



Miura North America Inc.

- **South Coast Air Quality Management District (SCAQMD)**
 1. Jurisdiction (Counties governed by SCAQMD)
 2. Rules and regulations for boilers
 3. Permits (what boilers require permits)
 4. New amendments to boiler rules 1146 & 1146.1
 5. New Protocol for checking NO_x & CO emissions with a portable analyzer (July 1, 2009).
 6. New compliance of 9ppm NO_x & 50 CO emissions (January 1, 2013).



Counties under SCAQMD Jurisdiction

- Areas of Los Angeles County
- All of Orange County
- Areas of Riverside County
- Areas of San Bernardino County



Los Angeles County -Eastern Region

Alhambra	Glendale	Pico Rivera
Arcadia	Glendora	Pomona
Artesia	Hawaiian Gardens	Rosemead
Azusa	Huntington Park	San Dimas
Baldwin Park	Irwindale	San Fernando
Bell	La Canada Flintridge	San Gabriel
Bellflower	La Habra Heights	San Marino
Bell Gardens	Lakewood	Santa Clara
Bradbury	La Mirada	Santa Fe Springs
Burbank	La Puente	Sierra Madre
Calabasas	La Verne	Signal Hill
Cerritos	Long Beach	South El Monte
City Of Commerce	Lynwood	South Gate
City Of Industry	Malibu	South Pasadena
Claremont	Maywood	Temple City
Covina	Monrovia	Vernon
Cudahy	Montebello	Walnut
Diamond Bar	Monterey	West Covina
Downey	Norwalk	Whittier
Duarte	Paramount	Pasadena

Riverside County

Banning	Hemet	Palm Desert
Beaumont	Indian Wells	Palm Springs
Calimesa	Indio	Perris
Canyon Lake	La Quinta	Rancho Mirage
Cathedral City	Lake Elsinore	Riverside
Coachella	Moreno Valley	San Jacinto
Corona	Murrietta	Temecula
Desert Hot Springs	Norco	

Los Angeles County -Western Region

Agoura Hills	Hawthorne	Palos Verdes Estates
Avalon	Hermosa Beach	Rancho Palos Verdes
Beverly Hills	Hidden Hills	Redondo Beach
Carson	Inglewood	Rolling Hills
Compton	Lawndale	Rolling Hills Estates
Culver City	Lomita	Santa Monica
El Segundo	Los Angeles	Torrance
Gardena	Manhattan Beach	West Hollywood

San Bernardino County

Big Bear Lake	Highland	Rialto
Chino	Loma Linda	San Bernardino
Chino Hills	Montclair	Upland
Colton	Ontario	Yucaipa
Fontana	Rancho Cucamonga	
Grand Terrace	Redlands	

Orange County

Aliso Viejo	Irvine	Orange
Anaheim	Laguna Beach	Placentia
Brea	Laguna Hills	Rancho Santa Margarita
Buena Park	Laguna Nigel	San Clemente
Costa Mesa	Laguna Woods	San Juan Capistrano
Cypress	La Habra	Santa Ana
Dana Point	Lake Forest	Seal Beach
Fountain Valley	La Palma	Stanton
Fullerton	Los Alamitos	Tustin
Garden Grove	Mission Viejo	Villa Park
Huntington Beach	Newport Beach	Westminster
Yorba Linda		



SCAQMD Rules & Regulations for steam & hot water boilers

What Rules Apply to Miura boilers ?

- **Rule 1146.** (LX150, LXL150, LX200, LXL200)
> 5 mmbtu/hr
- **Rule 1146.1** (LX100, LXL100)
< 2 mmbtu/hr To < 5 mmbtu/hr
- **Rule 1146.2** (EX50, LX50, LXW50, LXL50)
< 2 mmbtu/hr
- **Rule 1110.2** Portable Analyzer Testing



SCAQMD Rule Summary

Rule 1146. boilers, steam generators, and process heaters of equal to or greater than 5 **million** Btu per hour rated heat input capacity

- Check NOx emissions at least monthly or every 750 unit operating hours, which ever occurs later.
- Three (3) consecutive emissions check showing compliance of 12ppm, without any adjustments to the oxygen sensor set points, then the unit may be checked quarterly or every 2000 unit operating hours whichever occurs later.
- Until there is an emission check indicating noncompliance, which will revert the testing to the more frequent schedule.
- Tester must have AQMD-approved training and certification
- Portable analyzers are certified by U.S Environmental Protection Agency (EPA), you can obtain the list from website

Miura Boiler Models governed by this rule

LX-150, LXL-150 / LX-200 LXL-200



SCAQMD Rule Summary

- Rule 1146.1** applies to industrial, institutional, and commercial boilers, steam generators and process heaters with a rated heat input capacity greater than 2.5 million and less than 5 million btu's per hour.
- Check NOx emissions at least quarterly or every 2,000 unit operating hours, whichever occurs later.
 - Four (4) consecutive emission checks showing compliance of 12ppm, without any adjustments to the oxygen sensor set points, then the unit may be checked semi-annually or every 4,000 unit operating hours, whichever occurs later
 - Until there is an emission check indicating noncompliance, which will revert the testing to the more frequent schedule.
 - Tester must have AQMD-approved training and certification
 - Portable analyzers are certified by U.S Environmental Protection Agency (EPA), you can obtain the list from website

Miura Boiler Models governed by this rule

Rule 1146.1-LX-100 / LXL-100

SCAQMD Rule Summary

- **Rule 1146.2** applies to industrial, institutional, and commercial boilers, steam generators and process heaters have a rated heat input capacity less than or equal to 2,000,000 Btu per hour.

On or after January 1, 2010, no person shall manufacture for use or offer for sale for use within the District any Type 2 unit unless the unit is certified pursuant to subdivision (d) to a NO_x emission level of less than 14 nanograms of NO_x (calculated as NO₂) per joule of heat output or less than or equal to 20 ppm of NO_x emissions (at 3% O₂, dry).

Miura Boiler Models governed by this rule

EX50, LX50, LXW50, LXL50



AQMD Compliance Schedule

South Coast AQMD recently amended rules 1146 and 1146.1 to reduce NOx levels to 9ppm by January 1, 2013 .

The table below describes the new NOx and CO levels. Standard Compliance Limits And Schedule

SCAQMD Rules	Annual Rated Heat Input	NOx Limit (After 2013)	CO Limit (after 2013)
Rule 1146	> 5 mmbtu/hr	12ppm (9ppm)	400 (50ppm)
Rule 1146.1	> 2 mmbtu/hr To < 5 mmbtu/hr	12ppm (9ppm)	400 (50ppm)
Rule 1146.2	< 2 mmbtu/hr	30ppm (30ppm)	400 (400ppm)

Category	Limit	Submit Compliance Plan on or Before	Submit Application for Permit on or Before	Unit shall be in full compliance
Units 75% or more of units (by heat input)	9ppm or 0.011lbs/1,000,000 BTU	Jan 1, 2011	Jan 1, 2012	Jan 1, 2013
Units 100% or more of units (by heat input)	9ppm or 0.011lbs/1,000,000 BTU	Jan 1, 2011	Jan 1, 2014	Jan 1, 2014

EXCEPTION: An owner or operator that has installed or modified a natural gas fired unit Prior to September 5, 2008 complying with the applicable BACT emission Limit of 12 ppm or less of NOx may defer compliance with paragraph (c)(2) Until the unit's burner(s) replacement.



Miura Boilers that meet AQMD rules



Miura Gas-Fired/
Low Nox LX Series
High Pressure Steam Boiler

- LX-50 , LXW-50 , LXL-50
- LX-100 , LXL-100 ,
- LX-150
- LX-200 , LXL-200



Miura Boiler Models

NOx & CO levels

- LX-50 (20ppm NOx & 100 ppm CO)
- LXW-50 (30ppm NOx & 100ppm CO)
- LX-100, LXL-100 (9ppm NOx & 50 ppm CO)
- LX-150, LXL-150 (9ppm NOx & 50 ppm CO)
- LX-200, LXL-200 (9ppm NOx & 50 ppm CO)

New Protocol for Rule 1146.



1. Portable analyzer must be EPA approved.
2. Tester must be AQMD certified
3. Check NOx and CO every month
4. After 3 successful test with no adjustment to the sensor, test can be done quarterly.



New Protocol for Rule 1146.1



1. Portable analyzer must be EPA approved.
2. Tester must be AQMD certified
3. Check NO_x and CO every quarter
4. After 4 successful test with no adjustment to the sensor, test can be done semi-annually.



Sales and Maintenance Team

Sales Team

Rick Alcantara
SoCal Sales Rep



Yesenia Davila
Sales Administrator

Mario Medina

Sales Manager-Western Region & Mexico

Anthony Yonemoto

Maintenance Area Manager

Call us today regarding our Low Nox boiler models and for source testing services.

We are happy to answer any questions regarding regulation changes in your area.

****all information has been obtained from official SCAQMD source- www.aqmd.gov**

