finding Determination
<b>Authority:</b> The District must find that a provision of law or of a state or federal regulation permits or requires the District to adopt, amend, or repeal the rule.	The District is authorized to adopt rules and regulations by Health & Safety Code Sections 40001, 40702, 41010, 40919, 42301.16, and 42300 et. seq. (Health & Safety Code Section 40727(b)(2))
<b>Necessity:</b> The District must find that the rulemaking demonstrates a need exists for the rule, or for its amendment or repeal.	It is necessary for the District to amend the existing rule to comply with Health and Safety Code Section 42301.16. (Health & Safety Code Section 40727(b)(1))
Clarity: The District must find that the rule is written or displayed so that its meaning can be easily understood by the persons directly affected by it.	The District has reviewed the rule and determined that it can be easily understood by the affected industry. In addition, the record contains no evidence that the persons directly affected by the rule cannot understand the rule. (Health & Safety Code Section 40727(b)(3))
<b>Consistency:</b> The rule is in harmony with, and not in conflict with or contradictory to, existing statutes, court decisions, or state or federal regulations.	The proposed rule amendments do not conflict with and are not contradictory to existing statutes, court decisions, or state or federal regulations. (Health & Safety Code Section 40727(b)(4))
Non-Duplication: The District must find that either: 1) The rule does not impose the same requirements as an existing site or federal regulation; or 2) that the duplicative requirements are necessary or proper to execute the powers and duties granted to, and imposed upon the District.	The proposed rule duplicates federal regulations for permitting programs (40 CFR Part 51.165). The duplicative requirements are necessary in order to execute the powers and duties imposed upon the District because the Federal Clean Air Act (42 USC 7410(a)(2)(c)) requires New Source Review to be included in the State Implementation Plan. This rule contains those provisions and other requirements necessary to comply with state law, specified in HSC Section 39610(b). [HSC Section 40727(b)(5)].
<b>Reference:</b> The District must refer to any statute, court decision, or other provision of law that the District implements, interprets, or makes specific by adopting, amending or repealing the rule.	The adoption implements state law requirements pursuant to Health and Safety Code Section 42301.16. (Health & Safety Code Section 40727(b)(6))
Additional Informational Requirements (Health & Safety Code Section 40727): In complying with HSC Section 40727, the District must identify all federal requirements and District rules that apply to the same equipment or source type as the proposed rule or amendments.	There are no federal requirements that apply to these sources because this permitting program does not apply to new major stationary sources or major modifications. (Health & Safety Code Section 40727.2)

# **REFERENCES**

California Air Resources Board, "New Source Review Permitting Programs." <a href="http://www.arb.ca.gov/nsr/nsr.htm">http://www.arb.ca.gov/nsr/nsr.htm</a>

California Air Resources Board, New Source Review and Senate Bill 288 Guidance, April, 2006. (ARB, 2006).

California Air Resources Board, SB 288 Hearing Process Guidance, January 26, 2007.

"Implementation of the New Source Review (NSR) Program for Particulate Matter Less Than 2.5 Micrometers (PM2.5)", Federal Register 73:96 (May 16, 2008) p. 28321.

Placer County Air Pollution Control District, "Rule 502 New Source Review", February 11, 2010.

San Joaquin Valley Unified Air Pollution Control District, "Rule 2201 New and Modified Stationary Source Review Rule", December, 18, 2008.

San Joaquin Valley Unified Air Pollution Control District, "2008 PM2.5 Plan", April 30, 2008.

South Coast Air Quality Management District, "Rule XIII - New Source Review", Various Dates

U.S. EPA Comments for Rule 202, March 4, 1996 & September 3, 1996.

U.S. EPA Comments for Rule 202, August 14, 2000.

U.S. EPA, 40 CFR 51.165, Permit Requirements.

U.S. EPA, 40 CFR 51, Appendix S to Part 51 - Emission Offset Interpretative Ruling.

# **APPENDIX A**

# LIST OF CHANGES TO RULES Rule 202 – New Source Review

NEW SECTION NUMBER	EXISTING SECTION NUMBER	PROPOSED CHANGES
101	Same	Revised language to clarify rule provides for issuance of authorities to construct and permits to operate and changed the word "may" from "would then".
102	Same	Revised Rule 202 applicability, removed reference to agriculture and agricultural practices, and major source applicability. See also new Section 112. Agricultural sources that are major sources are subject to this rule due to changes in state law, HSC Section 42301.16. Added language from major modification section to clarify which emission units are subject in calculating potential to emit for determining major source applicability. Removed references to sections within Rule 207 are extraneous and not recommended by EPA for SIP approvability. Revised the term "affected pollutants" to "regulated air pollutants" for rule consistency and revised section reference.
110	Same	Revised exemption to clarify and limit exemption applicability. Emergency Equipment exemption does not apply if the emissions unit is a major stationary source or is a major modification. Change made due to EPA comments for SIP approvability and to be consistent with the 1984 SIP rule.
110.1	Same	Revised language to clarify emergency equipment shall not exceed 100 hours per year for maintenance purposes.
110.2	Same	Revised language to clarify operation of emergency equipment shall not exceed a total of 200 hours per year.
111	Same	Revised exemption to require the emissions unit emission increase not exceed the daily emissions levels specified in 1991 Rule. This exemption was added after the 1991 amendments. However, the 1991 rule would not have required offsets for sources that emitted less than the levels specified here. Change made due to SB288 requirements.
112	N/A	Added exemption to clarify what already is happening for non-major agricultural stationary source and agricultural non-major modifications.  These agricultural sources are subject to the requirements of Rule 215  – Agricultural Permit Requirements and New Agricultural Permit Review. HSC Section 42301.16
113	112	Revised exemption to include PM2.5. PM2.5 has been added to this rule because the District is now a federal PM2.5 nonattainment area. Added PM2.5 exemption level for notification, on annual basis, consistent with PM2.5 offset requirements (used offset trigger levels as the threshold). Revised the term "reactive" to "volatile" to be consistent with other District rules and simplified by calculating PTE from "the project," with "project" being defined in Section 235. Revised section

NEW SECTION NUMBER	EXISTING SECTION NUMBER	PROPOSED CHANGES
		reference.
114	113	Revised exemption to include the replacement equipment requirement that is removed. Revised "replacement equipment" exemption to satisfy SB288 and retain the exemption. The existing adopted rule modified the 1991 rule by allowing "functionally identical" instead of "identical" equipment to be considered replacement equipment. Under the 1991 rule, if equipment replacement was not "identical", then it would be subject to offsets if the emissions exceeded the 1991 offset thresholds except for VOC and NOx set at 136 lbs/day (25 tpy) consistent with major source levels of 25 tpy in the CAA for "severe" nonattainment. Therefore, "functionally" identical replacements can continue to be allowed, only if the daily emissions increase is less than the 1991 offset thresholds.
115	114	Revised significant to major to match 40 CFR Part 51.
116	N/A	Added exemption for modifications that are not federal major modifications from the requirements of Section 401 – Alternative Siting. Rule 213 is proposed to be rescinded and relevant requirements incorporated in Rule 202 for clarity.
200	Same	Revised section to explicitly include terms defined in Rule 101 – General Provisions and Definitions. Rule 101 contains the definition of Volatile Organic Compound (VOC).
N/A	202	Eliminated "actual emissions reductions" definition. Term no longer used in rule.
202	203	Section renumbered.
N/A	204	Eliminated "affected pollutants" definition. Term replaced with "regulated air pollutant" as defined by 40 CFR Part 51, Appendix S.
203	205	Revised to include U.S. Code and California Health and Safety Code for ambient air quality standards. Removed language referring to rule submittal to EPA for inclusion into the SIP. Rule 202 will not be submitted to the SIP.
204	206	Revised the definition to change the term "affected pollutants" to the new term "regulated air pollutants". Revised language to clarify BACT determination is for each nonattainment pollutant.
205-206	207-208	Sections renumbered.
207	N/A	Added "commencing operation" definition for the term used in the definition of new emissions unit consistent with the definition startup from 40 CFR 52.01 section (f).
208	N/A	Added "construction commences" definition for the term used in the definition of creditable increases and decreases consistent with 40 CFR Part 51.165 section (a)(1)(xvi).
210	Same	Revised "Cost Effectiveness Guidelines" to "BACT Policy" for determining cost-effective levels and added language that cost effectiveness does not apply to major stationary sources or major modifications consistent with the '91 rule. Revised the term "affected"

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NEW SECTION NUMBER	EXISTING SECTION NUMBER	PROPOSED CHANGES
		pollutants" to "regulated air pollutants" for rule consistency.
211	Same	Revised the period for creditable increases and decreases consistent with 40 CFR Part 51.165 and revised the term "federally enforceable" to "enforceable as a practical matter" consistent with "net emissions increase" definition in 40 CFR Part 51, Appendix S, Section II.A.6.i.
212	Same	Revised term "cumulative emission increase" to "emission increase" for rule clarity. Revised section reference.
213	Same	Revised the definition to change the term "affected pollutants" to the new term "regulated air pollutants".
214	Same	Added PM2.5 offset requirements to Section 302 consistent with federally required annual offset trigger levels. To enforce this new requirement, where applicable, daily and annual enforceable emissions limitations have been added. Moved the reference to NSPS and NESHAP provisions to Section 40X.
N/A	214.4	Section moved to Section 410.2d.
215	Same	Revised the term "affected pollutants" to "regulated air pollutants" for rule consistency.
216	N/A	Added "existing emissions unit" definition for the term used in the definition of historic potential emissions.
217	N/A	Added "federal major modification" definition taken verbatim from Rule 213. This definition specifies the sources that are exempt from alternative siting analysis requirements in Section 401.
218-219	216-217	Sections renumbered.
220.1	218	Revised the definition adding historic actual emissions using actual operating days or if no records using permitted operating days or calendar days, whichever is less. Under the 1991 rule, actual daily emissions reductions were calculated by dividing the actual quarterly emissions by actual operating days. Change made due to SB288 requirements.
220.2	N/A	Added operating days in calculation used to reduce historical actual emissions by non-compliance emissions. Under the 1991 rule, daily emissions days were used for the calculation procedure. Changed made due to SB288 requirements.
220.3	N/A	Revised definition for clarity and consistency with 40 CFR Part 51 Appendix S Section II.30.iii which defines actual emissions as excluding emissions from new emissions units (equipment operated less than 2 years.) See also Section 225.
220.4	N/A	Revised existing language for flexibility of non-major sources that are not subject to the most stringent requirements of Appendix S.
221	218	Revised definition consistent with EPA comments (September 3, 1996) and SB288. Added PM2.5 consistent with PM2.5 NSR Implementation Rule. Grandfather date for latest Permit to Operate for PM2.5 same as PM10 (January 1, 1977)}.
221.1	219.3	Section renumbered.

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NEW SECTION NUMBER	EXISTING SECTION NUMBER	PROPOSED CHANGES
221.2	219.1	For non-major sources, the historic potential emissions will remain equal to the potential to emit:  a. for BACT only if the permit had an enforceable daily emissions limit on the Authority to Construct or Permit to Operate.  b. for offset trigger determinations and quantity of offsets provided only if the permit had enforceable quarterly limitations permit had an enforceable daily emissions limit on the Authority to Construct or Permit to Operate, and c. for determining daily offset triggers for peaking power plants and for determining whether new requirements in Section 303.2 only if the permit had an enforceable daily emissions limit on the Authority to Construct or Permit to Operate.
221.3	219.2	Revised language consistent with 1996 comments (see section 221.3a) and maintained the procedure for emissions unit that are fully offset for any emission increase.
221.3a	219.4	Revised language to satisfy 1996 EPA comment that if a unit has enforceable limits, and has been operating within 80% of those limits, the unit's historic potential to emit shall equal to the enforceable limit.
222	N/A	Added "identical emissions unit" definition for clarification of Replacement Equipment. Change made due to SB288 requirements.
N/A	220	Moved definition to correct alphabetical ordering of definitions.
223	221	Revised definition to add PM2.5, PM2.5 precursors, and ammonia consistent with PM2.5 NSR Implementation Rule. Also, revised the term "affected pollutants" to "regulated air pollutants" and "reactive" to "volatile" for rule consistency.
223.1	N/A	Added lead compounds consistent with California Health and Safety Code Section 41706.
223.2	N/A	Added section to set significance levels for PM2.5 consistent with PM2.5 NSR Implementation Rule. Some PM2.5 precursors are also ozone precursors, but have higher major modification thresholds than ozone. Therefore, if a project exceeds the major modification threshold for PM2.5 then it requires any offsets of PM2.5 and PM2.5 precursors to be located within the Sacramento federal nonattainment area for PM2.5 pursuant to Section 302.12. The federal PM2.5 nonattainment area is smaller than the ozone nonattainment area, and excludes Sutter and Solano Counties, part of Yolo County, and a larger portion of Placer and El Dorado Counties.
224	N/A	Added "major stationary source" definition (moved from Section 220).  Added PM2.5 and PM2.5 precursor consistent with NSR Implementation Rule. Revised section reference.
225	222	Revised section consistent with 1991 rule by adding the language "including change in fuel" and "is not specifically limited by a permit

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NEW SECTION NUMBER	EXISTING SECTION NUMBER	PROPOSED CHANGES
		condition". Additionally, clarified replacement of air pollution control equipment with new control equipment is not a modification if the emissions are less than or equal as determined by Section 413.3 Changes made due to SB288 requirements. Changed the term "the replacement" to "replacing" to clarify this section is not part of the replacement equipment exemption and the term "significant" to "major".
226	N/A	Added "new emissions unit" definition for clarification of Historic Potential Emissions. This definition is consistent with 40 CFR 51, Appendix S, Section II.A.7.i.
227	223	Revised section to include specific reference to 40 CFR 81.305. This is the citation to attainment status designations of California.
228	224	Section renumbered.
229	N/A	Added "plantwide applicability limit" definition taken verbatim from Rule 213.
230	225	Section renumbered.
231	N/A	Added "PM2.5" definition consistent with PM2.5 NSR Implementation Rule.
232-233	226-227	Sections renumbered.
234	228	Revised "precursor" definition consistent with PM2.5 NSR Implementation Rule. PM2.5 and Ammonia included in definition.
235	229	Section renumbered and revised section references.
236	N/A	Added "Project" definition. This term is used where only the emissions units associated with the permit application are included for determining whether offsets triggers are exceeded, the quantity of offsets required pursuant to Section 413.5.a or whether exemptions apply (Sections 111 & 113).
237	230	Section renumbered.
N/A	231	Removed definition. Peaking Power Plants emission increase calculated in the calculations procedures rather than a separate section.
238	232	Section renumbered.
N/A	233	Removed definition. "Reactive Organic Compound" replaced with "Volatile Organic Compound" for rule consistency. "Volatile Organic Compound" defined in Rule 101 – General Provisions and Definitions.
239	234	Section renumbered.
240	N/A	Added "regulated air pollutant" definition as a replacement to prior term "affected pollutants". This is also similar to 40 CFR 51, Appendix S, Section II.A.31 but with included references to designations under the Federal Clean Air Act or California Health and Safety Code.
N/A	235	Removed definition. Requirements moved to replacement equipment exemption. See section 114.
241	236	Section renumbered.
242	N/A	Added "Sacramento Federal Nonattainment Area for PM2.5" consistent with PM2.5 NSR Implementation Rule.

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NEW SECTION NUMBER	EXISTING SECTION NUMBER	PROPOSED CHANGES
243	237	Revised the term "affected pollutants" to "regulated air pollutants" for rule consistency.
244	238	Section renumbered.
301	Same	Revised the term "affected pollutant" to "regulated air pollutants for rule consistency and section references revised to new calculation procedures section. BACT is triggered when an emissions change would result in an emission increase of <b>more than the levels</b> specified. This is consistent with the '91 language.
301.1	Same	Changed requirements to 0 lb/day for VOC, NOx, SOx, and PM10 and to reinstate the requirements from the 1991 rule. (SB288)  A BACT trigger for PM2.5 of 0 lb/day is proposed to match the proposed BACT trigger for PM10. The BACT trigger for PM2.5 matches the PM10 BACT trigger because PM2.5 is a subset of PM10.
302.1	Same	Added PM2.5 and ammonia offset requirement on an annual basis of 15 tons/year and 100 tons/year respectively consistent with PM2.5 NSR Implementation Rule and Placer County APCD Rule 502. Added section references for exemptions from offsets (CO modeling, portable and rocket engine). Revised the term "affected pollutants" to "regulated air pollutants" for rule consistency and section references revised. Revised PM10 offset requirements to 7,300 lbs/quarter (based off 80 lbs/day) consistent with the 1991 rule. (SB288)
N/A	302.2	Moved section to 302.6.
302.2	302.3	Clarified applicability of peaking power plants daily emissions offset trigger. Also, revised the term "affected pollutant" to "regulated air pollutants for rule consistency and section reference.
302.3.a & 302.3.b	303.3.a & 303.3.b	Combined sections 302.4 and 302.5 for clarity since all relate to seasonality of offset provisions for the various pollutants. Also, changed term "reactive" to "volatile" for rule consistency, section references revised.
302.3.c & 302.3.d	302.5	Revised to correct the quarters in which credits can be utilized and combined with Section 302.3 for clarity.
302.4	N/A	Moved from Section 303.2. Added additional language that offsets from other Districts can be used but must meet requirements of Section 302.8 (District, state and federal requirements). See section 302.8.
302.5	302.6	Revised section to clarify the intent that the emission reduction credits are from the same unit that was shutdown previously. Added reference to daily offset triggers for peaking power plants an.
302.6	N/A	Added language that emission offsets from other air districts must meet District rules and regulations, state and federal requirements. The offset ratio of the levels specified in Section 303 shall be applied to these offsets.
302.9	N/A	Moved from section 303.3.

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NEW SECTION NUMBER	EXISTING SECTION NUMBER	PROPOSED CHANGES
302.10	N/A	Added section to limit PM2.5 and precursors to PM2.5 offsets for major stationary sources or major modifications come from within the boundaries of the Sacramento Nonattainment Area for PM2.5.
303	Same	Added language referring to offsets required calculation and to explain the consolidated emission offset ratio table.
303.1	Same	Revised offset ratios consistent with the '91 Rule due to SB288 requirements. Note that the proposed offset ratios are 0.1 lower than the '91 Rule because the '91 Rule included a funding mechanism for the Community Bank, subsequently moved to Rule 204 - Emission Reduction Credits. Consolidated emission offset tables, and added PM2.5 ratios (and ammonia placeholder if needed) consistent with proposed PM10 offset ratios.  Offset ratios for nonattainment pollutants for greater than 15-mile but within 50-mile radius and more than 50-mile radius are increased to 2.0 to 1.0 consistent with the 1991 rule and the 1984 SIP approved NSR rule. (SB288)
N/A	303.1.a	Removed section. Consolidated information into section 303.1.
303.2	303.1.b	Consolidated Section 303.3 into this Section since the offset ratios for both referenced rules are identical. Added PM2.5 and ammonia to table consistent with PM2.5 NSR Implementation Rule. Revised table to clarify the ratios apply to offsets obtained from Rule 205, Community Bank and Priority Reserve Bank. Also, changed term "reactive" to "volatile" for rule consistency, section references revised and section renumbered.
N/A	303.1.c	Consolidated into Section 303.1.b.
N/A	303.2	Moved to section 302.6.a for clarity.
N/A	303.3	Moved to section 302.10 for clarity.
304	Same	Clarified section does not apply to PM2.5 and changed term "reactive" to "volatile" for rule consistency.
305	N/A	Added PM2.5 interpollutant emission offset ratios consistent with PM2.5 NSR Implementation Rule. Ratios are set for NOx and SOx unless a different offset ratio is established and approved by EPA into the SIP. Other pollutants are not allowed but have option to be added later if established in the attainment demonstration and approved into the SIP.
306-308	305-307	Sections renumbered.
400	Same	Section references revised.
401	Same	Added language consistent to incorporate the exemption previously provided in Rule 213 and made more specific the appropriate Clean Air Act section reference.
403	Same	U.S. EPA "Guidelines on Air Quality Models" section reference revised.
405-407	Same	Revised section references.
408	Same	Reinstated the public comment provisions for BACT determination previously required by the 1991 rule. New BACT determinations that

NEW SECTION NUMBER	EXISTING SECTION NUMBER	PROPOSED CHANGES
		are not in the BACT Policy shall be made available for public comment. (SB288)
409.2	Same	Revised section reference.
410.2a,b	Same	Added daily, quarterly emissions limitations for all regulated air pollutants. Annual emissions limitations are required for PM2.5 and any other air pollutants for which the source is major. The daily emissions limitations are applicable to the temporary source exemption, replacement equipment exemption, peaking power plants offset trigger, and units not required to install BACT pursuant to Section 413.2.
410.2d	N/A	Added language removed from section 214.4.
410.3c	Same	Removed term "new" that introduces ambiguity and clarified enforceable "as a practical matter" with 40 CFR Part 51.165 section (a)(1)((vi)(E)(2)
410.3d	Same	Revised to clarify reference is to the owner or operator of the permitted stationary source.
410.3f	N/A	Added requirement that offsets must be surrendered prior to commencing operation and that offsets must be maintained throughout operation consistent with 40 CFR Part 51.165.
412	Same	Revised to include offset section as stated.
413	Same	Revised section to include all calculation procedures used in exemptions, definitions and standards.
413.1	N/A	Clarified the increase in potential to emit is "for the project" when determining notification.
413.2	N/A	Added Emissions Increase section for BACT on a daily emissions basis and clarified BACT determination is performed separately for each emissions unit.
413.3	N/A	Added Emissions Increase section for Temporary Sources and replacing of air pollution control equipment with new control equipment determinations. This calculation procedure differs from Section 413.4 in that it includes only emissions units associated with the project, not all of the emissions units at the stationary source.
413.4	N/A	Added offset trigger calculation section. Offsets are triggered if the calculation exceeds the offsets trigger levels in Section 302.
413.4a	N/A	Added offsets trigger calculation for SOx, PM10 and CO and PM2.5. Emissions are excluded for emissions units where the latest Authority to Construct/Permit to Operate was issued before January 1, 1977. For equipment installed after January 1, 1977, offsets are calculated as the sum of the potential to emit for all units at the stationary source. For equipment installed prior to January 1, 1977 and modified after, offsets are calculated only the post '77 increase for those emissions units (potential to emit minus Historic Potential Emissions). The trigger is calculated using daily emissions for peaking power plants, quarterly emissions for SOx, PM10, and CO, and yearly for PM2.5.

NEW SECTION NUMBER	EXISTING SECTION NUMBER	PROPOSED CHANGES
413.4b	N/A	Added offset trigger calculation for VOC and NOx (except when calculating for Section 303.2). VOC and NOx offsets required to be calculated using daily or quarterly emissions. The daily calculation procedure is added consistent with the daily offset triggers in Section 302.2.
413.4c	N/A	Added offset trigger calculation for VOC and NOx for purposes of Section 302.2. This section is similar to Section 413.4a where the calculation only sums the emissions for equipment installed after '77 and only post '77 emission increases for equipment installed before '77 that has been modified after.
413.5a,b	N/A	Added section to calculate emissions offsets required by Section 302. Offsets are equal to sum of all increases of the potential to emit – Historic Potential Emissions for the emissions units associated with a project times the appropriate offset ratio. Calculations performed separately for each pollutant for each calendar quarterly or where required on an annual basis. Annual basis added pre PM2.5 NSR Implementation Rule.
N/A	414-419	Removed sections. All calculation procedures moved to Section 413.
414	420	Added requirements to allow sources to apply for a Plantwide Applicability Limit. Language taken from Rule 213.
415	N/A	Section renumbered.

Rule 214 – Federal New Source Review

NEW SECTION NUMBER	EXISTING SECTION NUMBER	PROPOSED CHANGES  (This is a new rule. This table articulates the rationale for differences from the Proposed Rule 202 Language.)
101	Same	Added language to clarify Rule 214 applies to all permitting actions at major sources which includes all modifications. This Rule 214 will be submitted as a revision to the California State Implementation Plan to replace the 1984 version of Rule 202 which will be removed from the SIP. This rule applies to major sources subject to federal New Source Review requirements.
102	Same	Added language the Rule 214 only applies to emissions units located at major stationary sources. Also, clarified rule applicability applies to major agricultural sources.
N/A	111	Eliminated exemption which does not apply to major sources or modifications at major sources.
111	N/A	Section number reserved to maintain section references consistent with Rule 202.
113	Same	Removed CO from exemption. Because Sacramento County has attained the CO NAAQS, they are now regulated by Rule 203, Prevention of Significant Deterioration.
114	Same	Revised exemption applicability to minor modification at major source,

NEW SECTION NUMBER	EXISTING SECTION NUMBER	PROPOSED CHANGES  (This is a new rule. This table articulates the rationale for differences from the Proposed Rule 202 Language.)
		see Section 237. Removed CO from definition because Sacramento has attained the NAAQS for CO. CO regulated by Rule 203, Prevention of Significant Deterioration.
117	N/A	Added exemption from PM10 requirements which takes effect upon redesignation of Sacramento County as attainment for the federal PM10 National Ambient Air Quality Standard.
203	Same	Revised section to refer only to national ambient air quality standards established pursuant to Clean Air Act Sections 108 or 109.
223	Same	Removed references to attainment pollutants: CO, and Pb.
N/A	224.5	Removed CO from definition. CO regulated by Rule 203, Prevention of Significant Deterioration.
224.5	N/A	Section number reserved to maintain section references consistent with Rule 202.
227	Same	Removed reference to California Health and Safety Code.
230-231	Same	Removed references to the California Code of Regulations which are not federal requirements.
N/A	232	Removed definition. Term no longer used due to eliminated temporary source exemption.
232	N/A	Section number reserved to maintain section references consistent with Rule 202.
233	Same	Added language excluding fugitive emissions from potential to emit unless the source belongs to one of the categories of stationary sources included in Rule 207. This is consistent with 40 CFR 51.165 but different from Rule 202 that requires fugitive emissions in potential to emit.
N/A	244	Removed "temporary source" definition. Term no longer used due to eliminated of temporary source exemption.
244	N/A	Section number reserved to maintain section references consistent with Rule 202.
301	Same	Removed last sentence because it is not necessary if BACT required for all emission increases.
301.1	Same	Removed Pb and CO because Sacramento has attained the NAAQS for these pollutants. BACT will still be required for these pollutants under PSD requirements.
302.1	Same	Removed section references to CO modeling and portable equipment offset provisions that have been removed from the rule. See sections 302.7 and 302.8.
302.1a	N/A	Offset thresholds are expressed on a quarterly basis because although the 1984 SIP rule required offsets to be provided on a yearly basis, they required seasonality protection. Since the quarterly offsets requirements for state purposes do not match calendar quarters, the thresholds are specified on a quarterly basis. PM2.5 is expressed on a yearly basis because it was not regulated by the 1984 SIP rule. The offset thresholds are the major source trigger levels for VOC and NOx.

NEW	EXISTING	PROPOSED CHANGES
SECTION	SECTION	(This is a new rule. This table articulates the rationale for
NUMBER	NUMBER	differences from the Proposed Rule 202 Language.)
		The major source threshold for PM10 is 100 tpy, but because the offset threshold in the 1984 was 150 lbs/day as TSP, which equates to 80 lb/day PM10, or 7,300 lbs/quarter. The threshold for SOx is based on the 1984 SIP rule threshold of 250 lbs/day, expressed quarterly. The PM2.5 offset threshold is from 40 CFR Part 51.165 section (a)(1)(iv).
302.1b	N/A	This section is to be used for all modifications, both major and minor modifications at a major stationary source. Minor modifications at major stationary sources are included because these were subject to the 1984 rule. Offset thresholds are expressed on a quarterly basis because although the 1984 SIP rule required offsets to be provided on a yearly basis, they required seasonality protection. Since the quarterly offsets requirements for state purposes do not match calendar quarters, the thresholds are specified on a quarterly basis. PM2.5 is expressed on a yearly basis because it was not regulated by the 1984 SIP rule. The offset thresholds are the major source trigger levels for VOC and NOx because the significant levels would be higher than the thresholds currently required resulting in a relaxation. The other modification offset threshold match the significant levels of 40 CFR Part 51.165 section (a)(1)(x)(A). The significant threshold for PM10 is 15 tpy, but because the offset threshold in the 1984 was 150 lbs/day as TSP, which equates to 80 lb/day PM10, or 7,300 lbs/quarter. The threshold for SOx is based on the significant level of 40 tpy (20,000 lbs/quarter) and PM2.5. The PM2.5 threshold is 10 tpy consistent with 40 CFR Part 51.165 section (a)(1)(x)(A).
302.2	Same	Removed CO because Sacramento has attained the NAAQS for these pollutants. Revised daily offset thresholds to 250 lbs/day matching the threshold in the 1984 rule. This is less stringent than Rule 202 at 150 lbs/day matching the threshold in the 1991 rule
302.3	Same	Removed CO because Sacramento has attained the NAAQS for these pollutants of this pollutant.
N/A	302.7	Removed section. CO modeling section not required because CO is removed from the rule. CO modeling may still be required by PSD.
302.7	N/A	Section number reserved to maintain section references consistent with Rule 202.
N/A	302.8	Removed section. Section not federal requirement.
302.8	N/A	Section number reserved to maintain section references consistent with Rule 202.
303	Same	Revised language including only offset ratios applicable for major stationary sources (which include all modifications).
303.1	Same	Removed references to minor sources and offset ratio applicable only to minor sources. Deleted the reference to Sacramento Valley because it is not defined in Rule 214 and is unnecessary because credits must come from within the federal nonattainment areas.

NEW SECTION NUMBER	EXISTING SECTION NUMBER	PROPOSED CHANGES  (This is a new rule. This table articulates the rationale for differences from the Proposed Rule 202 Language.)
303.2	Same	Removed offset ratios not applicable to major source or major modifications and removed language to clarify the applicability of the PM2.5 ratio.
N/A	308	Removed section. Section not applicable to major sources.
308	N/A	Section number reserved to maintain section references consistent with Rule 202.
402	Same	Removed reference to the California Government Code which is not a federal requirement.
405.1	Same	Removed reference to submitting preliminary decision to California Air Resources Board that is not a federal requirement.
N/A	408	Removed BACT determinations submittal to ARB that is not federal requirement.
413.3	Same	Removed reference to temporary source exemption. Temporary source exemption is not applicable for major sources.
413.4	Same	Removed reference to CO because Sacramento has attained the NAAQS for these pollutants. Section renumbered and revised section reference.

Rule 215 – Agricultural Permit Requirements and New Agricultural Permit Review

NEW SECTION NUMBER	EXISTING SECTION NUMBER	PROPOSED CHANGES
112	Same	Added language to clarify requirements of agricultural emission unit that is a new major stationary source or major modification complies with Rule 214, in addition to Rule 201 – General Permit Requirements and Rule 202.
228	Same	Added language to clarify requirement of offsets subject to Rule 214, in addition to Rule 202 and Rule 215.

# Appendix B

# California HSC Section 40727.2 Matrix Proposed Rule 202 – New Source Review

Elements of	Specific	Proposed Rule 202	40 CFR Part 51, Subpart
Comparison	Provisions	1 Toposcu Tiule 202	
Exemptions	Offset Requirements	1. Emergency Equipment 2. Temporary Equipment (limited by daily offset levels consistent with the '91 rule) 3. Non-major source/mod agricultural sources 4. Replacement Equipment 5. Rule Compliance 6. Alternative Siting not required for sources that would not constitute a Federal Major Modification	Replacement     equipment     Change of ownership     Routine repair and     maintenance     Requires Alternative     Siting for Federal Major     Modifications.     PM attainment, upon     PM attainment PSD     applies
Averaging Provisions		Not Applicable	Not Applicable
Units		Tons/year, lbs/day; lbs/quarter, ppm, grams/liter	Tons/year
Emissions Limits	Emissions Reduction	BACT at 0 lb/day and Emissions Offsets	Lowest Achievable Emissions Level and Offsets.
	Compliance alternatives	Interpollutant Emission Offsets; Air Quality Modeling for CO.	Innovative Control Technology; Air Quality Modeling
Permit Conditions		Emission Unit(s) operated in compliance with Rule Emissions Limitations Offsets that satisfy EPA requirements (by meeting Rule 204)	Federally enforceable permit conditions Offsets must be Real, Enforceable, Permanent, Quantifiable and Surplus.
Operating Parameters		Not Applicable – Required under other rules (Rule 201, General Permit Requirements)	Monitor emissions; Recordkeeping for hours of operations, throughput, and emissions.
Work Practice Requirements		Not Applicable – Required under other rules (Rule 201, General Permit Requirements)	Monitor emissions; Recordkeeping for hours of operations, throughput, and emissions.
Monitoring/Records	Recordkeeping	Not Applicable – Required under other rules (Rule 201, General Permit Requirements)	Monitor emissions; Recordkeeping for hours of operations, throughput, and emissions.
	Frequency	Not Applicable	Annual
Monitoring/Testing	Test Methods	Not Applicable	Continuous emission monitoring (CEM); testing to verify compliance with emission limits.
	Frequency	Not Applicable	Continuous for CEM; Annual or more frequent for source testing.

# California HSC Section 40727.2 Matrix Proposed Rule 214 – Federal New Source Review

Elements of	Specific	Proposed Rule 214	40 CFR Part 51,
Comparison	Provisions		Subpart I
Exemptions	Offset Requirements	Emergency Equipment     Non-major source/mod     agricultural sources     Replacement Equipment     Rule Compliance     Alternative Siting     PM Attainment	Replacement     equipment     Change of ownership     Routine repair and     maintenance     PM attainment, upon     PM attainment PSD     applies
Averaging Provisions		Not Applicable	Not Applicable
Units		Tons/year, lbs/day; lbs/quarter, ppm, grams/liter	Tons/year
Emissions Limits	Emissions Reduction	BACT at 0 lb/day and Emissions Offsets	Lowest Achievable Emissions Level and Offsets.
	Compliance alternatives	Interpollutant Emission Offsets;	Innovative Control Technology; Air Quality Modeling
Permit Conditions		Emission Unit(s) operated in compliance with Rule Emissions Limitations Offsets that satisfy EPA requirements (by meeting Rule 204)	Federally enforceable permit conditions Offsets must be Real, Enforceable, Permanent, Quantifiable and Surplus.
Operating Parameters		Not Applicable – Required under other rules (Rule 201, General Permit Requirements)	Monitor emissions; Recordkeeping for hours of operations, throughput, and emissions.
Work Practice Requirements		Not Applicable – Required under other rules (Rule 201, General Permit Requirements)	Monitor emissions; Recordkeeping for hours of operations, throughput, and emissions.
Monitoring/Records	Recordkeeping	Not Applicable – Required under other rules (Rule 201, General Permit Requirements)	Monitor emissions; Recordkeeping for hours of operations, throughput, and emissions.
	Frequency	Not Applicable	Annual
Monitoring/Testing	Test Methods	Not Applicable	Continuous emission monitoring (CEM); testing to verify compliance with emission limits.
	Frequency	Not Applicable	Continuous for CEM; Annual or more frequent for source testing.

# Appendix C

#### **Public Comments**

## Public Workshop (August 10, 2010)

**Attendees:** Anitra Brosseau, Aerojet

Jake Oosterman, Western United Dairymen

Tina Suarez-Murias, California Air Resources Board

Becky Wood, ATS

Argelia Leon, Breathe CA

Bob Hitomi, Sacramento State University Dick Wheaton, McCellan Business Park

June Livingston, BERC Stu Husband, SMUD

Marcus McCarthy, Dome Printing

Rafael Aguilera, Verde Consulting Group

Comment #1: Does the EPA consent decree focus on Sacramento or does it affect other

areas around the nation?

**Response:** The lawsuit, to which the consent decree applies, alleged that EPA failed to

perform a nondiscretionary duty to either approve a State Implementation Plan or promulgate a Federal Implementation Plan for California, Idaho, New Mexico, North Dakota, Oklahoma and Oregon to satisfy four separate requirements of the Clean Air Act with regard to the 1997 NAAQS for 8-hour ozone and fine particulate matter. SMAQMD was recognized as having a SIP-approved NSR rule from 1984 that does not address those

requirements.

**Comment #2:** What is the impact of the proposed amendments on the community? Are

there public health benefits?

**Response:** The proposed amendments are as stringent, and in some instances more

stringent, than the most recent version of Rule 202. The practical impact of the proposed amendments will be to require more emission units to install the best available control and will, in some cases, require additional

emissions offsets to be surrendered.

Comment #3: How do offsets that are from 50 miles away benefit the community?

**Response:** Emission offsets are encouraged to come from close to the source needing

the credits however further distances are allowed with an increased ratio to allow an area to move towards attainment while still allowing growth. For distances of 50 miles and more, the ratio is proposed to be at least 2.0:1.0 with a case by case determination that may require a higher offset ratio.

However, in no case shall emissions from a new or modified stationary source prevent or interfere with the attainment or maintenance of any applicable ambient air quality standard (see Section 306 of Rule 202). This ensures that near source impacts do not cause health problems regardless of the location of the offsets.

**Comment #4:** How is a new emissions unit determined? If an emissions unit is issued a permit before the rule is adopted, is it considered a new emissions unit?

New emissions unit definition was added in Section 226 as an emissions unit where less than two years has passed since the date of commencing operation under an issued Permit to Operate or an Authority to Construct, whichever is earlier. This is consistent with federal rules. However, new emissions units at major sources are treated differently under Section 220, historic actual emissions.

**Comment #5:** When will the District complete an analysis to determine if ammonia will be considered a precursor to PM2.5?

The District is planning to complete the PM2.5 attainment demonstration plan in late 2012. The plan will specify whether ammonia will be considered a limiting precursor. In other words, it will specify whether ammonia emissions reductions improve PM2.5 air quality. The San Joaquin Valley Air Pollution Control District's 2008 PM2.5 plan determined that ammonia was not a limiting precursor within their district<sup>32</sup>. Additional analyses are necessary and a public process will occur as part of Plan development.

Why did the offset ratios decrease from the 1996 adopted version of Rule 202 as compared to the 1991 adopted version of Rule 202?

The 1996 amendments of Rule 202 decreased emission location offset ratios of greater than 15 miles and increased the emission location offset ratios for same-source. However, the lower offset ratios do not meet federal SIP approvability and State law requirements, therefore the offset ratios for distances greater than 15 miles are proposed to match the 1984 and 1991 versions of Rule 202.

Will Greenhouse Gases (GHG) be regulated? If so, how will be GHG be regulated?

GHG will not be regulated under New Source Review. New Source Review is applicable to any air pollutant for which there is a national or state ambient air quality standard, or precursor to such air pollutant. EPA

"2008 PM2.5 Plan", San Joaquin Valley Unified Air Pollution Control District, April 30, 2008, p. 3-7

Response:

Response:

Comment #6:

Response:

Response:

Comment #7:

chose not to set a National Ambient Air Quality Standard (NAAQS) for GHG. EPA issued a tailored GHG rule that requires GHG to be regulated under Prevention of Significant Deterioration (PSD). The District is planning on addressing GHG in the upcoming months with proposed amendments to Rule 203 – PREVENTION OF SIGNIFICANT DETERIORATION.

**Comment #8:** How will emissions offsets function for PM2.5 from current credit certificates?

**Response:** The District has issued PM10 credit certificates in the past. When those old certificates surrendered as a PM2.5 offset, staff will determine the appropriate fraction of the PM10 that is PM2.5, depending on the type and function of the emissions unit that generated the emission reduction credit.

**Comment #9**: How will the District determine the ratios of PM2.5 and PM10 out of total particulate?

**Response:** These ratios have been determined by equipment type by the California Air Resources Board. The District will use these ratios for determining what percentage of particulate matter emissions are PM2.5 and PM10.

**Comment #10:** Health studies have shown that PM2.5 has a greater health impact than other pollutants. I would suggest a higher ratio for emissions offsets than the proposed 1:1 ratio for PM2.5 at all distances.

**Response:** Thank you for your suggestion. Staff has reviewed the comments received in response to the proposed amendments. After consideration of these comments, Staff is now recommending changing the PM2.5 offset ratios to match the higher ratios establish for PM10.