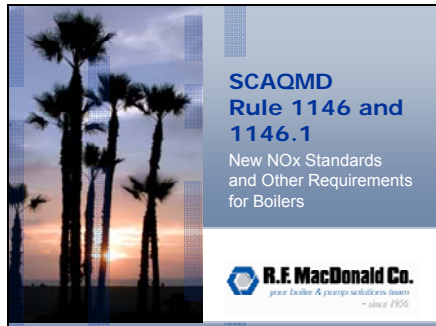
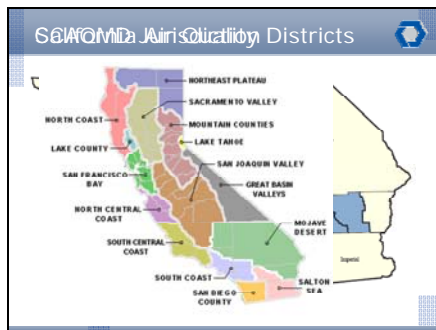


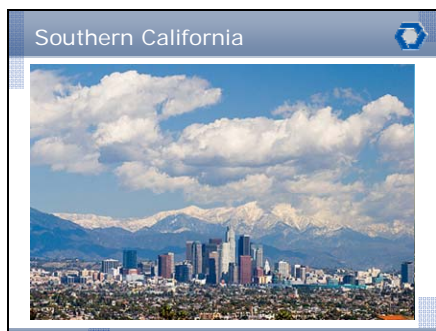
SCRIPT FOR PRESENTATION



RF MacDonald Co. welcomes you to this presentation that will cover the South Coast Air Quality Management District Rules 1146 and 1146.1: New NO_x Standards and Other Requirements for Boilers.



California is divided into 15 air basins to better manage air pollution. Regions are then divided into air districts. These district agencies are county or regional governing authorities that have primary responsibility for controlling air pollution from stationary sources. This map shows the area within Southern California that comprises the SCAQMD jurisdiction in blue and includes all of Orange County and the urban portions of Los Angeles, Riverside and San Bernardino Counties. The light yellow sections indicate the other surrounding air districts in the area.




The SCAQMD district is the second most populated urban area in the United States and one of the smoggiest. Because this area's smog problem is so severe, SCAQMD often finds itself at the forefront of the nation's emission reduction efforts.

Nevertheless, air quality in this area has continually improved and maximum levels of ozone, one of the worst smog problems, has been cut to less than one quarter of what they were in the 1950s, even though today there are nearly three times as many people and four times as many vehicles.

Even with new, tougher federal air quality rules for ozone and particulates, SCAQMD estimates it will take until at least 2020 to meet the new 24-hour average particulate standard, and until 2030 to meet the new ozone standard.

Why Different Rules?

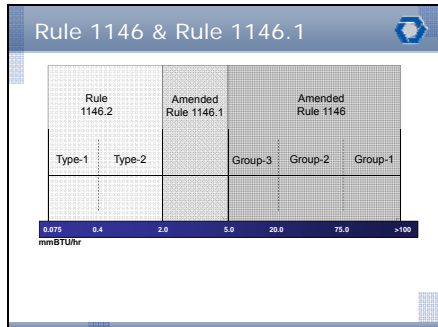


Why do air districts have different rules?

- Each air district sets its own "cost-effectiveness" limits for NOx controls.
- Air districts may be subject to different requirements to control emissions.

So why do air districts have different rules if they are all enforcing the same state law?


Due to some vague language in the law, each air district is allowed to set its own "cost-effectiveness" limits for NOx controls. In addition, air districts may be subject to different federal requirements to control emissions. As an example the Bay Area is very close to attaining federal EPA requirements, whereas San Joaquin and South Coast districts are not, resulting in more strict rules that are being enacted sooner.



The chart on this slide provides an easy reference for locating the rule that applies to your equipment with the segments by millions of BTUs/hr along the bottom and the rule categories along the top. Existing Rule 1146.2 applies to small equipment between .075 and 2 million BTUs/hr. Since this rule does not have new amendments we will only mention it here.

Rule 1146.1 applies to equipment between 2 and 5 million BTUs/hr. Rule 1146 contains three groupings; Group III is for equipment between 5 to 20 million BTU/hr, Group II is for equipment between 20 and 75 million BTU/hr, and Group I is for equipment greater than 75 million BTU/hr.

Key Elements of Amendments



- Main Goals
 - Reduce NOx Limits
 - Improved Monitoring
 - Provisions for fuel efficiency and low-fuel usage
- More time for Facilities with Multiple Units
- Standard and Enhanced Schedules are Available
- Health Facilities, Schools and Universities
- 400 ppm CO Limits

The three main goals of the new rule amendments is to greatly reduce NOx Limits between 2012 and 2016, require improved monitoring and provide provisions for fuel efficiency and low fuel usage.

If your facility has multiple units there is a provision to allow more time for all units to meet full compliance. For Group II Units there are standard and enhanced schedules available. Health facilities with newly mandated seismic upgrades, as well as Schools and Universities have more time to comply. There is no change in the 400 ppm CO limits.

Rule 1146 NOx Compliance Standard Schedule				
Boiler Input	NOx Limit	Compliance Plan	Application to Construct	Deadline
> 75 MM Btu/hr Group I	5 ppm		1/1/2012	1/1/2013
20 MM to 75 MM Group II - 75% of Units	9 ppm	1/1/2010	1/1/2011	1/1/2012
20 MM to 75 MM Group II - 100% of Units	9 ppm	1/1/2010	1/1/2013	1/1/2014
5 MM to 20 MM Group III - 75% of Units	9 ppm	1/1/2011	1/1/2012	1/1/2013
5 MM to 20 MM Group III - 100% of Units	9 ppm	1/1/2011	1/1/2014	1/1/2015
Atmospheric Units	12 ppm	1/1/2010	1/1/2013	1/1/2014

The chart on this slide shows more details for the mandates of Rule 1146 with columns for the boiler input, the NOx limit, the compliance plan due date, the Application to Construct due date and the full compliance deadline.

Group II and Group III show the extended due dates for those facilities with multiple units. Single unit facilities must use the earlier schedule.

It is important to note that this chart applies to the Standard Schedule. The Group II Compliance plan deadline was January 1, 2010 and operators who missed that deadline must follow the Enhanced Schedule listed on the next slide.

Rule 1146 NOx Compliance Enhanced Schedule				
Boiler Input	NOx Limit	Compliance Plan	Application to Construct	Deadline
20 MM to 75 MM Group II - 75% of Units	5 ppm	1/1/2011	1/1/2013	1/1/2014
20 MM to 75 MM Group II - 100% of Units	5 ppm	1/1/2011	1/1/2015	1/1/2016

NOTE: The Enhanced Schedule is the only option for Group II and Atmospheric unit operators who missed the deadline to submit Compliance Plans in January 2010 under the Standard Schedule

As an option, Rule 1146 has an Enhanced schedule for Group II Units that mandate a lower NOx limit, although provides more time for attainment than the Standard Schedule. Here again are shown the deadlines for facilities with multiple units although single unit facilities must use the earlier schedule.

Note: The Enhanced Schedule is the only option available for Group II and Atmospheric unit operators who missed the deadline to submit Compliance Plans in January of 2010.

Rule 1146.1 NOx Compliance			
Boiler Input	NOx Limit	Application to Contract	Deadline
2 MM to 5 MM Except Schools, Universities and Atmospheric Units	9 ppm	1/1/11	1/1/12
2 MM to 5 MM Units located at Schools and Universities except Atmospheric Units	9 ppm	1/1/13	1/1/14
Atmospheric Units	12 ppm	1/1/13	1/1/14

This chart shows the limits and schedule for Rule 1146.1 compliance, that includes units 2-5 million BTU/hour. This rule offers extended compliance dates for schools and universities as well as for atmospheric units as listed here.



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