

# **STAFF REPORT**

## **Amended Rule 1000 STATE AIRBORNE TOXIC CONTROL MEASURES, and Amended Rule 1002 AIRBORNE TOXIC CONTROL MEASURE FOR STATIONARY COMPRESSION IGNITION ENGINES**

Date of Release: August 22, 2011

### **Schedule of Meetings**

- Dates of Public Workshop: 2:00 p.m., Thursday, September 8, 2011, City of Chico Council Chambers, 421 Main Street, Chico, CA
- Date of Board Hearing: 10:00 a.m., Thursday, September 22, 2011, Chico City Council Chambers, 421 Main Street, Chico, CA

Prepared by: Jason Mandly, Air Quality Compliance Specialist II

Reviewed by: Robert McLaughlin, Assistant Air Pollution Control Officer

Approved by: W. James Wagoner, Air Pollution Control Officer

**STAFF REPORT**

**Amended Rule 1000  
STATE AIRBORNE TOXIC CONTROL MEASURES  
Amended Rule 1002  
AIRBORNE TOXIC CONTROL MEASURE FOR  
STATIONARY COMPRESSION IGNITION ENGINES**

Date of Release: \*\*\*\*

Date of Board Consideration for Adoption: September 22, 2011

Public Hearing: Thursday, September 22, 2011  
Chico City Council Chambers  
421 Main Street, Chico, CA

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**Amended Rule 1000—State Airborne Toxics Control Measures  
Amended Rule 1002— Airborne Toxics Control Measure  
For Stationary Compression Ignition Engines Used at Stationary Sources**

**STAFF REPORT**

*Executive Summary*

*California Health and Safety Code (HSC), Section 39650 et. seq., requires the California Air Resources Board (CARB) to develop Airborne Toxic Control Measures (ATCMs) to reduce public exposure to toxic air contaminants. HSC §39666(d) requires districts to implement and enforce airborne toxic control measures developed by the CARB or propose regulations enacting an ATCM that are equally effective or more stringent than the State ATCM. In adopting regulations in accordance with HSC §39666(d), the District has considered the factors of HSC §39665(b) as identified in CARB’s Initial Statement of Reasons relating to diesel particulate matter, which is incorporated by reference.*

*On November 16, 2006, the CARB adopted amendments to the Airborne Toxic Control Measure (ATCM) for Diesel Particulate Matter from Stationary Compression Ignition (CI) Engines. Rather than adopt the amendments to the State ATCM as adopted on November 16, 2006 by CARB, the District proposed to implement the requirements through the adoption of two separate rules that collectively implement the requirements of the State ATCM. On April 26, 2007, the District adopted Rule 1001-- Airborne Toxic Control Measure for Stationary Compression Ignition Engines Used in Agricultural Operations as an equivalent or more stringent measure to implement the State ATCM requirements for stationary diesel engines used in agricultural operations. On March 27, 2008, the District adopted Rule 1002— Airbourne Toxic Control Measure for Stationary Compression Ignition Engines Used at Stationary Sources.*

*On October 21, 2010, the CARB amended the State ATCM to more closely align emission standards for new stationary diesel-fueled emergency stand-by engines, including direct-drive fire pump engines, and new prime engines with the federal Standards of Performance for Stationary Compression-Ignition Internal Combustion Engines (NSPS) promulgated July 11, 2006. Proposed at this time is to amend Rule 1002-- Airborne Toxic Control Measure for Stationary Compression Ignition Engines Used at Stationary Sources to align District Rule 1002 with the recent amendments to the State ATCM.*

*Also proposed at this time are amendments to Rule 1000—State Airborne Toxic Control Measures to update the current list of State ATCMs that the District has incorporated by reference per Health and Safety Code (HSC) Section 39666.*

## 1) PURPOSE AND INTENT

**Proposed Amended Rule 1002:** The purpose of the proposed amendments to Rule 1002 is to align the District's Rule with amendments made to 17 California Code of Regulations Section 93115, Airborne Toxic Control Measure for Stationary Compression Ignition Engines (State ATCM). Amendments to the State ATCM were adopted on October 21, 2010 and became effective May 19, 2011. It is intended that the proposed amendments to District Rule 1002 will be at least as stringent as the amended State ATCM for reducing health risk caused by diesel particulate matter from non-agricultural engines. Pursuant to the requirements of HSC §39666(d), amendments to Rule 1002 are being proposed within 120 days of CARB's implementation of the amendments of the State ATCM.

**Proposed Amended Rule 1000:** The purpose of the proposed amendments to Rule 1000—*State Airborne Toxic Control Measures* is to update the current list of State ATCMs that the District has incorporated by reference per Health and Safety Code (HSC) Section 39666. This includes the recent amendments to the ATCM for Diesel Particulate Matter from Portable Engines Rated at 50 Horsepower and Greater and the new ATCM to Reduce Formaldehyde Emissions from Composite Wood Products.

## 2) APPLICABILITY

**Proposed Amended Rule 1002:** Proposed amendments to Rule 1002 applies to any person who either sells a stationary CI engine, offers a stationary CI engine for sale, leases a stationary CI engine, purchases, owns or operates a stationary CI engine in Butte County with a rated brake horsepower greater than 50 (>50 bhp) and any new stationary CI engines of any size in Butte County, except those engines used in agricultural operations, which are subject to Rule 1001. The amended Rule includes the same exemptions included in the amended State ATCM that are applicable to Butte County (i.e. does not include those specifically relating to other districts, coastal waters, etc.).

**Proposed Amended Rule 1000:** The proposed amended Rule 1000 applies to all sources affected by the ATCMs.

## 3) BACKGROUND

**Proposed Amended Rule 1002:** Diesel PM was determined a toxic air contaminant by the CARB in 1998. The existing State ATCM for Stationary Compression Ignition Engines was originally adopted in February 2004 aiming to reduce diesel PM emissions from stationary diesel-fueled CI engines. On November 16, 2006, the CARB adopted amendments to the Airborne Toxic Control Measure (ATCM) for Diesel Particulate Matter from Stationary Compression Ignition (CI) Engines. Rather than adopt the amendments to the State ATCM as adopted on November 16, 2006 by CARB, the District proposed to implement the requirements through the adoption of two separate rules that collectively implement the requirements of the State ATCM. On April 26, 2007, the District adopted Rule 1001--Airborne Toxic Control Measure for Stationary Compression Ignition Engines Used in Agricultural Operations as an equivalent or more stringent measure to implement the State ATCM requirements for stationary diesel engines used in agricultural operations. On March 27, 2008, the District adopted Rule 1002—Airbourne Toxic Control Measure for Stationary Compression Ignition Engines Used at Stationary Sources.

Amendments to the State ATCM were adopted on October 21, 2010 and became effective May 19, 2011. CARB amended the State ATCM to more closely align emission standards for new stationary diesel-fueled emergency stand-by engines, including direct-drive fire pump engines, and new prime engines with the federal Standards of Performance for Stationary Compression-Ignition Internal Combustion Engines (NSPS) promulgated July 11, 2006. The State ATCM amendments also clarified several definitions and removed provisions no longer needed. The proposed new Rule is at least as stringent as or more stringent than the ATCM for controlling diesel particulate matter, the toxic air contaminant of concern.

**Proposed Amended Rule 1000:**

District Rule 1000 serves to adopt and implement the ATCMs as adopted by CARB, unless the District proposes to adopt a rule that is at least as or more stringent than an ATCM.

**4) REQUIREMENTS OF PROPOSED AMENDED RULES**

**Proposed Amended Rule 1002:** Proposed amended Rule 1002 requires the reduction of diesel particulate matter from new and in-use non-agricultural engines consistent with the amended State ATCM. The following table summarizes the requirements of the proposed amendments. Reference ARB’s Staff Report: Initial Statement of Reasons for Proposed Rulemaking for more detail.

<b>Amendment Section</b>	<b>Requirement</b>	<b>Reason</b>
Formerly 4.13	Stock Engines are removed from the ATCM exemptions.	Removed in State ATCM.
4.13	Department of Defense Sites exemption clarification.	Amended in State ATCM.
5.29.3	Emergency Standby Engine definition clarification. Makes ineligible those engines supplying power to the grid or those supplying power as part of a financial agreement with any entity, except those allowed in sections 8.2.6 and 8.5 of this Rule.	Amended in State ATCM.
5.30.7	Emergency Use definition clarification concerning rocket launches and space vehicle reentry.	Amended in State ATCM.
5.48.1	Maintenance and Testing definition clarification adding an uninterruptable power supply as supported equipment.	Amended in State ATCM.
7	Edited language.	Clarification
7.1	New prime and emergency standby CI engines < 25 bhp must meet current (tier 4 final) off-road emissions standards.	Amended in State ATCM
7.2	New prime and emergency standby CI engines ≥25 bhp must meet tier 4 interim off-road emissions standards.	Amended in State ATCM

7.3	New direct-drive fire pump engines $\leq$ 50 bhp must meet the requirements of 40 CFR, Part 60.4202, Standards of Performance for Stationary Compression Ignition Internal Combustion Engines (2006).	Amended in State ATCM
8.1	New emergency standby CI engines $\geq$ 50 bhp shall meet 0.15 g/bhp-hr standard in lieu of current PM standard and shall be certified to the new non-road CI engine emission standard for all pollutants for 2007 and later model year engines as specified in 40 CFR Parts 60, 85, et al. Standards of Performance for Stationary Compression-Ignition Internal Combustion Engines.	Amended in State ATCM
8.4.1	PM Standards clarified for new direct-drive emergency standby fire pump engines $\geq$ 50 bhp.	Amended in State ATCM
8.4.2	New direct-drive fire pump engines $\geq$ 50 bhp must meet the requirements of 40 CFR, Part 60.4202, Standards of Performance for Stationary Compression Ignition Internal Combustion Engines (2006).	Amended in State ATCM
9.1	Edited language.	Clarification
9.1.1	New CI engines $\geq$ 50 bhp shall meet the PM Standard Strategy or be certified to the non-road CI engine emission standard as specified in 40 CFR Parts 60, 85, et al. Standards of Performance for Stationary Compression-Ignition Internal Combustion Engines.	Amended in State ATCM. Simplified within Table 4 for easier reference.
9.1.2	Owners and operators shall not install new prime diesel-fueled CI engines from a previous model year unless it meets the applicable requirements and deadlines specified in 40 CFR $\S$ 60.4208 (c)-(f).	Amended in State ATCM
10.2	Removed reporting requirements sellers of stationary CI engines $\leq$ 50 bhp.	Amended in State ATCM
10.6.1.7	Addition of DRP engine hours of operation to Reporting Requirements for Emergency Standby Engines.	Amended in State ATCM
10.7.1.1	Clarification of the reporting information required from stationary emergency standby diesel-fueled CI engines used to fulfill the requirements of an interruptible service contract (ISC).	Amended in State ATCM
Formerly 10.8.1.2	Removed reporting timeline for engines enrolled in an ISC prior to Januray 1, 2005.	Amended in State ATCM
Formerly 10.8.1.2	Removed reporting timeline for engines enrolled in an ISC after to Januray 1, 2005.	Amended in State ATCM

**Proposed Amended Rule 1000:** Rule 1000 incorporates the State ATCMs by reference. The new ATCM to Reduce Formaldehyde Emissions from Composite Wood Products (2008) will be incorporated by reference. The amended date for the ATCM for Diesel Particulate Matter from Portable Engines Rated at 50 Horsepower and Greater (February 19, 2011) has been updated. The ATCM for Stationary Compression Ignition Engines has been removed, but is now referenced as Rule 1001 and Rule 1002.

#### **5) COST IMPACTS/COST EFFECTIVENESS:**

**Proposed Amended Rule 1002:** The major amendments to the State ATCM and the proposed amendments to Rule 1002 relax the emission standards for emergency standby engines to align with federal Standards of Performance. These amendments will primarily provide a cost benefit to private business and public entities seeking to purchase new emergency standby engines. ARB estimates that purchasers of new emergency standby engines that may now forego after-market retrofits to meet the previous Tier 4 standard may save an estimated \$118 per hp. The rule amendments do not implement any cost impact beyond what is currently required by State regulations.

**Proposed Amended Rule 1000:** Because the cost to implement the requirements of the State ATCMs have already been reviewed during the ATCM adoption process, the rule does not implement any cost impact beyond what is currently required by State regulations.

#### **6) ALTERNATIVES TO THE RULES:**

The Governing Board may choose to:

- a) Approve the rules as proposed;
- b) Direct staff to modify the proposed new or amended Rule after receiving public comments during the hearing; or
- c) Take no action.

#### **7) ENVIRONMENTAL REVIEW AND COMPLIANCE:**

The adoption of proposed amended Rule 1002 and proposed amended Rule 1000 are categorically exempt from the California Environmental Quality Act (CEQA) under Sections 15307 and 15308 of the State CEQA Guidelines and no exceptions to these exemptions apply. This exemption is allowed when the rules will help improve air quality in Butte County. California Public Resources Code (Section 21159) requires an environmental analysis of the reasonably foreseeable methods of compliance. The District has concluded that no reasonably foreseeable adverse environmental impacts will be caused by adoption of the proposed new rule or amended rule since the rules as proposed will reduce toxic air contaminants.

#### **8) REQUIRED FINDINGS:**

Division 26 of the California Health and Safety Code requires local districts to comply with a rule adoption protocol as set forth in Section 40727 of the Code and make the required findings. This section has been revised through legislative mandate to contain six findings

that the District must make when developing, amending, or repealing a rule or regulation. These findings and their definitions are included in the following table:

**Required Findings**

<b>FINDING</b>	<b>DEFINITION</b>	<b>REFERENCE</b>
Authority	A district shall adopt rules and regulations and do such acts as may be necessary or proper to execute the powers and duties granted to and imposed upon the district by Division 26 and other statutory provisions.	The following California Health and Safety Code Sections are provisions of law that provide the District with the authority to adopt these amended rules: 39666(d) – Adoption of Airborne Toxic Control Measures 40000 – Legislative finding and declaration, 40001 – Rules and Regulations, 40701 – General Powers, 40702 – Rules and Regulations
Necessity	The District has demonstrated that a need for the rule or for rule amendment or repeal exists.	The adoption of amended Rule 1000 and amended Rule 1002 are necessary to comply with HSC §39666(d) which requires the District to adopt the State ATCM or propose regulations to adopt measure equally effective or more stringent than the State ATCM.
Clarity	The rule is written or displayed so that its meaning can easily be understood by the persons directly affected by it.	The amended Rules are written in such a manner that persons affected by the rule can easily understand it. The sections have been formatted for easier reference and definitions have been expanded and clarified.
Consistency	This rule is in harmony with, and not in conflict with or contradictory to, existing statutes, court decisions, or State or federal regulations.	The amended Rule 1000 and amended Rule 1002 requirements are consistent with applicable statutory requirements and consistent with the State ATCMs.
Non-Duplication	The rule does not impose the same requirements as an existing State or federal regulation, unless the District finds that the requirements are necessary and proper to execute the powers and duties granted to, and imposed upon, the district.	The amended rules do not impose requirements that duplicate existing laws or regulations.
Reference	Any statute, court decision, or other provision of law that the district implements, interprets, or makes specific by adopting, amending, or repealing a regulation.	California Health and Safety Code, Division 26, Part 3, Sections 39655(b), 39666(d), 40000, 40001, 40701, and 40702.

## 9) REFERENCES

### Rule 1002:

- a) **California Air Resources Board** Staff Report: Initial Statement of Reasons for Proposed Requirements for Stationary Diesel In-Use Agricultural Engines. Sacramento, California. September 2010.
- b) **California Air Resources Board:** Regulation and related documents for 17 CCR Sections 93115-93115.15 as amended May 19, 2011.

### Rule 1000:

- a) **California Air Resources Board:** Regulation, Staff Report, and related documents for 17 CCR Sections 93120-93120.12 for Reducing Formaldehyde Emissions from Composite Wood Products as adopted April 18, 2008.
- b) **California Air Resources Board:** Regulation, Staff Report, and related documents for 17 CCR Section 93116 for Diesel Particulate Matter from Portable Engines Rated at 50 Horsepower and Greater as amended February 19, 2011.

## 10) ATTACHMENTS

<b>Attachment A.</b>	Rule 1000— State Airborne Toxic Control Measures
<b>Attachment B.</b>	Rule 1002— Airborne Toxic Control Measure for Stationary Compression Ignition Engines
<b>Attachment C.</b>	Notice of Public Hearing and Workshop
<b>Attachment D.</b>	Public Comments and Staff Response
<b>Attachment E.</b>	Proposed Resolution of Adoption
<b>Attachment F.</b>	California Air Resources Board Airborne Toxics Control Measure for Stationary Compression Ignition Engines Amendments (Underline-Strikeout)

**Attachment A**

**Proposed Amended Rule 1000—State Airborne Toxic Control Measures**

**Attachment B**

**Proposed Amended Rule 1002—Airborne Toxic Control Measure for Stationary  
Compression Engines**

## **Attachment C**

### **Notice of Public Hearing and Workshops**

## NOTICE OF PUBLIC HEARING AND WORKSHOPS

NOTICE IS HEREBY GIVEN that the Butte County Air Quality Management District (District) Governing Board will hold a public hearing to consider adoption of proposed amendments to Rule 440-*Portable Equipment Registration*, Rule 1000-*State Airborne Toxic Control Measures (ATCMs)*, and Rule 1002-*Air Toxic Control Measure for Stationary Compression Ignition Engines used at Stationary Sources*. The time, date, and location of the public workshop and hearing are given below:

Public Workshop: September 8, 2011 at 2 p.m., City of Chico Council Chambers, 421 Main Street, Chico, CA

Public Hearing: September 22, 2011 at 10:00 a.m., City of Chico Council Chambers, 421 Main Street, Chico, CA

The Staff Report and proposed rules may be reviewed at the District office at the address below or on the District website: [www.bcaqmd.org](http://www.bcaqmd.org). For additional information please contact Jason Mandly at (530) 332-9400 ext. 102. Written comments on the proposed rules must be submitted by September 15, 2011 to: Board Clerk, Butte County Air Quality Management District, 629 Entler Avenue, Suite 15, Chico, CA 95928.

DATED: August 16, 2011

By: W. James Wagoner  
AIR POLLUTION CONTROL OFFICER

**Attachment D**

**Public Comments and Staff Response**

This page is a place holder for comments received during the public comment period.

**Attachment E**

**Proposed Resolution of Adoption**

RESOLUTION 2011-XX  
BEFORE THE BOARD OF DIRECTORS OF  
BUTTE COUNTY AIR QUALITY MANAGEMENT DISTRICT  
STATE OF CALIFORNIA  
ADOPTION OF AMENDED RULE 1000, *STATE AIRBORNE TOXIC CONTROL MEASURES*  
AND NEW RULE 1002, *AIRBORNE TOXIC CONTROL MEASURE FOR STATIONARY  
COMPRESSION IGNITION ENGINES*

Resolution 2011-\*\* .....)  
Adopt Amended Rule 1000, .....)  
*State Airborne Toxic Control Measures* , and .....)  
Amended Rule 1002, *Airborne Toxic Control Measure* .....)  
*For Stationary Compression Ignition Engines* .....)

WHEREAS, the Butte County Air Quality Management District Board obtains its authority to adopt, amend, or repeal rules and regulations from California Health and Safety Code Sections 39666(d), 40000, 40001, 40701, 40702;

AND WHEREAS, the Butte County Air Quality Management District Board has determined that the adoption of amended Rule 1000 and amended Rule 1002 is necessary to comply with HSC §39666(d) which requires the District to adopt the State ATCM or propose regulations to adopt measure equally effective or more stringent than the State ATCM;

AND WHEREAS, the Butte County Air Quality Management District Board has determined that the amended Rule 1000 and amended Rule 1002 are written such that the meaning can be understood by the persons directly affected by them (Health and Safety Code Section 40727(b)(3));

AND WHEREAS, the Butte County Air Quality Management District Board has determined that the amended Rule 1000 and amended Rule 1002 adopted herein are in harmony with, and not in conflict with or contradictory to existing statutes, court decisions, or state or federal regulations (Health and Safety Code Section 40727(b)(4));

AND WHEREAS, the Butte County Air Quality Management District Board has determined that the amended Rule 1000 and amended Rule 1002 requirements are consistent with applicable statutory requirements and consistent with recent amendments to the State ATCM for CI engines for controlling diesel particulate matter;

AND WHEREAS, the Butte County Air Quality Management District Board conducted a public hearing on September 22, 2011 concerning the proposed amended Rules herein;

AND WHEREAS, the District staff has made notice of the public hearing adopting the amended Rule 1000 and amended Rule 1002, held a public workshop meeting, and received comments as included in the staff report, which are included herein as a record of those proceedings;

THEREFORE, BE IT RESOLVED, that the Butte County Air Quality Management District Board hereby adopts amended Rule 1000 and amended Rule 1002, as proposed in the attachments to staff report.

On Motion of \_\_\_\_\_, Seconded by \_\_\_\_\_, the foregoing resolution is hereby PASSED AND ADOPTED on this 22<sup>nd</sup> day of September 2011 by the following:

AYES:

NOES:

ABSTAIN:

ABSENT:

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W. James Wagoner, Air Pollution Control Officer  
Butte County Air Quality Management District

I hereby attest that this is a true and correct copy of the action taken by the Butte County Air Quality Management District Board of Directors on September 22, 2008.

ATTEST: \_\_\_\_\_  
Patricia Cummings, Clerk of the Governing Board

**Attachment F**

California Air Resources Board  
Airborne Toxics Control Measure (ATCM)  
for Stationary Compression Ignition Engines  
with Amendments (~~underline-strikeout~~) as amended on October 21, 2010