

SOUTH COAST AIR QUALITY MANAGEMENT DISTRICT

Attachment 1 to the Governing Board Resolution for Proposed Amended Rule 1146.2 – Emissions of Oxides of Nitrogen from Large Water Heaters and Small Boilers

Statement of Findings and Statement of Overriding Considerations

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INTRODUCTION

Proposed Amended Rule (PAR) 1146.2 – Emissions of Oxides of Nitrogen from Large Water Heaters and Small Boilers, is a “project” as defined by the California Environmental Quality Act (CEQA) (California Public Resources Code §§21000 et seq.). The South Coast Air Quality Management District (SCAQMD) is the lead agency for the proposed project and, therefore, has prepared an Environmental Assessment (EA) pursuant to CEQA Guidelines §15252 and SCAQMD Rule 110. The purpose of the EA is to describe the proposed project and to identify, analyze, and evaluate any potentially significant adverse environmental impacts that may result from adopting and implementing the proposed project.

The Draft EA for the proposed amendments to Rule 1146.2 was circulated for a 45-day public review and comment period between October 8, 2004 and November 23, 2004. One comment letter was received and responded to during the public review period.

SUMMARY OF THE PROPOSED PROJECT

PAR 1146.2 involves amendments to an existing rule intended to reduce NO_x emissions from natural gas-fired large (commercial) water heaters, small (industrial) boilers, and process heaters.

- The proposed amendments will extend the compliance date from January 1, 2005, to January 1, 2006, for existing Type 2 units with a rated heat input greater than 1,000,000 Btu/hr, but less than or equal to 2,000,000 Btu/hr manufactured on or after January 1, 1992, and will require replacement of units more than 15 years old from the date of manufacture unless they comply with the NO_x emission limit of 30 ppm..
- Further, the proposed amendments will require that on or after January 1, 2006, no person shall operate in the district any unit 400,000 Btu/hr to 1,000,000 Btu/hr more than 15 years old, based on the original date of manufacture, which does not meet the emission limit of 30 ppm.

SIGNIFICANT ADVERSE IMPACTS THAT CANNOT BE REDUCED BELOW A SIGNIFICANT LEVEL

The EA identified “air quality” as the only area that may be significantly adversely affected by the proposed project. Chapter 4 of the EA includes an air quality analysis of the emission reductions foregone from:

- (a) extending the compliance date from January 1, 2005 to January 1, 2006 for existing Type 2 units greater than 1,000,000 Btu/hr manufactured on or after January 1, 1992, and that are more than 15 years old from the date of manufacture; and
- (b) requiring that on or after January 1, 2006, no person shall operate in the district any unit more than 15 years old, based on the original date of manufacture with a rated heat input greater than 400,000 Btu/hr, but less than or equal to 1,000,000 Btu/hr manufactured prior to January 1, 2000 unless the certified NO_x emissions are less than or equal to 30 ppm.

These air quality impacts are not emission increases, but are NO_x emission reductions foregone that exceed the SCAQMD’s daily NO_x significance threshold of 55 lbs/day. Table

1 illustrates the air quality impacts (emission reductions foregone) associated with the proposed project.

TABLE 1
AIR QUALITY IMPACTS ASSOCIATED WITH THE PROPOSED PROJECT
(lbs/day)

	YEAR										
	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015
Rule 1146.2 Emission Reductions (a)	14358	15431	15659	15888	16117	16346	16575	16804	17033	17262	17491
PAR 1146.2 Emission Reductions	11828	13056	13592	14108	14634	15159	15684	16210	16736	17262	17491
Proposed Project Emission Reductions Foregone (b)	2530	2375	2067	1780	1483	1187	891	594	297	0	0

(a) Emission reductions based on February 4, 1998 SIP Submittal to CARB for Rule 1146.2.

(b) Total emission reductions foregone are derived by subtracting anticipated emission reductions from PAR 1146.2 from the Rule 1146.2 emission reductions. Slight variations in the absolute differences shown in the table are due to rounding, converting tons per day to pounds per day, etc. Please see Appendix C of the Final EA for detailed emission reductions and emission reductions foregone.

STATEMENT OF FINDINGS

Public Resources Code §21081 and CEQA Guidelines §15091(a) state that no public agency shall approve or carry out a project for which a CEQA document has been completed which identifies one or more significant adverse environmental effects of the project unless the public agency makes one or more written findings for each of those significant effects, accompanied by a brief explanation of the rationale for each finding. Additionally, the findings must be supported by substantial evidence in the record (CEQA Guidelines §15091(b)). As identified in the Final EA the proposed project has the potential to create significant adverse operational air quality impacts due to NOx emission reductions foregone. The Governing Board, therefore, makes the following findings regarding the proposed project. The findings are supported by substantial evidence in the record as explained in each finding. This Statement of Findings will be included in the record of project approval and will also be noted in the Notice of Determination.

- **NOx emission reductions foregone from extending the emission limit compliance date and modifying compliance requirements cannot be mitigated to insignificance.**

Finding and Explanation: The air quality analysis concludes that extending the emission limit compliance date for existing units rated 1,000,000 Btu/hr but less than 2,000,000 Btu/hr, and modifying the compliance requirements for existing units rated 400,000 Btu/hr but less than 1,000,000 Btu/hr will cause NOx emission reductions foregone for each year beginning in 2006 through the year 2013. In 2014, originally anticipated NOx emission reductions will be realized and will no longer be foregone.

The emission reductions foregone include the effects of (a) extending the compliance date from January 1, 2005 to January 1, 2006 for existing Type 2 units greater than 1,000,000 Btu/hr manufactured on or after January 1, 1992, and that are more than 15 years old from the date of manufacture; and (b) requiring that on or after January 1, 2006, no person shall operate in the district any unit more than 15 years old, based on the original date of manufacture with a rated heat input greater than 400,000 Btu/hr, but less than or equal to 1,000,000 Btu/hr manufactured prior to January 1, 2000, unless the certified NO_x emissions are less than or equal to 30 ppm.

The Governing Board finds that no feasible mitigation measures have been identified that will reduce to insignificance the significant adverse NO_x air quality impacts. CEQA Guidelines §15364 defines "feasible" as "capable of being accomplished in a successful manner within a reasonable period of time, taking into account economic, environmental, social, and technological factors."

The Governing Board finds further that the EA considered project alternatives pursuant to CEQA Guidelines §15126.6, but did not identify an alternative which would reduce to insignificant levels the significant air quality impacts identified for the proposed project. Further the proposed project achieves the best balance of meeting rule objectives while providing affected businesses associated with large water heaters and small boilers, greater compliance flexibility. The "no project" alternative will not allow affected businesses to meet NO_x emission limits due to the fact that the development of retrofit kits did not occur as anticipated and are not currently available for all types of water heaters and boilers.

The Governing Board finds further that all of the findings presented in this "Statement of Findings" are supported by substantial evidence in the record.

The record of approval for this project may be found in the SCAQMD's Clerk of the Board's Office located at SCAQMD Headquarters in Diamond Bar, California.

STATEMENT OF OVERRIDING CONSIDERATIONS

If significant adverse impacts of a proposed project remain after incorporating mitigation measures, or no measures or alternatives to mitigate the adverse impacts to less than significant levels are identified, the lead agency must make a determination that the benefits of the project outweigh the unavoidable adverse environmental effects if it is to approve the project. CEQA requires the decision-making agency to balance, as applicable, the economic, legal, social, technological, or other benefits of a proposed project against its unavoidable environmental risks when determining whether to approve the project (CEQA Guidelines §15093 (a)). If the specific economic, legal, social, technological, or other benefits of a proposed project outweigh the unavoidable adverse environmental effects, the adverse environmental effects may be considered "acceptable" (CEQA Guidelines §15093 (a)). Accordingly, a Statement of Overriding Considerations regarding potentially significant adverse operational air quality impacts resulting from the proposed project has been prepared. This Statement of Overriding Considerations is included as part of the record of the project approval for the proposed project. Pursuant to CEQA Guidelines §15093(c), the Statement of Overriding Considerations will also be noted in the Notice of Determination for the proposed project.

Despite the inability to incorporate changes into the project that will mitigate potentially significant adverse air quality impacts to a level of insignificance, the SCAQMD's Governing Board finds that the following benefits and considerations outweigh the significant unavoidable adverse environmental impacts:

1. The analysis of potential adverse environmental impacts incorporates a “worst-case” approach. This entails the premise that whenever the analysis requires that assumptions be made, those assumptions that result in the greatest adverse impacts are typically chosen. This method may overestimate the actual adverse emission impacts resulting from the proposed project. In reality, the emission reductions foregone may be less than assumed in the EA, resulting in lower NO_x air quality impacts.
2. The long-term effect of PAR 1146.2, other SCAQMD rules and AQMP control measures is the reduction of emissions district-wide, contributing to attaining and maintaining the state and federal ambient air quality standards. PAR 1146.2 will continue to limit NO_x emissions from large water heaters and small boilers, albeit over a longer period of time, and not result in significant adverse cumulative air quality effects. The amendments to Rule 1146.2 will not increase NO_x emissions, but rather will delay originally anticipated NO_x emission reductions from sources subject to the rule. Additionally, PAR 1146.2 provides overall human health benefits by reducing criteria pollutant emissions from large water heaters and small boilers.
3. Extending the compliance date from January 1, 2005 to January 1, 2006 for existing Type 2 units greater than 1,000,000 Btu/hr manufactured on or after January 1, 1992, and more than 15 years old from the date of manufacture is expected to provide additional time for affected businesses to meet the emission limits. Allowing time for operators of affected businesses to resolve the technical issues associated with retrofit burners will help ensure that NO_x emission reductions anticipated for the rule will occur. Compliance by January 2005 is currently infeasible to achieve so it is necessary to extend the compliance date.
4. Even assuming a “worst-case” scenario of NO_x emission reductions foregone, this impact would decline over time as old water heaters and boilers are replaced with new units that comply with the 30 ppm requirement. By the year 2014, all originally anticipated NO_x emission reductions would be achieved.
5. In the settlement agreement for the 1999 AQMP amendment, a provision was included for findings of infeasibility in the event technology-forcing rules are not able to be met. The 2003 AQMP has a three ton per day set aside to account for the delay in emission reductions when technical assessments for rules indicate that technology did not develop as anticipated. As stated in the EA, it is infeasible for the affected businesses to meet the current emission limit of 30 ppm by January 1, 2005.

The Governing Board finds that the above-described considerations outweigh the unavoidable significant effects to the environment as a result of the proposed project.

MITIGATION MONITORING PLAN

When making findings as required by Public Resources Code §21081, the lead agency must adopt a reporting or monitoring program for the changes to the project which it has adopted or made a condition of project approval in order to mitigate or avoid significant effects on the environment (Public Resources Code §21081.6 and CEQA Guidelines §15097).

During the evaluation of the proposed amendments to Rule 1146.2, no project-specific mitigation measures were identified that could reduce air quality impacts. As a result, the SCAQMD Governing Board finds that, in the case of PAR 1146.2, a Mitigation Monitoring Plan need not be prepared since no feasible mitigation measures have been identified.