STATE OF MINNESOTA

MINNESOTA POLLUTION CONTROL AGENCY

In the Matter of Flint Hills Resources, L.P.

Proceedings to Develop
and Implement a State Implementation
Plan for the Pine Bend Industrial Area,
Rosemount, Minnesota, to
Demonstrate, Attain, and Maintain
Compliance with the National Ambient
Air Quality Standards for Sulfur
Dioxide, as required by the Clean Air Act
Section 110, 42 U.S.C. § 7410

AMENDMENT SEVEN TO FINDINGS AND ORDER BY STIPULATION

The Minnesota Pollution Control Agency (MPCA), being fully advised in the premises and with the consent of Flint Hills Resources, L.P., hereby adopts this Amendment Seven to the Findings and Order by Stipulation dated April 2, 1991 (Order). The Order has been amended six times, and as amended is in effect today.

Amendment Seven authorizes changes that allow Flint Hills Resources, L.P. to add new sulfur dioxide emitting sources in order to produce ultra low sulfur diesel and to meet its obligations under a Consent Decree to which the U.S. Environmental Protection Agency and the Minnesota Pollution Control Agency are also parties. The Consent Decree requires significant reductions in emissions of sulfur dioxide and nitrogen oxides at the refinery. This amendment will also allow Flint Hills to upgrade its facility, in part to produce low-sulfur fuels to meet federal standards. In addition, it makes a wide variety of changes designed to update and clarify the Order.

Amendment Seven shall become effective on the date it is executed by the Commissioner of the MPCA. Except as expressly amended herein, all provisions of the Order and Amendments One, Two, Three, Four, Five and Six remain unchanged and in full force and effect.

IT IS SO ORDERED BY THE MINNESOTA POLLUTION CONTROL AGENCY

AND CONSENTED TO BY FLINT HILLS RESOURCES, L.P.

Jeffrey Wilkes
Vice President
Minnesota Operations
Flint Hills Resources, L.P.

Date: 5/26/04

Sheryl A. Corrigan
Commissioner
Minnesota Pollution Control Agency

Date: 6/14/04

STATE OF MINNESOTA

MINNESOTA POLLUTION CONTROL AGENCY

In the Matter of Flint Hills Resources, LP

Proceedings to Develop and Implement a State Implementation Plan for the Pine Bend Industrial Area, Rosemount, Minnesota, to Demonstrate, Attain and Maintain Compliance with the National Ambient Air Quality Standards for Sulfur Dioxide, as required by the Clean Air Act Section 110, 42 U.S.C. § 7410.

FINDINGS AND ORDER BY STIPULATION

The Minnesota Pollution Control Agency (MPCA), being fully advised in the premises and with the consent of Flint Hills Resources, LP, hereby adopts the following Findings and Order by Stipulation.

FINDINGS

1. The State of Minnesota is obligated by section 110(a) of the Clean Air Act, 42 U.S.C. § 7410, to develop a plan which provides for "implementation, maintenance, and enforcement" of the primary and secondary national ambient air quality standards (NAAQS) promulgated by the U.S. Environmental Protection Agency (EPA) pursuant to section 109 of the Clean Air Act, 42 U.S.C. § 7409.

2. The EPA has promulgated requirements for the implementation plans required by section 110(a) of the Clean Air Act at 40 CFR Part 51 (1991) (Requirements for Preparation, Adoption and Submittal of Implementation Plans).

3. The EPA has promulgated primary NAAQS for sulfur dioxide of 0.03 parts per million (ppm) annual arithmetic mean and 0.14 ppm maximum 24-hour concentration, not to be exceeded more than once per year, 40 CFR § 50.4 (1991), and secondary NAAQS for sulfur dioxide of 0.5 ppm maximum three-hour concentration, not to be exceeded more than once per year, 40 CFR. § 50.5 (1991).

4. The MPCA is a statutory agency of the state of Minnesota, Minn. Stat. § 116.02, subp. 1 (1990), charged with the responsibility to administer and enforce laws and promulgate rules to

prevent water, air and land pollution throughout the state of Minnesota, Minn. Stat. chs. 115, 115B and 116 (1990).

5. The MPCA is empowered to promulgate standards and rules for the prevention, abatement or control of air pollution related, without limitation, to "source or emissions of air contamination or air pollution, to the quality or composition of such emissions, or to the quality of or composition of the ambient air or outdoor atmosphere or to any other matter relevant to the prevention, abatement or control of air pollution." Minn. Stat. § 116.07, subp. 4 (1990). See Minn. Stat. § 116.07, subp. 2 (1990).

6. The MPCA has promulgated primary ambient air quality standards for sulfur dioxide of 0.03 ppm annual arithmetic mean and 0.14 ppm maximum 24-hour concentration, not to be exceeded more than once per year. Minn. Rules pt. 7005.0080 (1991). The MPCA has also promulgated secondary ambient air quality standards for sulfur dioxide of 0.5 ppm maximum three-hour concentration, not to be exceeded more than once per year in Air Quality Control Region 131. Minn. Rules pt. 7005.0080 (1991).

7. The MPCA has the authority to enforce any statute or rule related to air pollution by, among other things, adopting, issuing, entering into or enforcing "reasonable orders, schedules of compliance and stipulation agreements." Minn. Stat. § 116.07, subp. 9 (1990).

8. Minn. Stat. § 115.071 (1990) provides that the provisions of chapters 115 and 116 and "all rules, standards, orders, stipulation agreements, schedules of compliance, and permits adopted or issued" by the MPCA may be enforced by criminal prosecution, action to recover civil penalties, injunction, action to compel performance, or other appropriate action. Specifically, in an action to compel performance of an order of the MPCA, the regulated party may be required "to do and perform any and all acts and things within the defendant's power which are reasonably necessary to accomplish the purposes of the order." Minn. Stat. § 115.071, subp. 5 (1990).

9. The seven-county Twin Cities metropolitan area Air Quality Control Region (AQCR) is defined at 40 CFR § 81.27 (1991) and is designated AQCR 131 and classified a nonattainment area for the primary NAAQS for sulfur dioxide at 40 CFR § 81.324 (1991).

10. In 1981, the EPA approved Minnesota's State Implementation Plan (SIP) to control emissions of sulfur dioxide in the Twin Cities nonattainment area, AQCR 131. 46 Federal Register 20997 (April 8, 1981). See 40 CFR § 52.1220(c)(16) (1991).

11. On July 29, 1982, EPA proposed to conditionally approve Minnesota Rule APC-41 (Offset Rule) as a revision to the Minnesota SIP fulfilling the requirements of Part D (Plan Requirements for Nonattainment Areas) of the Clean Air Act, 42 U.S.C. §§ 7501-7508. 47 Federal Register 32,742 (July 29, 1982).

12. In 1982, MPCA staff computer modeling of allowable sulfur dioxide emissions from stationary emission sources in the Pine Bend area of Dakota County (a portion of AQCR 131) showed the potential for nonattainment of the sulfur dioxide NAAQS.

13. On September 2, 1983, the MPCA formally requested that EPA redesignate all of AQCR 131 to attainment for sulfur dioxide except for the Pine Bend area of Dakota County.

14. On September 28, 1984, EPA issued a letter of SIP deficiency to the MPCA pursuant to Section 110(a)(2)(H) of the Clean Air Act, 42 U.S.C. § 7410(a)(2)(H), for monitored and modeled violations of the sulfur dioxide NAAQS in the Dakota County portion of AQCR 131. EPA published this notice at 49 Federal Register 47488 (December 5, 1984), and identified Dakota County as one of the areas in the country with fully or partially approved Part D plans which still do not attain NAAQS.

15. On June 27, 1986, the MPCA submitted a sulfur dioxide SIP revision for the Dakota County portion of AQCR 131 to EPA to resolve the deficiency noted in a September 28, 1984, letter from EPA to Governor Rudy Perpich of Minnesota. The MPCA submitted a sulfur dioxide SIP revision for another portion of AQCR 131 (i.e., the St. Paul Park area of Washington and Ramsey Counties) on June 30, 1987. On August 19, 1987, the MPCA submitted to EPA a sulfur dioxide SIP revision demonstrating modeled attainment of NAAQS for the Pine Bend area. On September 10, 1987, the MPCA again submitted a sulfur dioxide SIP revision requesting redesignation of all AQCR 131 as attainment for sulfur dioxide, except for the areas covered by the St. Paul Park and Pine Bend sulfur dioxide SIP submittals. In response to EPA's comments in June 1990, the MPCA withdrew these revisions in August 1990. On March 13, 1989, the MPCA submitted a SIP revision to EPA entitled "Revisions to Offset and General Rules" to fulfill the requirements of Part D of the Clean Air Act.

16. In its 1990 Air Pollution Control Cooperative Agreement No. A005236-90, EPA stated that it will withhold from the MPCA up to $150,000 in federal funds for the purpose of promulgating a Federal Implementation Plan (FIP) unless an approvable sulfur dioxide SIP for the Pine Bend area is submitted to EPA by the end of the third quarter of federal fiscal year 1990.

17. On January 1, 2002, Koch Petroleum Group LP changed its corporate name to Flint Hills Resources, LP. Flint Hills Resources, LP (FHR or Company) is a corporation organized and existing under the laws of the state of Delaware, is authorized to do business and is doing business in the state of Minnesota at the junction of Highway 52 and 55 in the county of Dakota, state of Minnesota.

18. The Company owns and operates a petroleum refinery (Refinery) and owns a sulfuric acid plant in the Pine Bend area of Rosemount, Dakota County, Minnesota. The refinery is now known as Flint Hills Resources LP – Pine Bend. The sulfuric acid plant is now known as Flint Hills Resources – Sulfuric Acid Unit (FHR SAU).

19. The Refinery and FHR SAU emit pollutants into the ambient air in sufficient quantities to require an air emission permit from the MPCA pursuant to Minn. Stat. § 116.081 (2000) and Minn. Rules pts. 7001.0030 and 7007.0150, Subp. 1 (2001).

The MPCA issued FHR an air emission permit in 1985, for the operation and expansion of the Refinery. That permit is Air Emission Facility Permit No. 106A-85-OT-1, the Refinery permit. FHR's Refinery permit has been amended, and as amended is in effect today.

On March 29, 2001, the MPCA issued a Part 70 permit for the FHR SAU (Air Emission Permit No. 03700006-001). The permit incorporated the elements of this Administrative Order that applied to the facility. The issuance of that permit removed the need to include SO_2 requirements for the FHR SAU in this Administrative Order. The MPCA plans to add that permit to its State Implementation Plan in 2003.

This Administrative Order imposes requirements on the FHR refinery (i.e., specified in parts I. through VIII. below) that will achieve and maintain compliance with the NAAQS for sulfur dioxide.

20. The Refinery is a potential major contributor of sulfur dioxide emissions in the Pine Bend area, and based on computer modeling [ISC-ST (Version 90346) and ISC-LT (Version 90008)] it is a culpable sulfur dioxide emission source in the Pine Bend area.

[Removed.]

21. The Refinery produces unleaded gasoline, home heating oil, commercial and industrial heating oils, transportation fuels, jet fuels, petroleum coke, asphalt, sulfur and carbon dioxide. The Refinery has numerous different processing facilities which contain emission sources that emit sulfur dioxide.

22. [Removed.]

23. [Incorporated into Finding 29.]

24. On July 29, 1992, the MPCA submitted a sulfur dioxide plan to bring the Pine Bend area into attainment. The submittal included this Order. On September 9, 1994, EPA approved the MPCA's plan (59 FR 46553).

25. On September 7, 1994, the MPCA submitted a request to EPA to redesignate the Pine Bend sulfur dioxide area from nonattainment to attainment. On May 31, 1995, the EPA published a Direct Final Rule (60 FR 28339) indicating that it intended to redesignate the Pine Bend area from nonattainment for sulfur dioxide to attainment. On July 31, 1995, this rule became effective, and the Pine Bend area was redesignated as an attainment area for sulfur dioxide.

26. On February 10, 2000, EPA promulgated the "Control of Air Pollution from New Motor Vehicles: Tier 2 Motor Vehicle Emissions Standards and Gasoline Sulfur Control Requirements." This rule, effective April 10, 2000, requires most refiners (including the Pine Bend refinery) to meet a corporate average standard for sulfur in gasoline in 2004 and to produce even lower sulfur gasoline by 2006.

27. On December 22, 2000, the U.S. Department of Justice lodged a proposed Complaint and Consent Decree in United States vs. Koch Petroleum Group LP in U.S. District Court (Civil Action No. 00-2756-PAM-SRN). The State of Minnesota joined in the settlement as a signatory to the Consent Decree. On April 25, 2001, the Department of Justice filed the Consent Decree.

The settlement required FHR to pay civil penalties and implement innovative pollution control technologies to greatly reduce emissions of nitrogen oxides and sulfur dioxide. Implementing some of these control technologies reduces the dispersion from affected stacks, and requires changes to this Administrative Order.

28. On January 18, 2001, EPA promulgated the "Control of Air Pollution from New Motor Vehicles: Heavy-Duty Engine and Vehicle Standards and Highway Diesel Fuel Sulfur Control Requirements." This rule, effective March 19, 2001, requires refiners (including the Pine Bend refinery) to produce diesel fuels for use in highway vehicles with a lower sulfur content. These fuels must be available by June 1, 2006.

29. On March 11, 2003, the MPCA amended this Administrative Order to allow Flint Hills Resources LP to modify its refinery. The MPCA found that the requirements of this Order, as amended, and as imposed on FHR will maintain compliance with the NAAQS for sulfur dioxide in the Pine Bend area of AQCR 131, and will allow the refinery to meet requirements established in the Consent Decree (Civil Action No. 00-2756-PAM-SRN) and to make lower sulfur gasoline (Tier 2 gasoline) and lower-sulfur diesel fuels.

30. The MPCA is now amending this Administrative Order to allow Flint Hills Resources LP to modify its refinery in order to meet requirements established in the Consent Decree (Civil Action No. 00-2756-PAM-SRN) not addressed in the previous amendment and to make ultra low sulfur diesel fuel.

This Order is needed to maintain the attainment status for the area.

ORDER

NOW, THEREFORE, IT IS ORDERED, that Flint Hills Resources, LP shall comply with the requirements listed below in operating its Refinery to demonstrate and maintain compliance with the federal ambient air quality standards for sulfur dioxide as set forth in 40 CFR §§ 50.4 and 50.5 (1991), while making certain facility modifications.

I. COMPANY PROPERTY AND ACCESS RESTRICTIONS

This Part of the Order is the control plan for preventing general public access to Company-owned property in order to exclude the atmosphere above the property from the definition of "ambient air" subject to the sulfur dioxide NAAQS. Exhibit 8 is the modeling technical support document, which is attached and incorporated by reference into this Order. The Company-owned property where the atmosphere above is excluded from modeled compliance with the sulfur dioxide NAAQS is shown in Exhibit 8.

The Company shall meet the following requirements for the property shown in Exhibit 8:

A. Access Control

On the effective date of this Order, the Company shall have enclosed the boundaries of the property with a continuous fence, excluding access points, and shall have installed gates at each access point. The Company shall thereafter keep the gates closed unless: 1) a guard or other FHR employee or contractor is present controlling access at a gate, or 2) authorized persons are entering or leaving the property through a gate.

B. Inspection, Maintenance, and Repair

The Company shall inspect the fencing and gates installed to ensure compliance with Part I.A at least annually.

The Company shall maintain and repair the fencing and gates to maintain continuous compliance with Part I.A. The Company shall complete all repairs and maintenance to the fencing and gates as soon as possible, but no later than 30 days after the date the Company

observes the need for repair or maintenance, or after the MPCA notifies the Company of the need for repair or maintenance.

II. SULFUR DIOXIDE EMISSION CONTROL PLAN AND COMPLIANCE SCHEDULES

This Part of the Order is the Refinery's sulfur dioxide emissions control plan, based upon air dispersion modeling that shows that the control plan will attain compliance with NAAQS. Exhibit 8 is the modeling technical support document. The sulfur dioxide modeling parameters for this equipment are contained in Exhibit 8. The emission limits and operational requirements of this Order apply to the units identified in Exhibit 8.

The remainder of this Part is divided into three sections. The first section contains the required Refinery modifications and compliance schedules. The second section contains the Refinery's sulfur dioxide emission limitations, fuel restrictions, and operational requirements. The third section contains the Refinery's compliance demonstration requirements for the stack emissions, fuel restrictions and operational requirements. The Company shall operate equipment as described in Part II.B and shall demonstrate compliance as described in Part II.C.

A. [Removed.]

B. Emission Limitations, Fuel Restrictions and Operational Requirements

1. Emission Limitations

The Company shall not exceed the emission limitations set forth in Table 1 which is attached and incorporated by reference herein, for each emission point. The Company's total facility emissions also shall not exceed 3,770 tons per year of sulfur dioxide based on a 365-day rolling average, effective the effective date of this Order.

2. Refinery Fuel Oil Restrictions

(a) The Company shall not burn refinery fuel oil at any Refinery location.

(b) [Removed.]

(c) [Removed.]

(d) Retained PSD emission reductions. Table 4 provides a summary of a number of fuel oil combustion sources that no longer combust Refinery fuel oil. The sources were included in the ambient air quality modeling (in Exhibit 8). Reductions achieved by eliminating them as fuel oil emissions sources may qualify for Prevention of Significant Deterioration (PSD; 40 CFR 52.21) netting purposes.

3. Fuel Gas Restrictions

(a) Natural Gas limits.

1. The Company shall only burn natural gas at the following sources:

   i. The Oily Sewer Water Treatment Plant (OSWTP) oxidizers (94H-1 and 94H-3); and

   ii. Tank heaters (Emission Point Nos. 70 through 99).

2. The Company may burn natural gas at all combustion sources provided the Company measures the volume of natural gas combusted.

(b) Refinery Fuel Gas limits. The Company may burn Refinery fuel gas at all existing locations except those sources listed in paragraph (a)(1). Existing sources are listed in Exhibit 8. New sources may combust Refinery fuel gas provided they comply with the emission limitation specified in Section IV.A.

(c) Supply source. The following provisions apply to refinery gas supplied as fuel to combustion sources:

1. Any fuel gas combustion unit other than those identified in (a), above, may burn Refinery fuel gas not taken from the Refinery fuel gas system provided that the Company install, operate, and maintain a hydrogen sulfide CMS and flow meter at the heater in accordance with the requirements of

Part II.C.3 whenever burning Refinery fuel gas not taken directly from the Refinery Fuel gas system; or

2. As an alternative to paragraph II.A.3(c)(1), combustion units may burn Refinery fuel gas not taken from the Refinery fuel gas system if sulfur dioxide emissions are monitored using a CEMS or monitored under an EPA-approved Alternative Monitoring Plan (AMP). The Company currently monitors the #2 and #3 Hydrogen Plant Pressure-Swing Adsorption (PSA) off-gas; railcar loading off-gas; soil-vapor extraction off-gas; wastewater treatment process vapors; and reformer lock hopper and switch valve vent gases in accordance with EPA-approved AMPs. (These AMPs were approved in a February 13, 2001 letter from U.S. EPA.) . The refinery is applying for approval of an AMP to monitor the #4 Hydrogen Plant Pressure-Swing Adsorption (PSA) off-gas.

(d) Hydrogen Sulfide Content. The Company shall not put fuel gas into the Refinery fuel gas distribution system at any time which contains greater than 162 parts per million (ppm) of hydrogen sulfide (0.10 grains of hydrogen sulfide per dry standard cubic foot of gas) as an average for any consecutive three-hour period.

4. Stationary Diesel Engine Fuel Restrictions

The Company shall only use diesel fuel with a sulfur content not in excess of 0.05 percent by weight at each of the Refinery's stationary diesel engines. Limits on hours of operation for selected stationary diesels are shown in Table 5.

5. Steam-Air Decoking Requirements

(a) Authorized Locations. The Company may decoke heater or boiler tubes using steam-air decoking only at the following Refinery heaters or boilers: 21H-1, 21H-2, 21H-3, 23H-1, and 23H-2.

(b) [Removed.]

(c) Frequency. The Company may steam-air decoke heater 21H-1, 21H-2, 23H-1 and 23H-2 no more than 432 hours per year for each heater. When heater 21H-3 is installed and put into operation, it shall comply with the decoking limitation of the heater it replaced (21H-1 or 21H-2).

(d) [Removed.]

(e) [Removed.]

(f) [Removed.]

6. Operation Requirements for Bypass Stacks and Other Special Stacks

(a) [Removed.]

(b) No. 3 Flare. This flare (Emission Point No. 107) may not receive gases from Refinery operations unless the gases are from pressure relief, are from upsets of Refinery process equipment, or are required for equipment maintenance. The Company shall only use commercial natural gas or nitrogen for the purge system and commercial natural gas at the pilot flame for the No. 3 flare.

(c) Nos. 5, 6, 7 Flares. These flares (Emission Point Nos. 109, 110, and 106, respectively) may not receive gases from Refinery operations unless the gases are from pressure relief, are from upsets of Refinery process equipment, or are required for equipment maintenance. The Company shall only use commercial natural gas or nitrogen for the purge system and commercial natural gas at the pilot flame for the Nos. 5, 6, and 7 flares.

(d) SRU 3 and SRU 4 Facility. The Company shall not emit SRU 3 tail gas at Emission Point No. 113 unless tail gas from SRU 3 is bypassing the SCOT Unit. The Company may use Emission Point No. 2 during periods when tail gas from SRU 4 is bypassing

the SCOT Unit. The Company shall not shut down the SCOT Unit except as necessary for maintenance or repair. The Company shall not bypass the SCOT Unit with tailgas from SRU 3 or SRU 4 except:

1) during periods of startup, shutdown, or breakdown of SRU 3, SRU 4, the SCOT Unit, or SCOT incinerator, or

2) to prevent a breakdown of the SCOT Unit.

Sulfur degassing gas may be combusted in the SRU 4 startup incinerator (Emission Point No. 113).

(e) SRU 5 Facility. The Company may use Emission Point No. 3 during periods when tail gas from SRU 5 is bypassing the Tail Gas Recovery Unit #2 (TGTU #2). The Company shall not shut down the TGTU #2 except as necessary for maintenance or repair. The Company shall not bypass the TGTU #2 with tail gas from SRU 5 except: 1) during periods of startup, shutdown, or breakdown (as governed by 40 CFR 60 Subp. A) of SRU 5, the TGTU No. 2 or TGTU #2 incinerator, or 2) to prevent a breakdown of the TGTU No. 2. Sulfur degassing gas may be combusted in the SRU 5 startup incinerator (Emission Point No. 3).

(f) FCC Facility. The Company shall only vent emissions from the Emission Point No. 9 stack as follows: 1) during startup or shutdown of the FCC; 2) for an emergency at the FCC reactor or catalyst regenerator which potentially or actually requires a bypass of the large WHCO Boiler or small WHCO Boiler; 3) for an emergency shutdown of the large WHCO Boiler (17H-2) or small WHCO Boiler (17H-4); and 4) required safety inspections of the large WHCO Boiler (17H-2) or small WHCO Boiler (17H-4).

C. Demonstration of Compliance With Emission Limitations, Fuel Restrictions and Equipment Operation Requirements

1. Demonstration of Compliance with Emission Limitations

The Company shall implement the compliance methods for monitoring requirements in Section V. of this Order and recordkeeping requirements in Section VI.B.2 of

this Order to determine compliance with each emission limitation in Table 1. The Company's emission monitoring programs shall also comply with Part V. of this Order.

2. [Removed.]

3. Demonstration of Compliance With Fuel Gas Restrictions

The Company shall implement the compliance methods in Sections V.A.2 and VI.B.2.a of this Order to determine compliance with the fuel gas restrictions of Part II.B.3 of this Order. The Company's fuel gas monitoring programs shall also comply with Part V of this Order.

4. Demonstration of Compliance with Diesel Fuel Restrictions

The Company shall prepare and retain written certifications of the sulfur content of each shipment of diesel fuel oil received at each of the Refinery's stationary diesel engines. The Company shall prepare these written certifications at the time of delivery of the diesel fuel to each engine. The Certification shall be signed by the Company official responsible for ensuring the proper oil is delivered to each engine.

5. [Removed.]

6. [Removed.]

7. Demonstration of Compliance with Equipment Operation Requirements

The Company shall monitor the start and stop times for heater decoking and compute the hours of heater decoking operations to determine compliance with the heater decoking requirements of Part II.B.5 of this Order.

III. [Removed.]

IV. CHANGES NOT REQUIRING A MODIFICATION OF THIS ORDER

The Company is authorized to conduct the activities listed below at the Refinery without a modification of this Order. The Company may conduct activities not listed below without a

modification of this Order, if the activities do not emit sulfur dioxide, do not affect the modeling parameters assumed in Exhibit 8, and do not affect the continuous emission monitors (CEMs) or continuous monitoring systems (CMSs) used to demonstrate compliance with this Order. The Company shall, however, obtain an air emission permit prior to commencing these activities if one is required by Minnesota statutes, Minnesota rules or federal statutes and regulations.

After obtaining the appropriate air emission permit (if required) but prior to a modification of this Order, the Company may begin construction of a new unit or modification to an existing unit. However, the Company shall not operate a new emission unit and shall not operate a modified unit in a manner contrary to the modeling parameters in Exhibit 8 for that unit until the modification to this Order is obtained.

A. The Company may install and operate any new sulfur dioxide process or control equipment with a maximum potential sulfur dioxide emissions rate that does not exceed 2.28 pounds per hour, except as expressly allowed elsewhere in this part (Part IV.).

The Company may modify and operate any existing sulfur dioxide process or control equipment to increase the sulfur dioxide emission rate up to 2.28 lb/hr over the modeled emission rate for that source in Exhibit 8.

B. The Company may physically and operationally modify process and control equipment if the modifications do not increase the modeled sulfur dioxide emissions rate above the amount allowed in paragraph A of this section, decrease the modeled stack emissions exit velocity, or decrease the modeled heat content of the stack exit emissions, at the emission source where the modification occurs and all other potentially affected emission points assumed in the modeling presented in Exhibit 8.

C. The Company may modify or replace and operate an existing sulfur dioxide emissions stack with a new stack if the height of the modified or replacement stack is not less than that of the stack assumed in the modeling presented in Exhibit 8, and if the exit diameter of the modified or replacement stack is not greater than that of the stack assumed in the modeling presented in Exhibit 8.

D. The Company may install and operate new structures, or modify and operate existing structures if the new or modified structures do not increase the effective structural dimensions assumed in the modeling presented in Exhibit 8.

E. The Company may replace and operate replacement CEMs and CMSs covered by this Order or the Company may install and operate additional CEMs and CMSs, so long as the new or replacement CEMs and CMSs are properly certified, comply with this Order, and are operated and tested as required by this Order.

F. [Removed.]

G. [Removed.]

H. The Company may add additional CEMs or CMSs as needed to provide redundancy, providing the Company notifies the MPCA as required in Part VII.A.6. The Company may modify the fuel gas delivery system if the following conditions are met: 1) fuel gas flow and hydrogen sulfide content must be continuously measured for all heaters, either by measuring the hydrogen sulfide level in the main Refinery fuel gas system and feeding the heater directly from the system, or by separately monitoring the fuel gas to the heater; and 2) any new fuel gas monitors added to the system must be certified within 60 days of startup, must meet 40 CFR 60 Appendix F QA/QC requirements, must have a QA/QC plan prepared and implemented within 60 days of startup, and operate in accordance with Minn. Rules pt. 7017.1090 within two quarters of startup.

I. The boundaries of the Company-owned property may be extended and existing fencing removed provided that the property excluded from the definition of "ambient air", as shown in Exhibit 8, continues to meet the requirements in Part I.A and Part I.B of this Order.

J. [Removed.]

K. [Removed.]

L. [Removed.]

M. As part of the Powerformer Unit NO_X Reduction Project, the Company may install and operate ultra low NO_X burners at Emission Point No. 10 (Powerformer unit heater

32H-5, -6, -7). The Company will continue to operate these sources on Refinery fuel gas or natural gas according to the requirements of Part II.B.3 of this Order.

Authority to construct under this part (IV.M) expires May 12, 2006.

N. The Company may make any or all of the following changes:

- modify the FCC Unit to meet emission control requirements by allowing operation in "full burn" mode and by allowing the use of SO_X-reducing catalyst additives;
- install and operate a new Delayed Coking Unit Process Heater (21H-3);
- remove the stack cones from heaters 38H-1A and 38H-1B;
- install fuel gas piping for the #3 Hydrogen Plant Heater (27H-501) and Boiler B-8 and operate them on Refinery fuel gas;
- modify the #3 Crude Unit Heaters (25H-1 and 25H-3);
- install a new Boiler #9 (71B-9) in the general vicinity of the boilerhouse;
- operate Boiler #6 (71B-6), the new Boiler #9, or both out of the combined stack 71B-7 or out of their individual stacks as described in Exhibit 8.

Authority to construct under this part (IV.N) expires June 30, 2008.

O. The Company may make any or all of the following changes:

- install and operate a new Hydrocracker Charge Heater 29 H-1.
- install and operate a new Hydrocracker Fractionator Heater 29 H-2.
- install and operate a new emergency diesel electric generator EE-29**401**.
- install and operate an emergency diesel powered cooling water pump, the **new 81 P 450,** at Cooling Tower 6.
- install and operate a new #4 Hydrogen Plant Charge Heater 30 H-1.
- The modeling paramenters of these sources are described in Exhibit 8:

Authority to construct under this part (III.I) expires May 19, 2009.

The Company may make modifications which reduce the fired duty of the heaters and boilers listed below. The duty reductions are to allow FHR to comply with the NO_x monitoring and control requirements established in the Consent Decree (Civil Action No. 00-2756-PAM-SRN). The modified modeling paramenters of these sources are described in Exhibit 8:

Boilers 71 B-1, 71 B-2, 71 B-3, 71 B-4, 71 B-6 and 71 B-9

Heaters 11 H-1, 11 H-2, 12 H-4, 19 H-1, 21 H-1, 21 H-2, 25 H-1, 25 H-3, 27 H -102, 31 H-4, 31 H-7, 31 H-9, 32 H-5,6,7, 33 H-31, 33 H-4 (33 H-1 & 2), 38 H-1A, 38 H-1B, 38 H-2.,

P. The Company may modify the stack and structures of the sulfuric acid rail car loading and rail car depressurization sources to install equipment to reduce SO_2 emissions from these sources.

V. GENERAL MONITORING REQUIREMENTS

A. Accurate Measurements Required

1. The Company shall install, certify, calibrate, operate and maintain each CEM and CMS as required by this Order, and shall conduct all non-continuous sampling and analysis as required by this Order to ensure accurate measurements of the parameters to be monitored.

2. The Company shall measure the stack sulfur dioxide concentration (ppm), stack velocity and stack temperature and compute the sulfur dioxide emission rate in lb/hr to determine the emission limitations listed in Table 1 for Emission Points No. 1 (Merox TO), No. 2 (SRU 3/4), 3 (SRU 5), and 8 (FCC). The Company shall measure the Refinery fuel gas hydrogen sulfide concentration and fuel gas flow rate to determine compliance with the emission

limit in Section II.B.3.c of this Order for sulfur dioxide emissions from Refinery fuel gas combustion.

B. Continuous Monitoring Requirements

1. General

(a) Compliance with Minnesota Rules and Federal Regulations. The Company shall meet the requirements of Minn. Rules pt. 7017.1002 – 1020 and 40 CFR Part 60.13 with each CEM and CMS. If the requirements of Minn. Rules pt. 7017.1002 – 1020 and 40 CFR Part 60.13 differ, the more stringent regulation shall apply.

(b) Continuous Operation of CMS and CEM Systems. The Company shall at all times properly operate and maintain each CMS and CEM system to provide continuous, accurate, real time monitoring data for the determination of compliance with the terms and requirements of this Order. In those situations where a CMS or CEM system becomes incapable of meeting the requirement of providing continuous, accurate, real time monitoring data, the Company shall expeditiously replace or repair the CMS or CEM system and take all other measures as necessary to meet the requirement as soon as possible.

2. Monitor Certification

(a) Sulfur Dioxide CEMs. The Company shall certify each sulfur dioxide CEM as required by 40 CFR Part 60, Appendix B, Performance Specification 2 (1991).

(b) Emission Rate CMSs. The Company shall certify each continuous monitoring system as required by 40 CFR Part 60, Performance Specification 6 (1991), except that the Company need not meet calibration drift requirements for those flow monitors that are not designed for conducting calibration drift tests (pitot tube or venturi type).

(c) Hydrogen Sulfide CMSs for Fuel Gas Monitoring. The Company shall certify each hydrogen sulfide CMS as required by 40 CFR Part 60, Appendix B (1991), by using the procedures specified in Performance Specification 7.

3. Quality Assurance

The Company shall conduct a quality assurance and quality control (QA/QC) program as required by 40 CFR Part 60, Appendix F (1991), to properly maintain and calibrate each CEM and CMS. The Company shall develop and follow the master QA/QC Plans for each CEM and CMS required by this Order.

4. Monitoring System Uptime

(a) Mass Sulfur Dioxide CEM Systems. The Company shall operate and maintain each mass sulfur dioxide CEM system in accordance with Minn. Rules 7017.1090 so that compliance with each emission limitation of Table 1 is determined from real time certified CEM monitoring.

(b) [Removed.]

(c) Refinery Fuel Gas Hydrogen Sulfide CMSs. The Company shall install, calibrate, maintain and operate a CMS for the hydrogen sulfide content of the refinery fuel gas at each of the inputs to the refinery fuel gas distribution loop. The CMS shall provide a continuous record of the hydrogen sulfide content in ppm.

For heaters receiving refinery fuel gas from sources other than the main refinery fuel gas distribution loop, the Company shall continuously measure the hydrogen sulfide content of the refinery fuel gas or monitor in accordance with an EPA-approved Alternative Monitoring Plan (AMP) at a representative point in the line supplying the heater. For heaters receiving commercial grade fuels directly, (e.g., commercial grade natural gas and propane), contract guarantees for hydrogen sulfide and heat content shall be utilized for compliance demonstration purposes.

(d) Each CEM or CMS must be operated and data recorded during all periods of emission unit operation including periods of emission unit start-up, shutdown, or malfunction. This requirement to operate the monitor applies whether or not an emission limit applies during these periods.

CEM or CMS downtime is unacceptable except for reasonable periods of monitor downtime due to the following causes:

(1) damage to the CEM or CMS due to acts of God such as lightning strikes, tornadoes, or floods that render the CMS inoperative;

(2) sudden and not reasonably preventable CEM or CMS breakdowns;

(3) scheduled maintenance based on equipment manufacturer's recommended schedule which cannot be reasonably be conducted when the emission unit is not operating; or

(4) unavoidable CEM or CMS downtime to conduct required checks and audits.

C. Non-Continuous Monitoring Requirements

1. The Company shall perform non-continuous monitoring as required by Section II.C.4 of this Order.

2. The Company shall conduct performance stack tests to determine compliance with the emission limitations and fuel restrictions of this Order as required by the Commissioner pursuant to Minn. Rules pt. 7017.2001 – 2060. Stack tests can also be required by authorized EPA personnel. All performance tests shall be conducted in accordance with the requirements of Minn. Rules pt. 7017.2001 – 2060. The Company shall submit to the MPCA performance stack test plans, protocols and schedules at least 15 days prior to the pretest meeting required in Part VII.A.5 of this Order.

VI. RECORDKEEPING REQUIREMENTS

This Part VI of the Order requires the Company to keep specified records so that EPA and the MPCA can evaluate the Company's compliance with the Order. The first section requires the Company to keep records on maintenance of property access controls. The second section requires the Company to keep records on the Refinery control plans and compliance schedules.

The third section requires the Company to keep records in the form and with the accessibility needed for EPA and MPCA staff inspection.

A. Property Boundary Fencing and Gates

The Company shall maintain records of each inspection of the fencing and gates required by Part I of this Order. In addition, the Company shall maintain records of each maintenance activity and each repair activity required by Part I of this Order. The Company shall retain each inspection, maintenance and repair record for a period of five years, despite any Company document retention policy to the contrary. These records shall be kept at the Refinery.

1. The inspection records shall include: the date of inspection; name of the person conducting the inspection; identification of each section of fence and each gate inspected; and identification of each location where repair or maintenance is required. The inspection report shall be certified as accurate in writing by the person conducting each inspection.

2. The maintenance and repair records shall include: the dates of the repairs or maintenance; a description of the repair and maintenance conducted; and the locations where they occurred. The maintenance and repair records shall be certified as accurate by the person(s) overseeing each maintenance or repair action.

B. Recordkeeping Requirements

The Company shall maintain for the Refinery a copy of the records required pursuant to this Part of the Order. Records shall be retained at the Refinery.

1. Permanent Records

The Company shall permanently maintain the following information together with all amendments, revisions, and modifications to this information.

(a) Design, Construction and Operation Information. The Company shall maintain information on the design, construction and operation of each emission facility, emission source, fuel system, stack, structures pertinent to modeling for downwash in Exhibit 8, and any other information required to conduct sulfur dioxide ambient air quality modeling of emissions from the Refinery. These records shall also include all information required to

demonstrate that the equipment identified in Exhibit 8 is installed as described in that exhibit. Where an activity has been undertaken pursuant to Part IV of this Order, the records shall include a description of each activity and all information required to demonstrate that the activity complies with each applicable Part IV requirement. The records shall also identify and provide information on the design, construction and operation of each modification or new installation at the Refinery required by this Order.

(b) Information on Sulfur Dioxide Emission Limits, Operational Requirements, and Modeling Parameters. The Company shall maintain records at the Refinery. These records include this Order and the Exhibits and Tables attached and incorporated by reference in this Order.

2. Non-Permanent Records

The Company shall retain the information identified below for a minimum of five years following the date on which the information was obtained, despite any document retention policy to the contrary. This retention period shall be automatically extended upon the Commissioner's written request.

(a) Monitoring, Testing, and Other Records. The Company shall maintain records of all measurements, including: all continuous monitoring system and continuous monitoring device measurements; all performance stack testing measurements and operating conditions during the performance stack tests; all continuous monitoring system performance evaluations; all continuous monitoring system or monitoring device calibration checks; all adjustments and maintenance performed on these systems or devices; and all other information required or applicable to verify compliance with this Order. The Company shall prepare and maintain records of the one-hour averages for stack sulfur dioxide concentration (ppm); stack diameter, stack velocity and stack temperature; and the sulfur dioxide emission rate in lb/hr to determine compliance with the emission limitations listed in Table 1 for Emission Points No. 1 (Merox TO), No. 2 (SRU 3/4), No. 3 (SRU 5), and No. 8 (FCC). The Company shall prepare and maintain records of the one-hour averages of the refinery fuel gas hydrogen

sulfide concentration and fuel gas flow rate to determine compliance with the emission limit in Section II.B.3.c. Using the one-hour averages, FHR shall calculate the three-hour, twenty four-hour, and annual rolling averages corresponding to the emission limits referenced above.

(b) Sulfur Dioxide Emissions, Fuel Records and Operations Records. The Company shall maintain records to demonstrate compliance with the sulfur dioxide emissions limitations, and fuel use and quality restrictions and operational requirements of this Order. These records shall be designed, and the information shall be maintained in a form suitable for the Commissioner to quickly determine compliance with each of the emission limitations, fuel restrictions, and operational requirements of this Order.

(c) Startup, Shutdown, Bypass, and Breakdown Records. The Company shall maintain records for each startup, shutdown, bypass and breakdown for each piece of process equipment, control equipment, fuel supply system, emission stack, monitoring system and any other piece of equipment applicable to this Order. These records shall include the date and time of the start and stop of each event.

(d) Excess Emissions, Exceedances of Fuel Usage and Quality Restrictions and Non-Compliance with Operational Requirements Records. The Company shall maintain a record of each exceedance of an emission limitation, fuel use restriction and fuel quality requirement, and operational requirement at the Refinery for each emission point and fuel system subject to the emission limitations, fuel restrictions, and operational requirements of this Order. The record shall include for each period of exceedance a description of the exceedance, its cause, the magnitude of the exceedance, and the date and time of commencement and cessation of the exceedance.

(e) Operations Records for CEMs and CMSs. The Company shall maintain an operations record for each CEM and CMS used to establish compliance with the terms and conditions of this Order. The operations record shall specify each date and time the CEM or CMS was inoperative and the nature of the CEM or CMS repairs or adjustments. The operations record shall include for each calendar quarter, the percent of time the CEM or CMS

was operating and the percent of time the CEM or CMS was not operating. The Company shall also record for each calendar quarter, the amount of time the process associated with the CEM or CMS was operated.

(f) [Removed.]

C. Record Maintenance

The Company shall maintain all required documents, records, reports and plans in a format suitable for determination of FHR's compliance with this Order by EPA or MPCA staff. The Company shall maintain the information in a form that is easily accessible for inspection by EPA or MPCA staff, and that is available for inspection at all reasonable times.

VII. REPORTING REQUIREMENTS

A. Notifications

1. Notification of Process or Control Equipment Shutdown

The Company shall notify the Commissioner of shutdown of any control equipment or process equipment governed by this Order in accordance with Minn. Rules pt. 7019.1000, Subp 3.

2. Notification of Process or Control Equipment Breakdown

The Company shall notify the Commissioner of breakdowns of control equipment or process equipment governed by this Order in accordance with Minn. Rules 7019.1000, subp. 2.

3. Notification of CEM or CMS Breakdown

The Company shall notify the Commissioner of a breakdown or malfunction of any CEM or CMS used to demonstrate compliance with the terms and conditions of this Order in the next air quality quarterly report (NSPS excess emissions and 1989 Stipulation Agreement quarterly report). The Company shall include the information identified in Minn. Rules pt. 7017.1110, Subp. 2.B.

4. Notification of CEM or CMS Certification Test and Quality Assurance Audit Test

The Company shall notify the Commissioner in writing at least 30 days prior to conducting any CEM or CMS certification test for any CEM or CMS required to be certified pursuant to this Order. The Company may request a pretest meeting with the MPCA staff by making the request at least seven days prior to conducting any CEM or CMS certification test for the CEMs or CMS required pursuant to this Order. The Company shall notify the Commissioner in writing at least seven days prior to conducting calendar quarter quality assurance audit test procedures for those CEMs or CMSs required pursuant to this Order.

5. Notification of Performance Tests

The Company shall notify the Commissioner of its intent to conduct performance stack tests required pursuant to this Order not less than 30 days prior to conducting each performance stack test as required by Minn. Rules pt. 7017.2030. The Company may request a pretest meeting with the MPCA staff by making the request at least seven days prior to conducting a performance stack test. The test date is subject to the Commissioner's approval and shall be approved by the Commissioner at least 15 days before the planned test date.

6. Notification of Changes to be Made Pursuant to Part IV of the Order

The Company shall notify the Commissioner in writing at least 15 days prior to undertaking an activity allowed by Parts IV.A, D, H, and I of this Order. The written notification shall describe the change the Company is proposing to make, and shall include submittal of a permit application for the change, if required pursuant to Minnesota statutes, Minnesota rules or federal statutes or regulations.

The Company shall notify the Commissioner of changes made pursuant to Part IV.E in the first quarterly report required by Part VII.C following the change. Each such written notification shall include all information necessary to demonstrate the activity fully complies with Part IV of this Order.

7. Notification of Regularly Scheduled Turnaround on any TGTU Unit

The Company shall notify the Commissioner in writing 30 days prior to performing regularly scheduled turnaround (scheduled unit shutdown for maintenance) on any TGTU Unit.

B. [Removed.]

C. Quarterly Reports

The Company shall submit to the Commissioner each calendar quarter, a report that contains the following information: sulfur dioxide emissions for the Emission Points of Table 1, refinery fuel gas hydrogen sulfide content (in a form that allows direct comparison with the requirements of the Order) on both hard copy and computer readable media; a record of data used in calculating, and calculations of the sulfur dioxide emissions, refinery fuel gas hydrogen sulfide content; a record of each steam-air decoke event; a record of each startup, shutdown, bypass and breakdown of process and control equipment; a summary record of excess sulfur dioxide emissions, exceedances of fuel usage and quality requirements and noncompliance with operational requirements, or the Company shall state if no exceedances or noncompliance conditions occurred in the quarter; a summary of CEM and CMS operation records including the amount of time the process equipment was operated; and, any quality assurance test results that do not meet the requirements of 40 CFR Part 60, Appendix F (1991). Quarterly reports shall be postmarked within 30 days following the end of each calendar quarter. Upon written notification by the Commissioner, the Company may cease including sulfur dioxide emissions, fuel usage and quality, records of data used in calculating, and calculations of sulfur dioxide emissions, and fuel usage and quality in the quarterly reports. However, the Company shall submit this data within 30 days of receipt of a written request by the Commissioner.

D. Performance Stack Tests Reports

The Company shall submit to the Commissioner, reports of each performance stack test conducted pursuant to this order. Performance stack test reports shall be postmarked no later than 45 days following completion of the performance stack test.

E. CEM Certification Test Results

The Company shall submit to the Commissioner, the results of each CEM certification test required pursuant to this Order. Certification test reports shall be postmarked no later than 45 days after the CEM certification test date.

F. CEM and CMS Audit Test Results

The Company shall submit to the Commissioner, the results of quarterly cylinder gas audits and annual relative accuracy tests. Submitted results of quarterly audits and annual relative accuracy tests shall be included in the quarterly report for the quarter in which they were conducted.

VIII. GENERAL CONDITIONS

A. Before the Company begins operation of new or modified equipment not specifically allowed by Part IV of this Order and which results in additional sulfur dioxide emissions, or changes to sulfur dioxide emission patterns assumed in the modeling presented in Exhibit 8, the Company shall obtain a modification of this Order.

B. This Order is meant to delineate Minnesota's strategy for attainment in the Pine Bend area from the present into the future, and is not an admission that the restrictions in 40 CFR § 52.24 (a) and (b) (1991) previously applied or currently apply to the Pine Bend area.

C. [Removed.]

D. This Order does not relieve FHR of the obligation in undertaking all actions required by this Order, to comply with all applicable local, State and Federal laws and regulations, including, but not limited to, federal new source performance standards, and laws and regulations related to occupational safety and health. In the event there is a conflict in applicable federal or state of local laws or regulations, the more stringent of the conflicting provisions shall apply.

E. The MPCA, EPA or their authorized representatives shall have authority to enter all property of the Company in Rosemount, Minnesota, at all reasonable times for the purposes of

inspecting records, operating logs and contracts related to the Company's compliance with this Order; reviewing the progress of the Company in implementing this Order; conducting such tests as the EPA or MPCA deem necessary to determine compliance with this Order; and verifying the data submitted to the EPA and MPCA by the Company. The Company shall honor all reasonable requests for such access by the EPA or MPCA staff, conditioned only upon presentation of proper credentials. This section does not limit any other right of entry and inspection held by the EPA and MPCA pursuant to applicable federal or state laws, rules or permits.

F. This Order shall be binding upon the Company and its respective officers, employees, successors and assigns. FHR shall provide a copy of this Order to any successor in interest prior to transfer of that interest, and shall simultaneously inform the MPCA that this notice has been given. Should the Company sell or otherwise convey or assign any of its right, title or interest in the Refinery, such conveyance shall not release the Company from any obligation imposed by this Order, unless the party to whom the right, title or interest has been transferred or assigned agrees in writing to fulfill the obligations of this Order and the MPCA finds that the new owner has the ability to fulfill the obligations of this Order, and approves such transfer or assignment.

G. [Removed.]

H. This Order mandates actions and establishes limits necessary to attain, maintain and verify compliance with the federal sulfur dioxide NAAQS by FHR. To the extent that any federal or state statute, rule, permit, order, stipulation agreement, consent decree or schedule of compliance now in force or subsequently issued imposes limits and requires actions additional to or more stringent than those required in this Order, FHR shall also comply with the requirements of the federal or state statute, rule, permit, order, stipulation agreement, consent decree or schedule of compliance.

I. This Order is effective upon the date that it is signed by the Chair and Commissioner of the MPCA.

J. Once EPA approves this Order as part of the Minnesota SIP, this Order supersedes the requirements of the SIP approved in 1981, at 46 Federal Register 20997 (April 8, 1981), as they apply to FHR.

TABLE 1 REFINERY EMISSION LIMITATIONS FOR EACH APPLICABLE FEDERAL SULFUR DIOXIDE AMBIENT AIR QUALITY STANDARD

EMISSION POINT	FACILITY OR SOURCE	3-HOUR AAQS [1]	24-HOUR AAQS [2]	ANNUAL AAQS [3]	DATES EMISSION POINT LIMITATIONS BECOME EFFECTIVE
1	Merox TO Facility	230 pounds SO2 per hour		1007.4 tons SO2 per 12 months	Effective the effective date of this Order.
2	SRU 3 and SRU 4 Facility (SCOT) [7]	149.0 pounds SO2 per hour	86.5 pounds SO2 per hour	324.3 tons SO2 per 12 months	Effective the effective date of this Order.
3	SRU 5 Facility (TGRU #2) [7]	170.8 pounds SO2 per hour	93.6 pounds SO2 per hour	409.8 tons SO2 per 12 months	Effective the effective date of this Order.
8	FCC Facility	1500 pounds SO2 per hour		3504 tons SO2 per 12 months	Effective the effective date of this Order.
348	OSWTP Facility (oxidizers[8])	50.71 pounds SO2 per hour [4]	50.71 pounds SO2 per hour [4]	39.4 tons SO2 per 12 months (9.0 lb/hr)	Effective the effective date of this Order.

(1) These emission limitations are based on three consecutive one-hour periods (3-hour rolling averages). To demonstrate compliance with the limitation, emissions shall be calculated in such manner, except for Emission Point No. 348. (See [4].)

(2) These emission limitations are based on 24 consecutive one-hour periods (24-hour rolling averages). To demonstrate compliance with the limitation, emissions shall be calculated in such manner, except for Emission Point No. 348. (See [4].)

(3) These emission limitations are based on a 12-month rolling average and to demonstrate compliance with the limitation, emissions shall be calculated in such manner, except for Emission Point No. 348. (See [4].)

(4) This emission limitation is a one hour maximum value to be met for any one consecutive hour period. Compliance with these emission limits has previously been demonstrated by stack tests.

(5) [Removed.]

(6) [Removed.]

(7) Limits include emissions from the incineration of sulfur degassing gas.

(8) This emission limit applies to the WWTP during operation of either the 94 H-1 oxidizer or the 94 H-3 oxidizer. 94 H-1 is the primary WWTP oxidizer; 94 H-3 is the backup. Only one oxidizer is operated at a time.

TABLE 1A. [Removed.]

TABLE 2. [Removed.]

TABLE 3. [Removed.]

TABLE 4 - UNITS INCLUDED IN FACILITY MODELING THAT NO LONGER BURN FUEL OIL[1]

EMISSION POINT	FACILITY OR SOURCE	3-HOUR AND 24-HOUR LIMIT	ANNUAL LIMIT	COMMENTS
7	71B-7	43.4 pounds SO_2 per hour	190.2 tons SO_2 per year	Combined boiler stacks could include 71B-9. Will continue to burn fuel gas.
11	19H-1	6.5 pounds SO_2 per hour	28.6 tons SO_2 per year	Will continue to burn fuel gas.
14	33H-31	37.6 pounds SO_2 per hour	164.9 tons SO_2 per year	Will continue to burn fuel gas.
16	11H-3	14.6 pounds SO_2 per hour	63.8 tons SO_2 per year	Unit shut down and removed.
18	11H-5	6.6 pounds SO_2 per hour	29.0 tons SO_2 per year	Unit shut down and removed.
19	11H-1	12.8 pounds SO_2 per hour	55.9 tons SO_2 per year	Will continue to burn fuel gas.
27	21H-1S	5.5 pounds SO_2 per hour	23.9 tons SO_2 per year	Will continue to burn fuel gas.
28	21H-1N	5.5 pounds SO_2 per hour	23.9 tons SO_2 per year	Will continue to burn fuel gas.
29	21H-2S	5.5 pounds SO_2 per hour	23.9 tons SO_2 per year	Will continue to burn fuel gas.
30	21H-2N	5.5 pounds SO_2 per hour	23.9 tons SO_2 per year	Will continue to burn fuel gas.
32	23H-1	9.7 pounds SO_2 per hour	42.5 tons SO_2 per year	Will continue to burn fuel gas.

[1] The refinery discontinued combustion of fuel oil. To retain the sulfur dioxide emission reduction for netting purposes under the Prevention of Significant Deterioration (PSD) regulation (40 CFR 52.21), FHR is including the annualized actual emissions (from June 1998 to May 2000) in the modeling.

TABLE 5 – LIMITS ON DIESEL-POWERED UNITS

EMISSION POINT NO.	FACILITY OR SOURCE	DESCRIPTION	ANNUAL LIMIT	COMMENTS
331	93 P 160	Diesel-powered fire water pump	1000 hours	Dedicated fuel storage tank; meter records hours of operation
332	93 P 400	Diesel-powered fire water pump	1000 hours	Dedicated fuel storage tank; meter records hours of operation
333	93 P 570	Diesel-powered fire water pump	1000 hours	Dedicated fuel storage tank; meter records hours of operation
407	EE 1657	Diesel-powered generator	1000 hours	Dedicated fuel storage tank; meter records hours of operation
408	EE 1692	Diesel-powered generator	1000 hours	Dedicated fuel storage tank; meter records hours of operation
435	23 ME 26	Diesel-powered generator	1000 hours	Dedicated fuel storage tank; meter records hours of operation
453	EE 1309	Diesel-powered generator	1000 hours	Dedicated fuel storage tank; meter records hours of operation
465	EE 1718	Diesel-powered generator	1000 hours	Dedicated fuel storage tank; meter records hours of operation
505	81 P 159	Diesel-powered cooling water pump	1000 hours	Dedicated fuel storage tank; meter records hours of operation
506	81 P 357	Diesel-powered cooling water pump	1000 hours	Dedicated fuel storage tank; meter records hours of operation

TABLE 5 – LIMITS ON DIESEL-POWERED UNITS

EMISSION POINT NO.	FACILITY OR SOURCE	DESCRIPTION	ANNUAL LIMIT	COMMENTS
507	81 P 444	Diesel-powered cooling water pump	1000 hours	Dedicated fuel storage tank; meter records hours of operation
508	81 P 89	Diesel-powered cooling water pump	1000 hours	Dedicated fuel storage tank; meter records hours of operation
509	81 P 450	Diesel-powered cooling water pump	1000 hours	Dedicated fuel storage tank; meter records hours of operation
510	Wood River diesel	Diesel-powered pump	2000 hours	Dedicated fuel storage tank; meter records hours of operation
511	71C-11	Diesel-powered plant air compressor	2500 hours	Dedicated fuel storage tank; meter records hours of operation
453	EE 29401	Diesel-powered generator	1000 hours	Dedicated fuel storage tank; meter records hours of operations
513	New 81 P-450	Diesel-powered cooling water pump	1000 hours	Dedicated fuel storage tank; meter records hours of operations