

**UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
REGION 5**

IN THE MATTER OF:)	FINDING OF VIOLATION
)	
Murphy Oil USA, Inc.)	EPA-5-99-WI-4
Superior, Wisconsin)	
)	
PROCEEDINGS PURSUANT TO SECTION)	
113(a) OF THE CLEAN AIR ACT, AS)	
AMENDED, 42 U.S.C. § 7413(a).)	

STATUTORY AUTHORITY

Pursuant to the Clean Air Act ("Act"), 42 U.S.C. §§ 7401 *et seq.*, the Administrator of the United States Environmental Protection Agency ("U.S. EPA"), by authority duly delegated to the undersigned, hereby notifies Murphy Oil USA, Inc. ("Murphy"), that U.S. EPA has found Murphy to be in violation of Section 111 of the Act, 42 U.S.C. § 7411, and regulations promulgated thereunder setting forth Standards of Performance for Petroleum Refineries at 40 C.F.R. Part 60, Subpart J.

REGULATORY BACKGROUND

1. On March 8, 1974, in accordance with Section 111(b) of the Act, U.S. EPA promulgated New Source Performance Standards ("NSPS") for Petroleum Refineries, 40 C.F.R. Part 60, Subpart J, Sections 60.100 - 60.109. The U.S. EPA promulgated revisions to these regulations on October 2, 1990, at 55 Fed. Reg. 40171-40178 and 40 C.F.R. Sections 60.100-60.109.
2. 40 C.F.R. Part 60 Subpart J, applies to all Claus sulfur recovery plants except Claus plants of 20 long tons per day (LTD) or less, (40 C.F.R. § 60.100(a)).
3. For Claus sulfur recovery plants subject to the NSPS, 40 C.F.R. § 60.104(a)(2) prohibits the discharge of any gases into the atmosphere in excess of:
 - (i) For an oxidation or a reduction control system followed by incineration, 250 parts per million (ppm) by volume (dry basis) of sulfur dioxide (SO₂) at zero percent excess air.
 - (ii) For a reduction control system not followed by incineration, 300 ppm by volume of reduced sulfur compounds and 10 ppm by volume hydrogen sulfide (H₂S), each calculated as ppm SO₂ by volume (dry basis) at zero percent excess air.
4. Section 111(e) of the Act prohibits any owner or operator of a subject stationary source from operating such source in violation of any applicable standard of performance promulgated pursuant to Section 111 of the Act.

STATEMENT OF FACTS

5. Murphy owns and operates a Claus sulfur recovery plant ("SRU") in its refinery in Superior Wisconsin. The Claus SRU is followed by an incinerator only.
6. According to Murphy, the SRU was designed in 1971 and was purchased by Murphy in 1972. At the time the unit's capacity was estimated at 14 LTD.
7. Murphy modified the unit in 1981, 1988 and 1991. According to Murphy, the referenced modifications increased the unit's capacity by only 0.4 LTD.
8. In May and June of 1998, U.S. EPA conducted a multimedia investigation of the Murphy refinery in Superior, Wisconsin. Based on information gathered during the multimedia inspection, the SRU's capacity for October 1996 exceeded 20 LTD.
9. In October 1998 Wisconsin Department of Natural Resources ("WDNR") inspectors visited the refinery to further investigate the capacity issue of the SRU.
10. According to WDNR inspectors the SRU for 6 days in 1998, 15 days in 1997, 9 days in 1996, 18 days 1995, 25 days in 1994, 30 days in 1993, 11 days in 1992, and 1 day in 1991 the SRU produced more than 20 LTD of elemental sulfur. Table A lists the days when the SRU exceeded 20 LTD.
11. Based on the above information, U.S. EPA, Region 5 believes that the SRU is subject to 40 C.F.R. Part 60 Subpart J because the 1991 SRU improvements constitute modification as defined in 40 C.F.R. § 60.14 and the unit produces more than 20 LTD of elemental sulfur.
12. Based on the above information, SO₂ emissions from the SRU tail gas incinerator range between 5,000 and 7,000 ppm.
13. This is in violation of 40 C.F.R. § 60.104(a)(2)(i) or (ii).
14. On November 20, 1998, WDNR issue a Letter of Noncompliance to Murphy alleging that the SRU is in violation of the NSPS requirements of 40 C.F.R. Part 60 Subpart J.

FINDING OF VIOLATION

The Administrator of the U.S. EPA, by authority duly delegated to the undersigned, notifies Murphy Oil USA, Inc., that it has violated the New Source Emission Standards as set forth in this Finding of Violation.

11/25/98
Date:



Stephen Rothblatt, Acting Director
Air and Radiation Division FOR

Enclosure