UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
REGION 5
77 WEST JACKSON BOULEVARD
CHICAGO, IL 60604-3590
JAN 8 2016

REPLY TO THE ATTENTION OF:

CERTIFIED MAIL
RETURN RECEIPT REQUESTED

Gregory Mullins, President
Northern Tier Energy
Saint Paul Park Refining Company, LLC
301 Saint Paul Park Road
Saint Paul Park, MN 55071

Re: Notice and Finding of Violation
Saint Paul Park Refining Company, LLC
Saint Paul Park, Minnesota

Dear Mr. Mullins:

The U.S. Environmental Protection Agency is issuing the enclosed Notice and Finding of Violation (NOV/FOV) to Saint Paul Park Refining Company, LLC and/or Northern Tier Energy, LLC (SPPRC/NTE or you) under Section 113(a)(1) and (a)(3) of the Clean Air Act, 42 U.S.C. § 7413(a)(1) and (a)(3). We find that you have violated the Clean Air Act ("the Act") and certain associated federal and state pollution control regulations.

Section 113 of the Clean Air Act gives us several enforcement options. These options include issuing an administrative compliance order, issuing an administrative penalty order and bringing a judicial civil or criminal action.

We are offering you an opportunity to confer with us about the violations alleged in the NOV/FOV. The conference will give you an opportunity to present information on the specific findings of violation, any efforts you have taken to comply and the steps you will take to prevent future violations. In addition, in order to make the conference more productive, we encourage you to submit to us information responsive to the NOV/FOV prior to the conference date.

Please plan for your facility's technical and management personnel to attend the conference to discuss compliance measures and commitments. You may have an attorney represent you at this conference.

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The EPA contact in this matter is Gregory Gehrig. You may call him at (312) 886-4434 or email at gehrig.greg@epa.gov to request a conference. You should make the request within 10 calendar days following receipt of this letter. We should hold any conference within 30 calendar days following receipt of this letter.

Sincerely,

George T. Czerniak
Director
Air and Radiation Division

Enclosure

cc: Katie Koelfgen, Minnesota Pollution Control Agency

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
REGION 5

IN THE MATTER OF:	)	
	)	
Saint Paul Park Refining Company, LLC	)	**NOTICE OF VIOLATION and**
Northern Tier Energy, LLC	)	**FINDING OF VIOLATION**
Saint Paul Park, Minnesota	)	
	)	
	)	**EPA-5-16-MN-01**
Proceedings Pursuant to	)	
the Clean Air Act	)	
42 U.S.C.§ § 7401 et seq	)	

NOTICE AND FINDING OF VIOLATION

Saint Paul Park Refining Company, LLC and/or Northern Tier Energy, LLC (SPPRC/NTE or you) owns and operates one steam-assisted flare (the flare) and a fluid catalytic cracking unit catalyst regenerator (FCCUR) at 301 Saint Paul Park Road, Saint Paul Park, Minnesota (facility or refinery).

The U.S. Environmental Protection Agency is sending this Notice of Violation and Finding of Violation (NOV/FOV or Notice) to notify you that we have found hydrogen sulfide (H_2S) vented to the flare in excess of the limits in your Title V permit, the Minnesota State Implementation Plan (Minnesota SIP) and New Source Performance Standards (NSPS) for Petroleum Refineries (Subpart J). Additionally, we have found that you have emitted carbon monoxide (CO) from the FCCUR in exceedance of NSPS Subpart J. These exceedances constitute violations of the Clean Air Act (the Act or CAA).

Section 113 of the Act provides you with the opportunity to request a conference with us to discuss the violations alleged in the NOV/FOV. This conference will provide you a chance to present information on the identified violations, any efforts you have taken to comply, and the steps you will take to prevent future violations. Please plan for the facility's technical and management personnel to take part in these discussions. You may have an attorney represent and accompany you at this conference.

I. Statutory and Regulatory Background

This NOV/FOV is based on the following statutory and regulatory provisions:

Clean Air Act

1. The Clean Air Act is designed to protect and enhance the quality of the nation's air so as to promote the public health and welfare and the productive capacity of its population. Section 101(b)(1) of the Act, 42 U.S.C. § 7401(b)(1).

Section 111 of the Act, New Source Performance Standards

2. Section 111(b) of the Act, 42 U.S.C. § 7411(b), requires EPA to publish a list of categories of stationary sources and, within a year after the inclusion of a category of stationary sources in the list, to publish proposed regulations establishing Federal standards of performance for new sources within the source category.

3. Section 111(e) of the Act, 42 U.S.C. § 7411(e), prohibits the operation of a new source in violation of any applicable standard of performance.

NSPS for Petroleum Refineries, Subpart J

4. NSPS Subpart J at 40 C.F.R. § 60.101 contains the following definitions:
   a. "Fuel gas" means any gas which is generated at a petroleum refinery and which is combusted. Fuel gas includes natural gas when the natural gas is combined and combusted in any proportion with a gas generated at a refinery. Fuel gas does not include gases generated by catalytic cracking unit catalyst regenerators and fluid coking burners. Fuel gas does not include vapors that are collected and combusted in a thermal oxidizer or flare installed to control emissions from wastewater treatment units or marine tank vessel loading operations.
   b. "Fuel gas combustion device" means any equipment, such as process heaters, boilers and flares used to combust fuel gas, except facilities in which gases are combusted to produce sulfur or sulfuric acid.
   c. "Fluid catalytic cracking unit catalyst regenerator" means one or more regenerators (multiple regenerators) which comprise that portion of the fluid catalytic cracking unit in which coke burn-off and catalyst or contact material regeneration occurs, and includes the regenerator combustion air blower(s).

5. NSPS Subpart J at 40 C.F.R. § 60.104(a)(1) prohibits the owner or operator from burning in any fuel gas combustion device (including the flare) any fuel gas that contains H_2S in excess of 230 mg/dscm (0.10 gr/dscf or 162 ppmv).

6. NSPS Subpart J at 40 C.F.R. § 60.103(a) requires that no owner or operator of any FCCUR subject to the requirement of this subpart shall "discharge or cause the discharge into the atmosphere . . . any gases that contain carbon monoxide (CO) in excess of 500 ppm by volume (dry basis)."

Minnesota State Implementation Plan (Minnesota SIP)

7. The Minnesota SIP at Minnesota Administrative Code (MAC) § 7011.1410, subpart 2, prohibits the owner or operator from burning fuel gas which contains H_2S in excess of 0.10 gr/dscf (230 mg/dscm or 162 ppmv) in the flare.

8. The Minnesota SIP at MAC § 7011.1410, subpart 1(B), prohibits the owner or operator of a FCCUR at a petroleum refinery from discharging into the atmosphere any gases which contain CO in excess of 0.050 percent by volume (500 ppmv).

III. Title V Permit

9. Section 502(a) of the CAA, 42 U.S.C. § 7661a(a), provides that no source may operate without a Title V permit after the effective date of any permit program approved or promulgated under Title V of the CAA. EPA first promulgated regulations governing state operating permit programs on July 21, 1992. *See* 57 Fed. Reg. 32295; 40 C.F.R. Part 70.

10. The Minnesota Pollution Control Agency (MPCA) issued Title V Air Emissions Permit No. 16300003-020 (Title V Permit) to the facility on April 10, 2013.

Factual Allegations

11. By correspondence and reports received July 30, 2012, June 2, July 7, July 29, August 8 and September 9, 2015, SPPRC/NTE provided information to EPA pertaining to the operation of its flare and FCCUR.

12. The Title V Permit, at *CE 005 Flaring*, prohibits combusting fuel gas which contains H_2S in excess of 0.10 gr/dscf, (230 mg/dscm or 162 ppmv) in the flare.

13. The Title V Permit, at *EU 004 FCC Regenerator*, prohibits the owner or operator of any FCCUR from emitting any gases containing a CO concentration equal to or larger than 500 parts per million using a 1-Hour Average by volume (dry basis).

14. SPPRC/NTE owns and operates a flare manufactured by the John Zink Company and installed at the refinery in 1974 that is subject to:

a. NSPS Subpart J
b. MAC § 7011.1410, subpart 2.
c. Title V Permit No. 16300003-020.

15. SPPRC/NTE provided data that indicates the refinery has combusted a vent gas steam with H_2S greater than 162 ppmv for 2,871 hours for the period of April 1, 2015 through July 31, 2015. The average concentration of H_2S during this period was 2,061 ppmv, with a maximum value of 96,339 ppmv.

16. SPPRC/NTE owns and operates an FCCUR subject to:

a. NSPS Subpart J
b. MAC § 7011.1410, subpart 1(B).
c. Title V Permit No. 16300003-020.

17. The semi-annual SPPRC/NTE consent decree reports dated July 30, 2012 and July 29, 2015 indicate that the FCCUR had emissions with concentrations of CO that exceeded 500 ppm stemming from the unit's valves on January 19, March 5, and March 22, 2012, then again on February 17, 2015.

IV. Alleged Violations

18. H_2S in vent gas routed to the flare in excess of 162 ppmv for 2,871 hours for the period of April 1, 2015 through July 31, 2015, as stated in paragraph 15 above is a violation of:

a. NSPS Subpart J at 40 C.F.R. § 60.104(a)(1).
b. The Minnesota SIP at MAC § 7011.1410, Subpart 2.
c. Title V Permit, CE 005 Flaring for Hydrogen Sulfide.

19. CO emissions in excess of 500 ppm from the FCCUR, as stated in paragraph 17 above is a violation of:

a. NSPS Subpart J at 40 C.F.R. § 60.103(a).
b. The Minnesota SIP at MAC § 7011.1410, Subpart 1(B)
c. Title V Permit, EU 004 FCC Regenerator

V. Environmental Impact of Violations

20. The above-described violations have caused or can cause excess emissions of sulfur dioxide as hydrogen sulfide principally oxidizes in the flare to become sulfur dioxide. Sulfur dioxide has an array of adverse respiratory effects including bronchoconstriction and increased asthma symptoms. These effects are particularly important for asthmatics at elevated ventilation rates (e.g., while exercising or playing). Studies also show a connection between short-term exposure and increased visits to emergency departments and hospital admissions for respiratory illnesses, particularly in at-risk populations including children, the elderly, and asthmatics.

21. The above-described violations have caused excess emissions of carbon monoxide. CO can cause harmful health effects by reducing the oxygen-carrying capacity of blood to the body's organs at tissues.

VI. Enforcement Provisions

22. Sections 113(a)(1) and (3) of the Act, 42 U.S.C. § 7413(a)(1) and (3), provide that the Administrator may bring a civil action in accordance with Section 113(b) of the Act, 42 U.S.C. § 7413(b), whenever, on the basis of any information available to the Administrator, the Administrator finds that any person has violated or is in violation of any requirement or prohibition of Title I of the Act, *inter alia*, the NSPS requirements of Section 111 of the Act, 42 U.S.C. § 7411, and any regulation issued thereunder; or the provisions of the Minnesota SIP.

11/8/16
Date

George T. Czerniak
Director
Air and Radiation Division

CERTIFICATE OF MAILING

I, Kathy Jones, certify that I sent a Notice and Finding of Violation, No. EPA-5-16-MN-01, by Certified Mail, Return Receipt Requested, to:

Gregory Mullins, President
Northern Tier Energy
Saint Paul Park Refining Company, LLC
301 Saint Paul Park Road
Saint Paul Park, MN 55071

I also certify that I sent copies of the Notice of Violation and Finding of Violation by first-class mail to:

Katie Koelfgen, Manager
Compliance and Enforcement Section
Industrial Division
Minnesota Pollution Control Agency
520 Lafayette Road
St. Paul, Minnesota 55155

On the 11th day of January 2015

SM for

Kathy Jones
Program Technician
AECAB, PAS

CERTIFIED MAIL RECEIPT NUMBER: 7014 2870 0001 9581 4786