

**New Emission Standards for the Refractory Products Manufacturing industry were promulgated on April 16, 2003**

**Who is covered by the rule?**  
[§63.9782]

You are affected if:

- ❖ Your facility is a major source, is located at a major source, or is a part of a major source of hazardous air pollutants (HAP), AND
- ❖ You own or operate any of the following:
  - Thermal process sources of organic HAP; or
  - Kilns that are used to manufacture chromium or clay refractory products

**Refractory products include. . .**

Refractory bricks and shapes, kiln furniture, crucibles, refractory ceramic fiber, and other materials used as linings for boilers, kilns, and other processing units and equipment where extremes of temperature, corrosion, and abrasion would destroy other materials.

**A thermal process source of organic HAP is any. . .**

- Shape dryer, curing oven, or kiln that is used to manufacture refractory products that use organic HAP, such as resin-bonded refractory products and pitch-bonded refractory products; or
- Shape preheater, pitch working tank, defumer, or coking oven that is used to produce pitch-impregnated refractory products

**Who is not covered by the rule?**  
[§63.9782]

**Most refractory products manufacturing facilities are not affected by this rule.**

You are not affected if:

- ❖ Your facility is not a major source of HAP; OR
- ❖ You do not own or operate any refractory products thermal processing units, such as dryers, kilns, curing ovens, coking ovens, or defumers; OR
- ❖ You do not produce refractory products that are. . .
  - Dried, cured, or fired and contain organic HAP, such as phenol, formaldehyde, or methanol.
  - Dried, cured, or fired and contain pitch or other material that releases organic HAP, or
  - Fired and contain at least 10% uncalcined clay, or
  - Fired and contain at least 1% chromium.

**Compliance Dates**

[§63.9786]

If the initial startup of your affected source is. . .	Then your affected source is . . .	And you must comply by. . .
On or before June 20, 2002	An existing source	April 17, 2006
Between June 20, 2002 and April 16, 2003	A new source	April 16, 2003
After April 16, 2003	A new source	The initial startup date of the source

**What standards must I follow?**  
[§63.9788]

Subpart SSSSS requires you to comply with:

- ❖ Emission limits
- ❖ Operating limits and monitoring requirements
- ❖ Work practice standards
- ❖ Reporting and recordkeeping requirements

**Emission Limits**

[§63.9788 and Table 1 of subpart SSSSS]

If your affected source is a. . .	You must meet the following emission limit. . .	Or the following percent reduction limit. . .
Thermal process source of organic HAP that is equipped with a control device	20 ppmv THC at 18% oxygen*	95% THC
Thermal process source of organic HAP that uses process changes to reduce organic HAP emissions	20 ppmv THC at 18% oxygen*	No percent reduction option
Kiln that is not equipped with a control device	20 ppmv THC at 18% oxygen*	No percent reduction option
New clay refractory products kiln	For HF, 0.038 lb/ton, AND for HCl, 0.18 lb/ton**	90% HF, AND 30% HCl

\* Parts per million of total hydrocarbons by volume, dry basis, corrected to 18 percent oxygen.

\*\* Pounds of hydrogen fluoride or hydrochloric acid per ton of uncalcined clay processed.

**Operating Limits and Monitoring Requirements**  
[§§63.9788, 63.9800, and Table 2 of subpart SSSSS]

<b>Organic HAP Sources</b>	
If your affected source is a. . .	You must monitor and meet the operating limit* for the. . .
Thermal process source of organic HAP	The organic HAP processing rate and maintain that rate
Thermal process source of organic HAP equipped with a thermal oxidizer	The thermal oxidizer combustion chamber temperature
Thermal process source of organic HAP equipped with a catalytic oxidizer	The temperature at the inlet to the catalyst bed
Thermal process source of organic HAP equipped with another type of control device	<ul style="list-style-type: none"> <li>• No operating limit, but you must install a THC CEMS** and comply with PS-8 (40 CFR 60, appendix B), and Procedure 1 (40 CFR 60, appendix F); AND</li> <li>• Submit a request for approval of alternative monitoring and comply with the requirements of the approved monitoring procedures</li> </ul>
<b>Clay Refractory Kilns</b>	
New clay refractory products kiln equipped with a dry limestone adsorber (DLA)	<ul style="list-style-type: none"> <li>• The pressure drop across the DLA</li> <li>• The limestone feeder setting</li> <li>• Maintain free-flowing limestone throughout the system;</li> <li>• Use the same limestone grade and supply used during your most recent performance test.</li> </ul>
New clay refractory products kiln equipped with a dry injection fabric filter (DIFF) or dry lime scrubber/fabric filter (DLS/FF)	<ul style="list-style-type: none"> <li>• The lime feeder setting; AND</li> <li>• Maintain free-flowing limestone throughout the system</li> </ul>
New clay refractory products kiln equipped with a wet scrubber	<ul style="list-style-type: none"> <li>• The pressure drop across the scrubber</li> <li>• If chemicals are added to the scrubber liquid, the chemical feed rate</li> </ul>

\* Based on the limit established during the most recent performance test.

\*\* Total hydrocarbon continuous emission monitoring system.

**Work Practice Standards**  
[§63.9788 and Table 3 of subpart SSSSS]

If your affected source is . . .	You must perform the following work practices. . .
An existing shape preheater used for making pitch-impregnated refractory products	<ul style="list-style-type: none"> <li>• At least every 10 cycles, clean the holding baskets by abrasive blasting, or</li> <li>• At least every 10 cycles, subject the holding baskets to a thermal process cycle that meets or exceeds the temperature and cycle time of the preheater and is exhausted to a thermal or catalytic oxidizer, or</li> <li>• Exhaust emissions from the preheater to a control device that controls emissions from defumer or coking oven</li> </ul>
A pitch working tank	<ul style="list-style-type: none"> <li>• Exhaust emissions from the pitch working tank to a control device that controls emissions from defumer or coking oven, or</li> <li>• Exhaust emissions from the tank to a comparable control device</li> </ul>
A chromium refractory products kiln	Use natural gas or equivalent fuel, except during periods of natural gas curtailment or supply interruption
An existing clay refractory products kiln	Use natural gas or equivalent fuel, except during periods of natural gas curtailment or supply interruption

## Notification, Recordkeeping, and Reporting Requirements

### Notifications

**Initial Notification:** [§§63.9(b) and 63.9812]  
The initial notification states that your facility is subject to the Refractory Products Manufacturing NESHAP. For existing sources, you must submit this notification by August 14, 2003; for new sources, you must submit the notification by August 14, 2003, or 120 days after the startup date, whichever is later.

**Notification of Performance Test:** [§§63.7(b), 63.9(e), and 63.9812]  
If your facility is required to conduct performance tests, you must submit a notification of your intent to conduct a performance test 60 days prior to the test.

**Notification of Compliance Status:** [§§63.9(h) and 63.9812]  
You must submit a Notification of Compliance Status to document your initial compliance within 60 days of your initial performance test.

**Notification of Alternative Fuel Use:** [§63.9812(f)]  
If you own or operate an affected clay or chromium refractory products kiln and you intend to use a fuel other than natural gas or equivalent to fire the kiln, you must submit a Notice of Alternative Fuel Use within 48 hours of the declaration of natural gas curtailment or supply interruption.

## Reports and Record Keeping

**Semiannual Compliance Reports:** [§63.9814]  
After the initial compliance period, each affected source must submit semiannual compliance reports.

**Immediate Startup, Shutdown, and Malfunction Reports:** [§63.10(d)]  
You must submit an Immediate Startup, Shutdown, and Malfunction Report following any startup, shutdown, or malfunction of an affected source during the reporting period that was not consistent with your startup, shutdown, and malfunction plan.

**Report of Alternative Fuel Use:** [§63.9814(g)]  
If you own or operate an affected clay or chromium refractory products kiln and you use a fuel other than natural gas or equivalent to fire the kiln, you must submit a Report of Alternative Fuel Use within 10 working days after you stopped using the alternative fuel.

**Records:** [§63.9816]  
Your facility is required to keep records of reported information and all other information necessary to document compliance with the proposed rule for 5 years. Design and operation records for the control and monitoring equipment must be kept for the life of the equipment.

### Comprehensive Environmental Reporting System (CERTS)

The Office of Air Quality Planning and Standards is developing recommendations and options for electronic web-based reporting of environmental regulatory requirements and for direct reporting of data to EPA. As currently planned CERTS will allow facilities to report NESHAP compliance requirements through EPA's Central Data Exchange (CDX) system. You can access more information on CERTS at the following website:  
<http://www.epa.gov/ttn/atw/certs/>

**For More Information**

Copies of the rule and other material are located at EPA's Refractory Products Manufacturing Web site:

**You can also contact your regional EPA air toxics office at the following numbers:**

Address	States	Website/ Phone Number
Region 1 1 Congress Street Suite 1100 Boston, MA 02114-2023	CT, MA, ME, NH, RI, VT	<a href="http://www.epa.gov/region1">www.epa.gov/region1</a> (888) 372-7341
Region 2 290 Broadway New York, NY 10007-1866	NJ, NY, PR	<a href="http://www.epa.gov/region2">www.epa.gov/region2</a> (212) 637-3000
Region 3 1650 Arch Street Philadelphia, PA 19103-2029	DE, MD, PA, VA, WB, DC	<a href="http://www.epa.gov/region3">www.epa.gov/region3</a> (800) 438-2474
Region 4 Atlanta Federal Center 61 Forsyth Street, SW Atlanta, GA 30303-3104	FL, NC, SC, KY, TN, GA, AL, MS	<a href="http://www.epa.gov/region4">www.epa.gov/region4</a> (800) 241-1754
Region 5 77 W. Jackson Blvd Chicago, IL 60604	IL, IN, MI, WI, MN, OH	<a href="http://www.epa.gov/region5">www.epa.gov/region5</a> (800) 621-8431
Region 6 1445 Ross Avenue Suite 1200 Dallas, TX 75202	AR, LA, NM, OK, TX	<a href="http://www.epa.gov/region6">www.epa.gov/region6</a> (800) 887-6063
Region 7 901 N. 5th Street Kansas City, KS 66101	IA, KS, MO, NE	<a href="http://www.epa.gov/region7">www.epa.gov/region7</a> (800) 223-0425
Region 8 999-18th St. Suite 300 Denver, CO 80202-2466	CO, MT, ND, SD, UT, WY	<a href="http://www.epa.gov/region8">www.epa.gov/region8</a> (800) 227-8917
Region 9 75 Hawthorne St., San Francisco, CA 94105	CA, AZ, HI, NV	<a href="http://www.epa.gov/region9">www.epa.gov/region9</a> (415) 947-8000
Region 10 1200 6th Avenue Seattle, WA 98101	AK, ID, WA, OR	<a href="http://www.epa.gov/region10">www.epa.gov/region10</a> (800) 424-4372

# Refractory Products Manufacturing NESHAP (Subpart SSSSS) An Overview of the Rule