PERMITTING

Do I need to obtain a permit to operate my small boiler as part of complying with this rule?

Here's the good news: you don't need to get an air quality permit as part of complying with this rule. This holds true for both new equipment that meets the emission limits, and for existing equipment that needs to be retrofitted/replaced. However, note that units with a rated input from 1,000,000 Btu/hr up to and including 2,000,000 Btu/hr must be registered under Rule 222 by submitting application form 222B.

DOCUMENTING COMPLIANCE

Do I need to source test a new boiler to show it meets the compliance limit?

As long as you buy a new boiler or replacement burner that has been certified by SCAQMD, you won't need to conduct a source test. Note that a replacement burner must be certified for your specific boiler model. Certification status must be identified on the permanent rating plate.

What if I buy a replacement burner that hasn't been certified by SCAQMD?

If you do buy an uncertified replacement burner, you'll need to have a source test run by an independent third party after the retrofit is complete. Send the source test report to SCAQMD for review and certification. The SCAQMD will send you a certificate which must be kept on site to validate compliance in the event your facility is inspected.

What are the annual maintenance and record keeping requirements?

As of May 2006, an operator is required to document all activities that show equipment is being maintained and serviced according to manufacturer's recommendations. Records must be kept for at least three years. This requirement applies to units with a rated input > 400,000 Btu/hr. Also as of May 2006, operators are required to keep, on-site, a copy of documents identifying the rated Btu input of the equipment. Documentation of modifications to a unit must also be maintained.

2006 AMENDMENTS TO RULE 1146.2

Several amendments to this rule were approved in May 2006 which apply to equipment manufacturers, installers and retailers. These amendments require water heater and boiler manufacturers to meet more stringent NOx emission limits in the future as follows:

- On or after 1/01/10, units rated > 400,000 Btu/hr up to and including 2,000,000 Btu/hr must meet a NOx emission level of 20 ppm (or 14 nanograms per joule).
- On or after 1/01/12, units rated from 75,000 Btu/hr to less than or equal to 400,000 Btu/hr must meet a NOx emission level of 20 ppm (or 14 nanograms per joule).

STRATEGIES

Buy a boiler or replacement burner that has been certified by SCAQMD.

Note that a burner must be certified for your specific boiler model to avoid costly source testing. Be aware that even units that meet the emission limits may not be certified yet.

2 Buy a replacement burner from your boiler manufacturer.

Check to see if your boiler manufacturer has a replacement burner certified for your boiler model. This may provide warranty and installation advantages.

3 De-rate your boiler below key equipment size thresholds (refer to the Compliance Flowchart in this brochure) to avoid retrofit requirements.

You can avoid retrofit/replacement requirements by de-rating your boiler to less than 400,000 Btu/hr input. A de-rating certificate must be kept on file.

4 Call us!

If you have questions or need any further information, contact your representative at SoCalGas or call our Air Quality Answer Line at 562-803-7428.

For more information contact the SCAQMD at

909-396-3113 www.aqmd.gov

or call SoCalGas' Air Quality Answer Line at

562-803-7428 socalgas.com (search "AIR QUALITY")



This brochure is for information purposes only. You are encouraged to consult the applicable air quality regulations. Neither Southern California Gas Company nor its employees or any person acting on their behalf makes any warranty or representation, expressed or implied, with respect to the accuracy or completeness of this information, nor assumes any liability with respect to its use.

© 2012 Southern California Gas Company Trademarks are property of their respective owners. All rights reserved.

Printed on recycled paper with sov-based inks. N1230032 0412 XX



A 🔀 Sempra Energy utility®

UNDERSTANDING SCAQMD **AIR QUALITY RULES**

For Small Boilers, Process Heaters and Water Heaters 75,000 to 2 Million Btu/Hr Air Quality Permitting Series

SOUTHERN CALIFORNIA GAS COMPANY (SOCALGAS®) HAS PUBLISHED THIS BROCHURE AS AN OVERVIEW TO HELP YOU UNDERSTAND THE AIR QUALITY REGULATIONS FOR SMALL BOILERS AND WATER HEATERS IN THE SOUTH COAST AIR QUALITY MANAGEMENT DISTRICT (SCAQMD). IT'S JUST PART OF OUR COMMITMENT TO PROVIDING EXCEPTIONAL CUSTOMER SERVICE.

In this brochure, we cover the air quality requirements for equipment rated from 75,000 Btu/hr up to and including 2,000,000 Btu/hr. For information about larger boilers, please see "Understanding SCAQMD Air Quality Rules for Large Boilers." This brochure is divided into seven sections for your easy reference:

- The SCAQMD's Boundaries
- Rule Applicability for New and Existing Small Boilers and Water Heaters
- Rule Compliance Requirements for New and Existing Small Boilers and Water Heaters
- Permitting
- Documenting Compliance
- 2006 Amendments to Rule 1146.2
- Strategies

The SCAQMD's Boundaries



The SCAQMD's service territory includes the entire areas of:

- Los Angeles County (excluding Antelope Valley)
- Orange County
- San Bernardino County (only the non-desert area)
- Riverside County (excluding Palo Verde Valley and Mojave Desert)

RULE APPLICABILITY FOR NEW AND EXISTING SMALL BOILERS AND WATER HEATERS

In January, 1998, SCAQMD adopted a new rule to reduce emissions from small natural gas-fired boilers, process heaters and water heaters. The rule fills the gap between earlier regulations that addressed smaller water heaters and larger boilers, and covers equipment rated from 75,000 Btu/hr up to and including 2,000,000 Btu/hr.

What new equipment must meet emission limits?

Under this rule, most new equipment must eventually meet emission limits. Exceptions are units used in recreational vehicles and units used in residential homes with a rated input < 75,000 Btu/hr.

What existing equipment must meet emission limits?

Only equipment rated over 400,000 Btu/hr must be retrofitted/replaced. There are other exemptions, including:

- Equipment at residential buildings designed for 4 or less families
- Equipment at RECLAIM facilities (exempt from NOx compliance only)
- Equipment using < 9,000 therms/year

How do I qualify for the low fuel usage exemption?

You'll need to document that your boiler uses less than 9,000 therms every calendar year. Annual therm usage can be documented using gas bills from your utility company, or from data obtained using a non-resetable fuel meter or hour meter.

RULE COMPLIANCE REQUIREMENTS FOR NEW AND EXISTING SMALL **BOILERS AND WATER HEATERS**

Emission limits and compliance dates depend on the size of your equipment and the year in which it was manufactured. The chart above summarizes compliance dates. Note that new equipment must meet a 20 ppm NOx level in the future (see 2006 Amendments to Rule 1146.2).

Emission Limits at $3\% 0_2$:

Boilers, water heaters or process heaters rated 75,000 to 400,000 Btu/hr: < 40 ng/J OR < 55 ppm NOx

Boilers, water heaters or process heaters rated > 400,000 - 2,000,000 Btu/hr: NOX: ≤ 30 ppm OR 0.037 lbs NOx/MMBtu CO: < 400 ppm



on or after 1/1/01

before 1/1/00

> 400.000 -1.000.000²

75.000 -

400,000

on or after 1/1/00

> 1.000.000 -2,000,000²

1/1/92 - 12/31/99

before 1/1/92

Emission Limits: 40 ng/J OR 55 ppm NOx ²NOx: 30 ppm OR 0.037 lbs NOx/MMBtu: ²CO: 400 ppm

on or after 1/1/00



COMPLIANCE REQUIREMENT

none

upon installation

Starting 1/1/06 retrofit or replace after 15 years

upon installation

retrofit by 7/1/02

Starting 1/1/06 retrofit or replace after 15 years

upon installation