

PUBLIC WORKSHOP & CEQA SCOPING MEETING FOR PROPOSED AMENDED RULE 1147



February 15, 2017

PAR-1147 Workshop & CEQA Scoping

Agenda



- Welcome and Introductions
- Background
- Proposed Amendments
- CEQA Scoping
- Future Activities and Schedule
- Contacts
- Seeking Input

Rule 1147 Background

- Adopted December 2008
- Rule 1147 regulates NOx emissions from sources that are not regulated by other SCAQMD Rules
 - Ovens, dryers and spray booths used as ovens
 - Furnaces and non-food roasters
 - Burn-off ovens, crematories, and incinerators
 - VOC, PM, and air toxics incineration devices including: afterburners, oxidizers, and remediation units
 - Heated tanks, parts washers, fryers, and asphalt operations

September 2011 Amendment

- Amended to provide a compliance delay of up to two years for sources with daily emissions rates less than or equal to one pound per day
- Issues raised during rulemaking:
 - Rule 1147 includes many unique pieces of equipment and the availability of cost-effective and affordable low-NOx technologies
 - Impact on small and low use equipment with NOx emissions of one pound per day or less
- Staff committed to perform a technology assessment for small and low emission sources that are not typically subject to the best available control technology (BACT) requirements
- 2011 amendment of Rule 1147 was approved into the State Implementation Plan December 2016

Rule 1147 Technology Assessment for Small and Low Emission Sources

- Rule 1147 Technology Assessment initiated immediately after the September 2011 rule amendment
 - Initial evaluation resulted in development of a new rule specific to food ovens (Rule 1153.1) and
 - Amendments to Rules 219 and 222 for equipment which required permits but the equipment category had not been specifically evaluated as part of any rule development
- January 2016 Preliminary Draft Technology Assessment released
 - Evaluated the availability and cost of low-NOx burner systems for the small and low emissions sources (less than 1 pound/day) regulated by Rule 1147
 - Incorporated information from permit applications, materials, site visits, and emission testing results
- March 2016 SCAQMD staff presented the Draft Technology Assessment to the Governing Board

Rule 1147 Technology Assessment for Small and Low Emission Sources (cont.)

- At March 2016 Governing Board meeting, staff also committed to an independent 3rd party review of the Draft Technology Assessment
- May 2016 ETS was selected as 3rd party reviewer
 - ETS was selected by a panel that included individuals from SCAQMD, Ventura County APCD, Furnace Dynamics and California Small Business Alliance
 - October 2016 ETS provided recommendations based on their evaluation of the technical , cost analysis, and stakeholder comments
- SCAQMD staff incorporated ETS' recommendations and stakeholder comments and finalized the Rule 1147 Technology Assessment

Final Technology Assessment Recommendations

- Exempt sources with total rated heat input less than 325,000 Btu per hour from the Rule 1147 NOx emission limit (Alternatively, the emission limit for low temperature systems with these burners could be changed to 60 ppm NOx and the limit for high temperature systems would continue to be 60 ppm)
- Change the NOx emission limit from 30 ppm to 60 ppm for NOx for:
 - Primary chamber of all multi-chamber burn-off ovens, burn-out furnaces and incinerators for all process temperature
 - Afterburner processes operating at temperatures less than 800° F from 30 to 60 ppm (SCAQMD staff is also considering to change the emission limit for related types of process that do not have integrated afterburners)
- Delay compliance for existing in-use heated process tanks, evaporators and parts washers from the NOx emission limit until such time the combustion system or tank is modified, replaced or relocated
- Delay compliance with the NOx emission limit for the following existing in-use equipment categories until the heating or combustion system is modified or replaced or the unit is relocated:
 - Spray booths
 - Units with actual NOx emissions of one pound per day or less

Proposed Amendments

Proposed Amended Rule 1147

Proposed Amended Rule 1147

- Incorporates recommendations from Final Rule 1147 Technology Assessment
- Other revisions to improve clarity
 - Applicability
 - Definitions
 - Exemptions
 - Removal of sections that are no longer applicable
 - Recordkeeping options

Definitions

- Revised definition for Combustion Modification

(4) COMBUSTION MODIFICATION means replacement of a burner(s) or any modification of the burner, fuel system or combustion air supply that changes the RATED HEAT INPUT CAPACITY of the burner(s).

- Revised definition for Food Oven

(5) FOOD OVEN means an oven, cooker, dryer, roaster, or other fuel-fired unit, excluding fryer, used to heat, ~~or~~ cook, dry, roast, or prepare food, food products, or products used for making beverages for human consumption.

Definitions (Continued)

□ Added definition for Infrared Burner

- (9) INFRARED BURNER means a burner with:
- (A) Ceramic, metal fiber, sintered metal, or perforated metal flame-holding surface;
 - (B) More than 50% of the heat output as infrared radiation and that is operated in a manner where the zone including and above the flame-holding surface is red and does not produce observable blue or yellow flames in excess of ½ inch (13 mm) in length; and
 - (C) A RATED HEAT INPUT CAPACITY per square foot of flame holding surface of 100,000 BTU per hour or less.

Changes to NOx Emission Limits (Table 1)

- Emission limit changes in Table 1 consistent with Technology Assessment findings, recommendations from independent review and stakeholder comments

Table 1 – NOx Emission Limit

Equipment Category(ies)	NOx Emission Limit		
	PPM @ 3% O ₂ , dry or Pound/mmBtu heat input		
	Process Temperature		
	≤ 800° F	> 800° F and < 1200° F	≥ 1200° F
Gaseous Fuel-Fired Equipment			
Asphalt Manufacturing Operation	40 ppm	40 ppm	
Afterburner, Degassing Unit, Remediation Unit, Thermal Oxidizer, Catalytic Oxidizer or Vapor Incinerator ¹	36 0 ppm or 0.073 6 lb/mmBtu	60 ppm or 0.073 lb/mmBtu	60 ppm or 0.073 lb/mmBtu
<u>Crematory or Incinerator</u>	<u>60 ppm or 0.073 lb/mmBtu</u>	<u>60 ppm or 0.073 lb/mmBtu</u>	<u>60 ppm or 0.073 lb/mmBtu</u>
<u>Dual Chamber Burn-off Furnace, Burnout Oven, Incinerator or Crematory with Integrated Afterburner</u>	<u>60 ppm or 0.073 lb/mmBtu</u>	<u>60 ppm or 0.073 lb/mmBtu</u>	<u>60 ppm or 0.073 lb/mmBtu</u>
Evaporator, Fryer, Heated Process Tank, or Parts Washer	60 ppm or 0.073 lb/mmBtu	60 ppm or 0.073 lb/mmBtu	
Metal Heat Treating, Metal Melting Furnace, Metal Pot, or Tar Pot	60 ppm or 0.073 lb/mmBtu	60 ppm or 0.073 lb/mmBtu	60 ppm or 0.073 lb/mmBtu
Oven, Dehydrator, Dryer, Heater, Kiln, Crematory, Incinerator , Calciner, Cooker, Roaster, Furnace, or Heated Storage Tank with unit heat rating ≥ 325,000 BTU/hour	30 ppm or 0.036 lb/mmBtu	30 ppm or 0.036 lb/mmBtu	60 ppm or 0.073 lb/mmBtu
Make-Up Air Heater or other Air Heater located outside of building with temperature controlled zone inside building	30 ppm or 0.036 lb/mmBtu		
Tenter Frame or Fabric or Carpet Dryer	30 ppm or 0.036 lb/mmBtu		
Other Unit or Process Temperature with unit heat rating ≥ 325,000 BTU/hour	30 ppm or 0.036 lb/mmBtu	30 ppm or 0.036 lb/mmBtu	60 ppm or 0.073 lb/mmBtu
<u>Oven, Dehydrator, Dryer, Heater, Kiln, Calciner, Cooker, Roaster, Furnace, Heated Storage Tank or Other Unit with unit heat rating < 325,000 BTU/hour</u>	<u>60 ppm or 0.073 lb/mmBtu</u>	<u>60 ppm or 0.073 lb/mmBtu</u>	<u>60 ppm or 0.073 lb/mmBtu</u>
Liquid Fuel-Fired Equipment			
All liquid fuel-fired Units	40 ppm or 0.053 lb/mmBtu	40 ppm or 0.053 lb/mmBtu	60 ppm or 0.080 lb/mmBtu

1. Emission limit applies to burners in units fueled by 100% natural gas that are used to incinerate air toxics, VOCs, or other vapors, or to heat a unit. The emission limit applies solely when burning 100% fuel and not when the burner is incinerating air toxics, VOCs, or other vapors. The unit shall be tested or certified to meet the emission limit while fueled with natural gas.

Changes to Compliance Schedule for Larger In-Use Units (Table 2)

- Removed food ovens

Table 2 – Compliance Schedule for In-Use Units

Equipment Category(ies)	Submit Permit Application	Unit Shall Be in Compliance
Remediation UNIT manufactured prior to 1998	Seven months prior to combustion modification or change of location.	Upon combustion modification or change of location beginning March 1, 2012
Tar Pot		All new permit applications beginning January 1, 2013
Afterburner, degassing unit, catalytic oxidizer, thermal oxidizer, vapor incinerator, evaporator, food oven , fryer, heated process tank, parts washer or spray booth make-up air heater manufactured prior to 1998	December 1, 2013	July 1, 2014
Other UNIT manufactured prior to 1986	December 1, 2011	July 1, 2012
Other UNIT manufactured prior to 1992	December 1, 2011	July 1, 2012
Other UNIT manufactured prior to 1998	December 1, 2012	July 1, 2013
Any UNIT manufactured after 1997	December 1 of the year prior to the compliance date	July 1 of the year the unit is 15 years old

Requirements for In-Use Equipment that is Replaced or Rebuilt

- July 1, 2017 compliance date nullified for small and low emission units
 - Comply with limit upon combustion modification, replacement, **[relocation]**, rebuilding **[or age of 35 years]**
- Seeking additional input on stakeholder request to remove relocation criteria
- Seeking comment on age criteria

(6) Notwithstanding the requirements of paragraph (c)(1), ~~an in-use unit with a District permit to construct or permit to operate prior to January 1, 2010; and an afterburner, degassing unit, thermal oxidizer, catalytic oxidizer, vapor incinerator, or spray booth make-up air heater installed with a District permit prior to March 1, 2012~~ with emissions of less than one pound per day ~~or less~~ of nitrogen oxides, may defer compliance with the applicable emission limit specified in Table 1 of paragraph (c)(1) until a combustion modification; the unit is replaced, relocated, or rebuilt; or December 1 of the year the unit is 35 years old. A unit with NOx emissions less than one pound per day that becomes 35 years old before December 1, 2017, shall comply with the emission limit on and after December 1, 2018. The age of the unit shall be determined according to subparagraph (c)(2)(A) for up to five years from the applicable compliance date in Table 2 of (c)(1). NOx emissions of less than one pound per day ~~or less~~ shall be demonstrated by compliance with one of the following requirements:

- (A) ~~A unit has a rated heat input capacity of 400,000 Btu or less.~~
- (B) ~~The unit as of September 9, 2011 has a NOx permit emission limit of one pound per day or less, a permit condition with a process~~

Compliance Demonstration for Sources <1 pound/day

- More specific options to demonstrate that unit is <1 lb/day:
 - 325,000 Btu/hour
 - Permit condition
 - Monthly with time or gas meter
 - Daily with time or gas meter
 - Daily limits for manual recordkeeping
 - Other options? (seeking input)

Other Revisions

- Remove compliance options that are no longer applicable (c)(14)
- Revise/clarify exemption section to address proposed changes for:
 - Food ovens (moved to Rule 1153.1),
 - Heated tanks, evaporators and parts washers,
 - Flare based emission control systems, and
 - Future Rule 219 amendments.
- Add testing exemption for direct fired infrared burners

CEQA Scoping for PAR 1147

California Environmental Quality Act (CEQA)

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- Purpose of CEQA
 - Requires decision-makers to be informed about the effects of projects they approve
 - Discloses to the public potential environmental effects of projects
 - Provides a mechanism for the public to provide input on a project
 - Identifies ways to reduce adverse impacts
- PAR 1147 is considered a project subject to CEQA

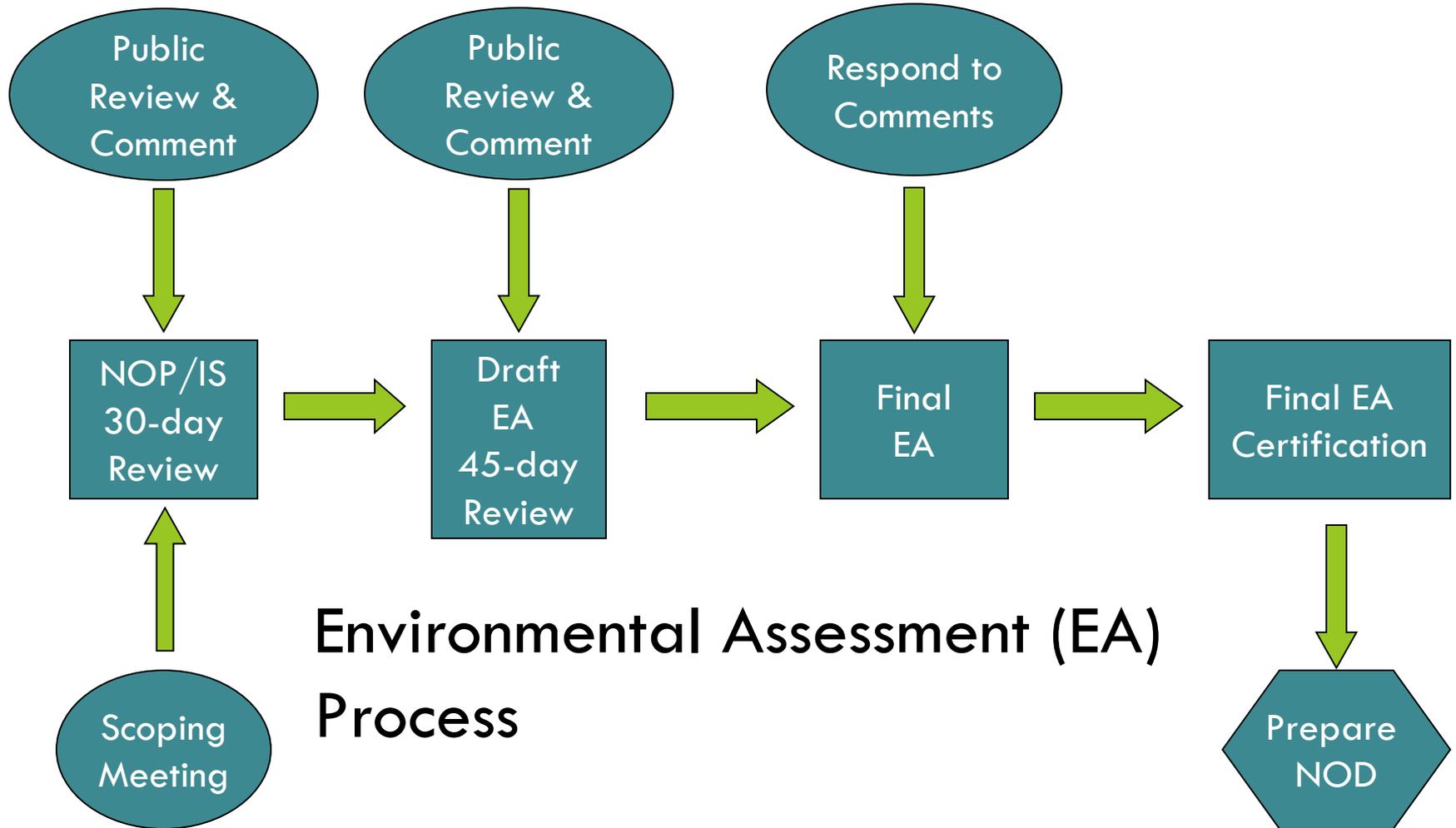
Lead Agency

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- Is the public agency responsible for preparing the CEQA document for a proposed project
- Is typically the public agency with general land use approval authority
- SCAQMD has “greatest responsibility in approving the project”
- Affected equipment are required to have air quality permits

SCAQMD's CEQA Process

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CEQA Scoping Meeting

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- Early consultation – opportunity for public to participate in the CEQA process
- Provides information on the project:
 - Project description
 - Environmental topics to be analyzed
- Allows public to provide input on potential impacts to be analyzed in the Draft EA
- Allows public to provide suggestions for potential project alternatives

Notice of Preparation (NOP)/ Initial Study (IS)

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- NOP/IS contains:
 - ▶ Project Description and PAR 1147 Draft Rule Language
 - ▶ Analysis shows that only air quality may be significantly affected and will be analyzed in Draft EA
 - ▶ Circulated for a 30-day public review period from February 1, 2017 to March 3, 2017
 - ▶ Available on SCAQMD's webpage at:
http://www.aqmd.gov/docs/default-source/ceqa/documents/aqmd-projects/2016/par1147_nopis.pdf
 - ▶ Comments received at CEQA Scoping Meeting or later relative to NOP/IS will be included and responded to in Draft EA

Preparation of Draft Environmental Assessment (EA)

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- Preparation of Draft EA is underway and includes:
 - Summary of Proposed Project/Project Description
 - Existing Setting
 - Initial analysis of project impacts
- Seeking input for:
 - Analysis of potentially significant environmental impacts to air quality
 - Feasible mitigation measures

Draft EA (continued)

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- Seeking input for:
 - Analysis of cumulative impacts
 - Project alternatives analysis – including no project alternative and least toxic alternative
 - Other CEQA topics
- The Draft EA will also include:
 - CEQA Scoping comments, if any, and responses
 - NOP/IS comment letters, if any, and responses
- Once completed, Draft EA will be released for 45-day public review and comment period

Final EA

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- Final EA will include:
 - ▶ Any modifications to the Draft EA
 - ▶ Responses to Comments on Draft EA
- As necessary, prepare Findings, Statement of Overriding Considerations, and Mitigation Monitoring and Reporting Plan

CEQA Comments

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- Oral comments from CEQA scoping meeting
- Written comments via mail, email or fax due by 5:00 pm Friday, March 3, 2017
- Mail comments to:
 - Attn: Mr. Sam Wang, CEQA Section
 - SCAQMD
 - 21865 Copley Drive
 - Diamond Bar, CA 91765
- Send comments via email to:
swang1@aqmd.gov
- Send comments via fax to:
(909) 396-3324



Future Activities and Discussion

Future Activities and Schedule

- Comment Submittal Date for CEQA NOP and Preliminary Draft Rule 1147 – March 3, 2017
- Continue Meeting with Task Force
- Public Hearing for Rule Amendment – June 2017

Contacts

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