BOARD MEETING DATE: May 2, 2014 AGENDA NO. 27

PROPOSAL: Amend Rule 1155 – Particulate Matter (PM) Control Devices

SYNOPSIS: Rule 1155 was adopted in December 2009 and subsequently forwarded to CARB for inclusion in the SIP. CARB approved the submittal and forwarded to U.S. EPA in July 2010. U.S. EPA has raised concerns about certain exemptions during equipment start-up. In order to address U.S. EPA's concern regarding approval of this rule into the SIP, Rule 1155 is proposed for an administrative amendment clarifying that certain provisions of Rule 401 – Visible Emissions and the provisions of Rule 404 – Particulate Matter – Concentration are applicable to equipment subject to Rule 1155.

COMMITTEE: Stationary Source, March 21, 2014; Reviewed

RECOMMENDED ACTION:
Adopt the attached resolution:
1. Certifying the Notice of Exemption for Proposed Amended Rule 1155
2. Amending Rule 1155 – Particulate Matter (PM) Control Devices.

Barry R. Wallerstein, D.Env.
Executive Officer

EC:PF:TG:JHL

This Board letter and its attachments serve as the final staff report for the proposed amendments to Rule 1155. The draft staff report, (released on March 28, 2014), was incorporated herein without changes.

Background
Rule 1155 was adopted on December 4, 2009 to ensure proper operation and maintenance (O&M) of PM control devices. The key requirements of the rule include no visible emissions, a PM grain limit, and installation of a bag leak detection system

(BLDS) and verified filtration system on larger devices. Rule 1155 requires that there must not be any visible emissions observed from any PM air pollution control device requiring an SCAQMD permit. To implement this requirement, a once a week, five-minute visible emissions observation by a trained individual using U.S. EPA Method 22 is required for any baghouse or other PM air pollution control device. Rule 1155 also includes requirements for: baghouse upgrades to, at a minimum, an automated shaker unit; a controlled material transfer system; properly designed ventilation system for a new baghouse; proper O&M of any permitted PM air pollution control device or BLDS; and recordkeeping.

Rule 1155 allows an exemption from certain rule requirements during periods of equipment start-up. Specifically, the rule exempts equipment or processes venting to the PM air pollution control device from the no visible emissions, PM concentration, and related requirements during the initial one-half hour of start-up, including start-up after an equipment breakdown or scheduled maintenance activity.

Rule 1155 was submitted to CARB in February 2010, approved, and forwarded to U.S. EPA in July 2010 for approval into the State Implementation Plan (SIP).

On February 22, 2013, U.S. EPA published in the Federal Register (78 FR 12460) a response to a petition for rulemaking filed by the Sierra Club with the U.S. EPA Administrator on June 30, 2011. The Petition includes interrelated requests concerning the treatment of excess emissions in state rules by sources during periods of start-up, shutdown, or malfunction (SSM). As a part of the proposed action, the U.S. EPA raised concerns about uncontrolled excess emissions resulting from certain regulatory exemptions during the SSM event and whether that exemption is also from all other regulations. With this in mind, U.S. EPA has requested, (see attachment A), that an amendment be made to Rule 1155, prior to inclusion into the SIP, to ensure that sources subject to Rule 1155 are subject to other SCAQMD regulations and are not allowed unlimited emissions during periods of start-up, for which a limited exemption is provided in the rule (as noted above).

Rule 401 – Visible Emissions, as amended March 2, 1984, is currently in the SIP and establishes a maximum opacity for all sources, (given some exclusions), no greater than No. One (1) on the Ringelmann Chart, as published by the United States Bureau of Mines. A Ringelmann Chart No. 1 is equivalent to 20% opacity. Sources subject to Rule 1155, even under exempted conditions, remain subject to Rule 401. However, the Rule 1155 exemption does not specifically reference these provisions of Rule 401.

Rule 404 – Particulate Matter – Concentration, as amended February 7, 1986, is currently in the SIP and establishes a general outlet PM concentration level for all equipment, with or without control. The rule establishes varying baseline grain loading maximum concentrations based on flow rate. As with Rule 401, sources subject to Rule

1155, even under exempted conditions, remain subject to Rule 404. However, the Rule 1155 exemption does not specifically reference these provisions of Rule 404.

Therefore, in order to address the U.S. EPA's concerns regarding approval of Rule 1155 into the SIP, Rule 1155 is proposed for an administrative amendment clarifying that PM air pollution control devices under the rule during start-up conditions remain subject to the SIP-approved opacity requirement of Rule 401, paragraph (b)(1), and the PM concentration requirements of Rule 404. Rule 401 (b)(1) sets the maximum opacity at No. 1 on the Ringelmann Chart and is identical to Rule 401, subdivision (a), in the March 1984 version of the rule, which was SIP-approved on January 29, 1985 (Federal Register Citation No. 50 FR 3907).

Summary of Proposal

This proposed amended rule would clarify that during the one-half hour starting period of the equipment, PM air pollution control devices under Rule 1155 remain subject to the PM concentration (grain loading) requirements of Rule 404 and the opacity requirement of no greater than No. 1 on the Ringelmann Chart as specified in Rule 401 (b)(1) [shown as Rule 401 (a) in the SIP-approved version, as amended March 2, 1984 and SIP-approved on January 29, 1985].

As the provisions referred to in the proposed amendment are already in effect, they represent no change to existing requirements on sources subject to the rule.

Public Process

The rule development effort is based on discussions with U.S. EPA regarding approval of Rule 1155 into the SIP and concerns regarding the exemption provisions of the rule when equipment is under start-up condition and whether that exemption is from all other regulations. Discussions have taken place between U.S. EPA and SCAQMD staff on ways to rectify this SIP approval issue. An agreeable solution has been developed with U.S. EPA resulting in this proposed rule amendment.

As part of the rule development effort, SCAQMD held a Public Workshop on March 27, 2014. Only two comments were made at the workshop and did not directly relate to the proposed amendments. A comment was made that Table 1 – Summary of Requirements of the rule should also list the condition under which monthly visible emissions checks would be acceptable in lieu of weekly checks, as provided in subdivision (e)(2). Staff responded that the table is merely a summary of key rule elements, as stated in subdivision (b), and that the table is not intended to include all rule requirements. A comment was also made that, unlike the visible emissions requirement, no guidelines are provided in the rule relative to measuring PM concentration levels. Staff responded that such a measurement is not always required, but that if necessary, SCAQMD staff would review source test protocols and provide feedback and guidance as needed. Visible emission checks as required by the rule are a means of a check for self

compliance, whereas methods to test PM concentrations could vary by source and protocols for compliance would need to be approved by SCAQMD staff.

SCAQMD staff presented the proposed amendments to the Stationary Source Committee at its March 21, 2014 meeting.

California Environmental Quality Act (CEQA) and Socioeconomic Impacts
SCAQMD staff has reviewed Proposed Amended Rule 1155, and determined that it is exempt from CEQA pursuant to state CEQA Guidelines §15061 (b)(3) – Review for Exemption. Upon adoption of the proposed amended rule, a Notice of Exemption will be prepared pursuant to CEQA Guidelines §15062 and filed with the county clerks in each county within the SCAQMD's jurisdiction.

No socioeconomic impact assessment was performed for the proposed amendments because they are administrative in nature and seek to clarify existing rule requirements pursuant to Rule 401 (b)(1) and Rule 404 already in effect.

Draft Findings Under the California Health and Safety Code 40727
Before adopting, amending or repealing a rule, the California Health and Safety Code requires SCAQMD to adopt written findings of necessity, authority, clarity, consistency, non-duplication, and reference, as defined in Health and Safety Code § 40727. The draft findings are as follows:

Necessity - The SCAQMD Governing Board has determined that a need exists to adopt Proposed Amended Rule 1155 – PM Control Devices, to ensure that the proposed amendment addresses U.S. EPA's submitted letter expressing concerns relating to start-up emissions. The proposed amendment would clarify that Rule 404 requirements for PM concentration and Rule 401 (b)(1) requirements for opacity remain applicable, which is necessary for approval into the State Implementation Plan to assist in the attainment of State and federal PM standards for the South Coast Air Basin.

Authority - The SCAQMD Governing Board obtains its authority to adopt, amend, or repeal rules and regulations from Health and Safety Code §§ 40000, 40001, 40440, 40463, 40702, 40725 through 40728.

Clarity - the SCAQMD Governing Board has determined that Proposed Amended Rule 1155 – PM Control Devices, is written and displayed so that the meaning can be easily understood by persons directly affected by it.

Consistency - The SCAQMD Governing Board has determined that Proposed Amended Rule 1155 – PM Control Devices, is in harmony with, and not in conflict with or contradictory to, existing statutes, court decisions, federal or state regulations.

Non-duplication - The SCAQMD Governing Board has determined that Proposed Amended Rule 1155 – PM Control Devices, does not impose the same requirements as any existing state or federal regulation, and the proposed rule is necessary and proper to execute the powers and duties granted to, and imposed upon, the SCAQMD.

Reference - In adopting this proposed amended rule, the SCAQMD Governing Board references the following statutes which the SCAQMD hereby implements, interprets or makes specific: Health and Safety Code Sections 40001 (rules to achieve ambient air quality standards); 40440(a) (rules to carry out the AQMP); 40440(a) (BARCT); 40440(c) (cost-effectiveness); and Federal Clean Air Act Section 172(c)(1) (RACT).

Comparative Analysis

Under Health and Safety Code Section 40727.2, the SCAQMD is required to perform a comparative written analysis when adopting, amending, or repealing a rule or regulation. The comparative analysis is relative to existing federal requirements, existing or proposed SCAQMD rules and air pollution control requirements and guidelines which are applicable to PM Control Devices.

As the proposed amendments are administrative in nature and clarify the applicability of other rule provisions that are already in effect and represent no change to existing requirements, a comparative analysis is not required.

AQMP and Legal Mandates

Rule 1155 is a PM control device rule that implements control measure BCM-01 of the 2007 Air Quality Management Plan. The proposed amendments will address an approvability issue by U.S. EPA that should resolve concerns preventing inclusion into the SIP.

Resource Impacts

Existing SCAQMD resources are sufficient for continued implementation and enforcement of the rule.

Attachments

A. Letter from U.S. EPA dated March 18, 2014
B. Notice of Exemption
C. Resolution for Proposed Amended Rule 1155
D. Proposed Amended Rule 1155

ATTACHMENT A

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
REGION IX
75 Hawthorne Street
San Francisco, CA 94105

MAR 1 8 2014

Dr. Elaine Chang
Deputy Executive Officer
South Coast Air Quality Management District
21865 Copley Drive
Diamond Bar, CA 91765

Re: SCAQMD Rule 1155

Dear Dr. Chang:

I am writing to clarify EPA's concerns regarding paragraph (g)(7) of SCAQMD Rule 1155 (Particulate Matter Control Devices), recently discussed by EPA and District staff. While we fully support District efforts in adopting and implementing the innovative requirements for permitted control devices described in this rule, we believe that the exemption in paragraph (g)(7) precludes full SIP approval under the federal Clean Air Act (CAA).

Paragraph (g)(7) exempts affected control devices during ½ hour of startup from Rule 1155's zero visible emissions standard, outlet PM concentration of less than 0.01 grains per dry standard cubic foot (gr/dscf) and several other control and monitoring requirements. This conflicts with EPA's CAA interpretation with respect to the treatment in SIPs of excess emissions during startup. Central to EPA's interpretation are the definitions of "emission limitation" and "emission standard" contained in CAA section 302(k), which are defined as limitations that must be met on a continuous basis, and CAA section 110(a)(2)(A), which requires each SIP to include enforceable emission limitations and other control measures as may be necessary or appropriate to meet applicable CAA requirements. This is discussed in more detail in "EPA Proposed Rule: State Implementation Plans: Response to Petition for Rulemaking; Findings of Substantial Inadequacy, and SIP Calls to Amend Provisions Applying to Excess Emissions During Periods of Startup, Shutdown, and Malfunction" (78 FR 12460, February 22, 2013).

In addition, CAA sections 110(l) and 193 restrict EPA's ability to approve SIP relaxations. While the zero visible emission standard and other requirements of Rule 1155 would clearly strengthen the SIP, it is not clear how this strengthening relates to the startup exemption in paragraph (g)(7), which could be interpreted to relax other District rules and SIP requirements, such as those regarding opacity (e.g., SCAQMD Rule 401) and gr/dscf loading (e.g., SCAQMD Rule 404).

As a result of these concerns with paragraph (g)(7), we recommend that SCAQMD revise and resubmit Rule 1155 in lieu of EPA acting on the existing version. We believe our issues can be addressed without significant impact on affected sources and we would be happy to work with the District in this regard. Feel free to contact me (415-972-3183), Andy Steckel (415-947-4115) or Christine Vineyard (415-947-4125) if you wish to discuss this further.

Sincerely,

Elizabeth Adams
Deputy Director, Air Division

cc: Phil Fine, SCAQMD

ATTACHMENT B

South Coast
Air Quality Management District
21865 Copley Drive, Diamond Bar, CA 91765-4182
(909) 396-2000 • www.aqmd.gov

SUBJECT: **NOTICE OF EXEMPTION FROM THE CALIFORNIA ENVIRONMENTAL QUALITY ACT**

PROJECT TITLE: **PROPOSED AMENDED RULE 1155 – PARTICULATE MATTER (PM) CONTROL DEVICES**

Pursuant to the California Environmental Quality Act (CEQA) Guidelines, the South Coast Air Quality Management District (SCAQMD) is the Lead Agency and will prepare a Notice of Exemption for the project identified above.

Rule 1155 was adopted in December 2009 and subsequently submitted to the California Air Resources Board (CARB) for approval and inclusion in the State Implementation Plan (SIP). CARB approved the SIP inclusion and submitted to U.S. EPA in July 2010 for approval. U.S. EPA has raised concerns about certain exemptions during equipment start-up. In order to address U.S. EPA's concern affecting approval of this rule into the SIP, an administrative amendment for Rule 1155 is proposed to clarify that certain provisions of Rule 401 – Visible Emissions, and the provisions of Rule 404 – Particulate Matter – Concentration, are applicable to equipment subject to Rule 1155.

Pursuant to CEQA, the SCAQMD is the Lead Agency and has reviewed the proposed project mentioned above pursuant to CEQA Guidelines §§15002 (k)(1) and 15061. The proposed amendments are not expected to adversely affect air quality or any other environmental categories because they are administrative in nature. As a result, no new adverse impacts on the environment are expected from the proposed project. Since it can be seen with certainty that the proposed project has no potential to adversely impact air quality or any other environmental area, it is exempt from CEQA pursuant to state CEQA Guidelines §15061(b)(3) – Review for Exemption. A Notice of Exemption has been prepared pursuant to CEQA Guidelines §15062 - Notice of Exemption. The Notice of Exemption will be filed with the county clerks of Los Angeles, Orange, Riverside and San Bernardino counties immediately following the adoption of the proposed project.

Any questions regarding this Notice of Exemption should be sent to Jeff Inabinet (c/o Planning, Rule Development & Area Sources) at the above address. Mr. Inabinet can also be reached at (909) 396-2453.

Date: May 2, 2014 **Signature**:

Michael Krause
Program Supervisor – CEQA Section
Planning, Rule Development &
Area Sources

Reference: California Code of Regulations, Title 14

NOTICE OF EXEMPTION

To:	County Clerks of Los Angeles, Orange, Riverside, San Bernardino	**From:**	South Coast Air Quality Management District 21865 Copley Drive Diamond Bar, CA 91765

Project Title:

Proposed Amended Rule 1155 – PM Control Devices

Project Location:

South Coast Air Quality Management District (SCAQMD) area of jurisdiction consisting of the four-county South Coast Air Basin (Orange County and the non-desert portions of Los Angeles, Riverside and San Bernardino counties), and the Riverside County portions of the Salton Sea Air Basin and the Mojave Desert Air Basin.

Description of Nature, Purpose, and Beneficiaries of Project:

Rule 1155 was adopted in December 2009 and subsequently submitted to CARB for approval and inclusion in the SIP. CARB approved the SIP inclusion and submitted to U.S. EPA in July 2010 for approval. U.S. EPA has raised concerns about certain exemptions during equipment start-up. In order to address U.S. EPA's concern affecting approval of this rule into the SIP, an administrative amendment for Rule 1155 is proposed to clarify that certain provisions of Rule 401 – Visible Emissions, and the provisions of Rule 404 – Particulate Matter – Concentration, are applicable to equipment subject to Rule 1155.

Public Agency Approving Project:	**Agency Carrying Out Project:**
South Coast Air Quality Management District	South Coast Air Quality Management District

Exempt Status:

General Concepts [CEQA Guidelines §15002 (k)(1)]; and
General Rule Exemption [CEQA Guidelines §15061 (b)(3)]

Reasons why project is exempt:

The SCAQMD has reviewed the proposed amendments to Rule 1155, pursuant to CEQA Guidelines §15002(k)(1) – Three Step Process, and CEQA Guidelines §15061 – Review for Exemption and has determined that the proposed amendments are exempt from CEQA pursuant to CEQA Guidelines §15061 (b)(3) – General Rule Exemption. The proposed amendments are not expected to adversely affect air quality or any other environmental categories because they are administrative in nature. As a result, no new adverse impacts on the environment are expected from the proposed project. Since it can be seen with certainty that the proposed project has no potential to adversely impact air quality or any other environmental area, it is exempt from CEQA pursuant to state CEQA Guidelines §15061(b)(3) – Review for Exemption.

Project Approval Date:

SCAQMD Governing Board Hearing: May 2, 2014, 9:00 a.m.; SCAQMD Headquarters

CEQA Contact Person:	**Phone Number:**	**Fax Number:**	**Email:**
Mr. Jeffrey Inabinet	(909) 396-2453	(909) 396-3324	jinabinet@aqmd.gov
Rule Contact Person:	**Phone Number:**	**Fax Number:**	**Email:**
Mr. Jong Hoon Lee	(909) 396-3903	(909) 396-3324	jhlee@aqmd.gov

Date Received for Filing_____

Signature *Signed upon approval*
Michael Krause
Program Supervisor – CEQA Section
Planning, Rule Development
and Area Sources

ATTACHMENT C

RESOLUTION NO. 2014-_____

A Resolution of the South Coast Air Quality Management District (SCAQMD) Board certifying the Notice of Exemption for Proposed Amended Rule 1155 – Particulate Matter (PM) Control Devices.

A Resolution of the South Coast Air Quality Management District Board amending Rule 1155 – Particulate Matter (PM) Control Devices.

WHEREAS, Rule 1155 was adopted in December 2009 to implement a PM control measure in the 2007 Air Quality Management Plan (AQMP); and

WHEREAS, U.S. EPA has submitted a letter expressing concerns relating to start-up emissions, which currently prevents approval of Rule 1155 into the State Implementation Plan (SIP); and

WHEREAS, the SCAQMD staff conducted a public workshop regarding Proposed Amended Rule 1155; and

WHEREAS, the SCAQMD staff has reviewed Proposed Amended Rule 1155, and determined that it is exempt from CEQA pursuant to state CEQA Guidelines Section 15061 (b)(3) – Review for Exemption; and

WHEREAS, the SCAQMD staff has prepared, pursuant to CEQA Guidelines Section 15062, a Notice of Exemption for Proposed Amended Rule 1155 – Particulate Matter (PM) Control Devices; and

WHEREAS, the SCAQMD staff has reviewed Proposed Amended Rule 1155, and determined that no socioeconomic impact assessment needs to be performed for the proposed amendments because they are administrative in nature and seek to clarify that the existing rule requirements of Rule 404, as well as Rule 401 (b)(1) [shown as Rule 401 (a) in the SIP-approved version, as amended March 2, 1984 and SIP-approved on January 29, 1985] are already in effect; and

WHEREAS, California Health and Safety Code Section 40727 requires that prior to adopting, amending or repealing a rule or regulation, the SCAQMD Governing Board shall make findings of necessity, authority, clarity, consistency, non-duplication, and reference based on relevant information presented at the public hearing and in the staff report; and

WHEREAS, the SCAQMD Governing Board has determined that a need exists to adopt Proposed Amended Rule 1155 to ensure that the proposed amendment addresses U.S. EPA's concerns relating to start-up emissions. The above amendment would clarify that Rule 404 requirements for PM concentration and Rule 401 (b)(1) requirements for opacity remain applicable, which is necessary for approval into the State Implementation Plan; and

WHEREAS, the SCAQMD Governing Board has authority to adopt Proposed Amended Rule 1155 pursuant to the California Health and Safety Code Sections 40000, 40001, 40440, 40702, 40725 through 40728; and

WHEREAS, the SCAQMD Governing Board has determined that Proposed Amended Rule 1155 is written and displayed so that the meaning can be easily understood by persons directly affected by it; and

WHEREAS, the SCAQMD Governing Board has determined that Rule 1155, as proposed to be amended, is in harmony with, and not in conflict with, or contradictory to, existing statues, court decisions, or state or federal regulations; and

WHEREAS, the SCAQMD Governing Board has determined that Rule 1155, as proposed to be amended, does not impose the same requirement as any existing state or federal regulation, and the proposed amended rule is necessary and proper to execute the powers and duties granted to, and imposed upon, the SCAQMD; and

WHEREAS, adoption of Proposed Amended Rule 1155 will alleviate a problem by addressing specific U.S. EPA's concerns regarding start-up emissions that are necessary for approval of the rule into the State Implementation Plan (SIP) and will assist in attaining state and federal ambient air quality standards; and

WHEREAS, by adopting Proposed Amended Rule 1155, the SCAQMD Governing Board will be implementing, interpreting or making specific the provisions of the California Health and Safety Code Section 40001 (rules to achieve ambient air quality standards), 40440 (a) (rules to carry out the AQMP), 40440 (c) (cost-effectiveness), and Federal Clean Air Act Section 172 (c)(1) (RACT); and

WHEREAS, the SCAQMD specifies the Assistant Deputy Executive Officer of Proposed Amended Rule 1155 as the custodian of the documents or other materials which constitute the record of proceedings upon which the adoption of this proposed amended rule is based, which are located at the South Coast Air Quality Management District, 21865 Copley Drive, Diamond Bar, California; and

WHEREAS, a public hearing has been properly noticed in accordance with all provisions of Health and Safety Code Section 40725; and

WHEREAS, the SCAQMD Governing Board has held a public hearing in accordance with all provisions of law.

NOW, THEREFORE BE IT RESOLVED, the SCAQMD Governing Board hereby certifies, pursuant to the authority granted by law, the Notice of Exemption for Rule 1155, as proposed to be amended, in compliance with CEQA Guidelines Sections 15061 (b)(3) – Review for Exemption, and 15062; and

BE IT FURTHER RESOLVED, that the SCAQMD Governing Board does hereby adopt, pursuant to the authority granted by law, Proposed Amended Rule 1155, as set forth in the attached, and incorporated herein by reference; and

BE IT FURTHER RESOLVED, that the South Coast Air Quality Management District Board requests that Proposed Amended Rule 1155 be submitted into the State Implementation Plan; and

BE IT FURTHER RESOLVED, that the Executive Officer is hereby directed to forward a copy of this Resolution and Proposed Amended Rule 1155 to the California Air Resources Board for approval and subsequent submittal to the U.S. Environmental Protection Agency for inclusion into the State Implementation Plan.

DATE: _____ _____

CLERK OF THE BOARDS

(Adopted December 4, 2009)
(PAR1155, March 19, 2014)

PROPOSED AMENDED RULE 1155. PARTICULATE MATTER (PM) CONTROL DEVICES

(a) Purpose

The purpose of this rule is to establish requirements for permitted particulate matter (PM) air pollution control devices, including, but not limited to, baghouses, high efficiency particulate air (HEPA) systems, bin vents, or other dust collectors using high efficiency or other air filters, cyclones, electrostatic precipitators, and wet scrubbers.

(b) Applicability

This rule applies to the operator of permitted PM air pollution control device(s) venting processes that have direct (non-combustion) PM emissions. A summary of key rule elements is provided in Table 1 of this rule.

(c) Definitions

(1) BEST AVAILABLE CONTROL TECHNOLOGY (BACT) is as defined in South Coast Air Quality Management District (SCAQMD) Rule 1302 – Definitions, subdivision (h).

(2) BAGHOUSE means an air pollution control device designed to remove PM from a gas stream using fabric filters in the shape of a tube or an envelope, or other air filters that are built into a frame or cartridge. For the purpose of this rule, baghouses are separated into three tiers based on the following characteristics:

(A) Tier 1: Baghouses for which the filter surface area is less than or equal to 500 square feet;

(B) Tier 2: Baghouses for which the filter surface area is greater than 500 square feet but less than or equal to 7,500 square feet; or

(C) Tier 3: Baghouses for which the filter surface area is greater than 7,500 square feet.

(3) BAG LEAK DETECTION SYSTEM (BLDS) means a system that monitors electrical charge transfer based on triboelectricity or electrostatic induction to continuously monitor bag leakage and similar failures by detecting changes in particle mass loading in the exhaust.

(4) BIN VENT means an air filtration dust collector designed to remove PM from the air that is displaced by materials filling silos and bins.

(5) CONTINUOUS OPACITY MONITORING SYSTEM (COMS) means a system that meets minimum requirements specified under U.S. EPA 40 CFR Part 60, Appendix B, to continuously monitor opacity.

(6) CYCLONE means an air pollution control device designed to remove PM from a gas stream by inertia.

(7) ELECTROSTATIC PRECIPITATOR (ESP) means an air pollution control device designed to remove PM from a gas stream by imparting a high voltage direct current (DC) charge to the particles while simultaneously ionizing the carrier gas, producing an electric corona.

(8) EXISTING PM CONTROL DEVICE means a PM air pollution control device installed or for which an application for a permit has been deemed complete on or before December 4, 2009.

(9) FACILITY means any source or group of sources or other air contaminant-emitting activities which are subject to this rule and are located on one or more contiguous properties within the SCAQMD, in actual physical contact or separated solely by a public roadway or other public right-of-way, and are owned or operated by the same person (or by persons under common control), or an outer continental shelf (OCS) source as determined in 40 CFR Section 55.2. Such above-described groups, if noncontiguous, but connected only by land carrying a pipeline, shall not be considered one facility. Sources or installations involved in crude oil and gas production in Southern California Coastal or OCS Waters and transport of such crude oil and gas in Southern California Coastal or OCS Waters shall be included in the same facility which is under the same ownership or use entitlement as the crude oil and gas production facility on-shore.

(10) NEW PM CONTROL DEVICE means a PM air pollution control device for which an application for a permit has been deemed complete after December 4, 2009.

(11) NON-CONTINUOUS PROCESS means an emissions generating activity vented to a PM air pollution control device that operates no more than once per week or for periods of less than one hour, not to cumulatively exceed 4 hours during any single day.

(12) VERIFIED FILTRATION PRODUCT means a filtration product that has been verified under the U.S. EPA Environmental Technology Verification (ETV) program at the time of purchase. Manufacturers whose filtration product verification has expired must demonstrate at the time of purchase that the product is the same as was previously tested and verified under the ETV program.

(13) WET SCRUBBER means an air pollution control device designed to remove PM from a gas stream by using a finely atomized stream of liquid to capture particulate matter pollutants.

(d) General Requirements

(1) Beginning April 1, 2010, the operator of a facility shall not cause or allow any visible emissions (excluding condensed water vapor) from any PM air pollution control device required to have a permit.

(2) No later than January 1, 2011, the operator of any Tier 3 baghouse shall meet an outlet PM concentration of less than or equal to 0.01 grains per dry standard cubic foot (gr/dscf).

(A) Notwithstanding the above, the operator of hot mix asphalt production equipment shall comply with the 0.01 gr/dscf limit no later than January 1, 2013, unless the operator has documentation that demonstrates that new fabric filters have been installed within 12 months prior to December 4, 2009, in which case the hot mix asphalt production equipment shall comply by January 1, 2014 or at the end of the filter useful life, whichever occurs sooner.

(3) No later than April 1, 2010, all permitted PM control devices shall be operated and maintained in accordance with the manufacturer's operation and maintenance manual or other similar written materials supplied by the manufacturer or distributor of a control device to ensure that the control device remains in proper operating condition. If such documents are not available, the operator shall provide and follow written operation and maintenance procedures for the PM control device(s). Such documentation shall be made available to the Executive Officer immediately upon request.

(4) No later than January 1, 2012 or after the end of the useful life of a manual shaker unit, whichever occurs sooner, the operator of an existing manual

shaker baghouse shall upgrade or replace it with, at a minimum, an automated shaker unit.

(5) An operator shall not install a manual shaker baghouse after December 4, 2009.

(6) If the PM emission limit in paragraph (d)(2) is exceeded, the operator shall file a permit application to use verified filtration products, as defined in paragraph (c)(12), or other technologies or methods demonstrated through source test pursuant to paragraph (e)(6) to comply with the requirement in paragraph (d)(2), within three months of discovery by the operator or of notification by the Executive Officer, to replace the existing filter bags or cartridges. The operator shall install the verified filtration products within three months of issuance of the permit.

(7) If the operator discovers the exceedance of the PM limit in paragraph (d)(2) and resolves the problem that led to the exceedance, within 24 hours of discovery, the operator would not be subject to the requirements in paragraph (d)(6).

(8) When a new process is vented to a new baghouse, the operator shall install and maintain a ventilation system that meets a minimum capture velocity requirement specified in the applicable standards of the most current Edition of the U.S. Industrial Ventilation Handbook, American Conference of Governmental Industrial Hygienists, at the time of installation.

(9) The operator shall discharge material collected in a permitted PM control device for disposal or bring the material back to the process through a controlled material transfer system to prevent fugitive emissions during material transfer, including, but not limited to, shrouding or use of dust suppressants to stabilize the material.

(10) Until more stringent requirements of this rule are effective and after, if still applicable, the operator shall operate and maintain all existing PM air pollution control devices according to existing SCAQMD permit conditions.

(11) For any new or modified PM air pollution control device subject to BACT, the operator of such device shall meet the more stringent BACT level established for that device (pursuant to SCAQMD BACT Guidelines) at the time of evaluation of the permit application for the device.

(e) Monitoring Requirements

(1) No later than March 31, 2010, the operator shall have a minimum of one person trained in the reading of visible emissions pursuant to EPA Method 22. Beginning April 1, 2010, the operator of any baghouse or other PM control device shall have the trained person conduct a continuous five-minute visible emissions observation using EPA Method 22 once a week and shall maintain records for each observation and any necessary subsequent action(s) taken to eliminate visible emissions pursuant to subdivision (f). The provisions of this paragraph shall apply to Tier 3 baghouse units up to and until compliance with the provisions of paragraph (e)(3).

(A) If the operator observes any visible emissions exiting at any time, including during a scheduled Method 22 test, the operator shall implement, within 24 hours, all necessary corrective actions to eliminate the visible emissions.

(B) To verify corrective actions were effective, the operator must restart the operations and complete a new Method 22 test to ensure no visible emissions are present. If visible emissions are still present, further corrective actions pursuant to subparagraph (e)(1)(C) must be taken. If no visible emissions are present, normal operations may resume.

(C) If the operator, after taking all corrective actions, subsequently observes visible emissions, the operator shall shut down the PM emitting equipment that vents into the control device, unless the baghouse operation can be adjusted to ensure no visible emissions, until necessary steps are taken to prevent the visible emissions. Baghouse adjustments include, but are not limited to, closing off specific baghouse chambers.

(D) If the activity being observed is consistently a duration of less than five minutes, then the Method 22 observation shall be for the period in which the activity takes place.

(E) An operator shall not be considered in violation of this paragraph and (d)(1), if the operator complies with subparagraphs (e)(1)(A) through (e)(1)(D).

(F) To the extent that multiple Method 22 tests can be conducted simultaneously, the operator may observe multiple sources

contemporaneously at a single time as long as all of the sources are located in the field of view of the observer and appropriate records are kept for each observation. If the operator observes a visible emissions problem during the reading, each source shall then be monitored separately.

(2) Notwithstanding the requirements of paragraph (e)(1), any baghouse outfitted completely with verified filtration products shall only be required to conduct visible emission observations once per month, pursuant to paragraph (e)(1), and shall maintain records for each Method 22 observation and any subsequent actions taken to eliminate visible emissions.

(3) The operator of any Tier 3 baghouse shall install, operate, calibrate and maintain a BLDS pursuant to the manufacturer's written recommendations, to monitor baghouse performance and ensure compliance with in paragraphs (d)(1) and (d)(2).

(A) The provisions of this paragraph shall apply to any new Tier 3 baghouse installed and operated as of December 4, 2009. For an existing baghouse, the facility operator shall file a permit application for a BLDS no later than May 1, 2010 and shall install the BLDS within three months of issuance of the permit.

(B) The BLDS system shall meet the following minimum requirements:

(i) The BLDS sensor must provide output of relative PM emissions; and

(ii) The BLDS must have an alarm that will activate automatically when it detects significant increase in relative PM emissions greater than a preset level and the presence of an alarm condition should be clearly apparent to the facility operator.

(C) The operator shall install a BLDS that has been certified by the manufacturer to be capable of alarming automatically before visible emissions can be seen in the exhaust of a baghouse and shall set the BLDS to operate at such level. The baseline output for the system must be established as follows:

(i) Adjust and maintain the range and the averaging period of the device for the specific application per the

manufacturer's written specifications and recommendations; and

(ii) Establish and maintain the alarm set points and the alarm delay time per the manufacturer's written specifications and recommendations.

(D) The operator shall perform adequate maintenance and inspections of a BLDS, according to the written specifications and recommendations of the manufacturer, to ensure that the monitor is operating properly at all times and shall maintain the records pursuant to subdivision (f).

(E) If the operator receives an alarm from the BLDS, the operator shall investigate the baghouse and the BLDS, and take all necessary corrective actions to eliminate the cause of the alarm.

(F) The operator shall maintain filters and operate the baghouse such that the BLDS alarm activation is minimized and the cumulative number of hours of alarm activation within any continuous six-month rolling period do not exceed more than five percent of the total operating hours in that period after following the procedures of subparagraph (e)(3)(G), including, but not limted to, shut down of the equipment as specified.

(G) Each time the alarm activates, the operator shall count the alarm time as the actual length of time of the elevated emissions that caused the alarm and record it. If the inspection of the baghouse, pursuant to subparagraph (e)(3)(E), demonstrates that no visible emissions are occuring in conjunction with the alarm and that no corrective actions are necessary to the baghouse equipment, no alarm time will be counted. If cumulative alarm time exceeds five percent of the total operating hours based on any continuous six-month rolling period, the operator shall shut down the equipment that vents into the baghouse until necessary actions are taken to eliminate the elevated emissions.

(4) Notwithstanding the provisions of paragraph (e)(1) and subparagraph (e)(3)(A) applicable to Tier 3 units, the operator of hot mix asphalt production equipment may conduct daily visible emissions monitoring, as described in paragraph (e)(1), in lieu of BLDS installation, provided the facility operator notifies the Executive Officer in writing no later than

May 1, 2010, files a permit application for a BLDS no later than June 1, 2011, and installs the BLDS within three months of issuance of the permit, at which time the operator shall comply with the provisions of paragraph (e)(3). Daily visible emissions monitoring shall begin no later than January 1, 2011 and continue until such time the BLDS is installed. The operator shall maintain records for each observation and any subsequent actions taken to eliminate visible emissions during the time in which daily visible emissions monitoring is conducted.

(5) No later than January 1, 2015 or after the end of the useful life of a COMS, whichever occurs sooner, a COMS installed at an existing Tier 3 baghouse shall be changed to a BLDS.

(6) Source tests conducted to demonstrate compliance with paragraph (d)(2) shall follow SCAQMD Methods 5.1, 5.2, or 5.3, as applicable.

(A) For a baghouse located at a Title V facility, the facility operator shall conduct an initial source test no later than January 1, 2011 to demonstrate compliance with the requirements of paragraph (d)(2). Subsequent source tests shall be conducted every five years thereafter.

(B) Source tests shall be conducted by an approved lab from the SCAQMD Laboratory Approval Program. For the purpose of this rule, the total weight of PM in solid and liquid form should be considered when conducting source tests.

(f) Recordkeeping

Records shall be kept in a format approved by the Executive Officer to demonstrate compliance with the provisions of this rule, and all records and information recorded pursuant to this subdivision shall be maintained at the facility for a minimum of five years and shall be made available to the Executive Officer immediately upon request.

(1) For the purposes of paragraph (e)(1), records kept shall include, but not be limited to:

(A) Facility name;

(B) Observer's name and affiliation;

(C) Date and time of observation;

(D) Process unit(s) being observed;

(E) Observer's position relative to the source;

(F) Observation duration;

(G) Whether visible emissions occurred and cumulative amount of time visible emissions occurred; and

(H) If visible emissions were observed, what actions were taken to correct the problem causing them, including and up to date and time of equipment shutdown, if applicable.

(2) For the purposes of paragraph (e)(3), records kept shall include, but not be limited to:

(A) Facility name;

(B) Facility representative for maintaining the BLDS;

(C) Date and time of routine maintenance and inspections conducted on BLDS;

(D) The date and time of any alarm, including length of the alarm time, and cause of the alarm;

(E) The date and time corrective action is completed to eliminate the cause of the alarm;

(F) Whether visible emissions occurred; and

(G) Total operating hours of the baghouse.

(g) Exemptions

(1) With the exception of paragraph (d)(1), any baghouse for which the filter surface area is less than or equal to 100 square feet is exempt from the provisions of this rule.

(2) The operator of a PM air pollution control device venting a non-continuous process is exempt from the provisions of paragraph (e)(1), provided no visible emissions occur when the process activity takes place.

(3) Any equipment with an active permit to operate that is not in operation as of December 4, 2009 shall be exempt from the provisions of this rule until operations commence.

(4) Facility operations that are subject to District Rules 1105.1 – Reduction of PM_{10} and Ammonia Emissions from Fluid Catalytic Cracking Units, and 1156 – Further Reductions of Particulate Emissions from Cement Manufacturing Facilities, are exempt from the provisions of this rule.

(5) The operator of a Tier 1 or Tier 2 baghouse that voluntarily installs, operates, calibrates and maintains a BLDS pursuant to paragraph (e)(3) shall be exempt from the visible emissions provisions of paragraph (e)(1).

(6) Bin vents are exempt from the provisions of paragraph (e)(1).

(7) The provisions of paragraphs (d)(1), (d)(2), (d)(6), and (e)(1), and subparagraphs (e)(3)(E) through (e)(3)(G) shall not apply during the one-half hour of start-up of the equipment or process venting to the PM air pollution control device, including start-up after a repair to fix an equipment breakdown or after a scheduled maintenance activity. <u>During that one-half hour starting period, PM air pollution control devices under this rule remain subject to the PM concentration (grain loading) requirements of Rule 404 and an opacity requirement of no greater than No. 1 on the Ringelmann Chart as specified in Rule 401 (b)(1) [shown as Rule 401 (a) in the SIP-approved version, as amended March 2, 1984, and SIP-approved on January 29, 1985].</u>

(8) For PM air pollution control devices connected in series, the provisions of paragraphs (d)(2), (d)(6), and (e)(1) shall only apply to the PM air pollution control device exhausting to the atmosphere. In the event a Tier 3 baghouse is not the last in the series to vent to the atmosphere, the provisions of paragraph (e)(3) shall not apply.

(9) Any paint spray booth or powder spray booth is exempt from the provisions of this rule.

(10) Air pollution control equipment exclusively venting organic gases from hot mix asphalt load-out operations and directly related equipment, including storage silos, conveyors, mills, and batching towers, are exempt from the provisions of this rule.

(11) With the exception of paragraph (d)(1), any portable dust collector, fume extractor, or negative air machine with a maximum rated capacity of less than or equal to 3,000 cfm is exempt from the provisions of this rule.

(12) With the exception of paragraph (d)(1), facility operations that are subject to District Rule 1469 - Hexavalent Chromium Emissions from Chromium Electroplating and Chromic Acid Anodizing Operations are exempt from the provisions of this rule.

(13) With the exception of paragraph (d)(1), high efficiency particulate air (HEPA) equipment are exempt from the provisions of this rule.

Table 1
Summary of Requirements

Fabric Filtration PM Air Pollution Control Equipment (baghouses)*			Other Fabric and Non-Fabric Filtration PM Air Pollution Control Equipment (dust collectors, cyclones, ESPs, wet scrubbers)*
Tier 1	Tier 2	Tier 3	n/a
≤ 500 square feet	> 500 – 7,500 square feet	> 7,500 square feet	n/a
Once-a-week visible emissions monitoring and recordkeeping (new, existing)	Once-a-week visible emissions monitoring and recordkeeping (new, existing)	Until BLDS is installed, once-a-week visible emissions monitoring and recordkeeping	Once-a-week visible emissions monitoring and recordkeeping (new, existing)
--	--	BLDS installation (new, existing)	--
--		Emission limit (0.01 gr/dscf)	--
		Title V facilities conduct initial source test and test every five years relative to compliance with the emission limit.	

* Except as provided in subdivision (g) Exemptions.