EMISSION SOURCES - MAXIMUM ALLOWABLE EMISSION RATES

21392

This table lists the maximum allowable emission rates and all sources of air contaminants on the applicant's property covered by this permit. The emission rates shown are those derived from information submitted as part of the application for permit and are the maximum rates allowed for these facilities. Any proposed increase in emission rates may require an application for a modification of the facilities covered by this permit.

		AIR CONTAMINANTS DATA		
Emission Point No. (1)	Source Name (2)	Air Contaminant Name (3)	Emission Rates * lb/hr	TPY
23G	Heater	NOx	3.38	14.80
		CO	1.32	5.81
		SO2	.61	.83
		VOC	.05	.19
		PM	.05	.23
25A	Heater	NOx	5.90	25.85
		CO	3.09	13.53
		SO2	1.41	1.93
		VOC	.11	.46
		PM	.12	.54
FU003	Fugitive DHT (4)	VOC	2.88	12.63
FU004	Fugitive HRU (4)	VOC	.35	1.55
F2	Flare (5)	VOC	.01	.04

(1) Emission point identification - either specific equipment designation or emission point number from plot plan.
(2) Specific point source name. For fugitive sources use area name or fugitive source name.
(3) PM - particulate matter
PM10 - particulate matter less than 10 microns
VOC - volatile organic compounds as defined in General Rule 101.1
NOx - total oxides of nitrogen
SO2 - sulfur dioxide
CO - carbon monoxide
(4) Fugitive emissions are an estimate only and should not be considered as a maximum allowable emission rate.
(5) For this permit only.

* Emission rates are based on and the facilities are limited by the following maximum operating schedule:

Hrs/day 24 Days/week 7 Weeks/year 52 or Hrs/year ___

Revised _____

GENERAL PROVISIONS

21392

1. Equivalency of Methods - It shall be the responsibility of the holder of this permit to demonstrate or otherwise justify the equivalency of emission control methods, sampling or other emission testing methods and monitoring methods proposed as alternatives to methods indicated in the provisions of this permit. Alternative methods shall be applied for in writing and shall be reviewed and approved by the Executive Director prior to their use in fulfilling any requirements of this permit.

2. Sampling Requirements - If sampling of stacks or process vents is required, the holder of this permit must contact the Source and Mobile Monitoring Section of the Texas Natural Resource Conservation Commission (TNRCC) prior to sampling to obtain the proper data forms and procedures. The holder of this permit is also responsible for providing sampling facilities and conducting the sampling operations at his own expense.

3. Appeal - This permit may be appealed pursuant to Rule 103.81 of the Procedural Rules of the TNRCC and Section 382.032 of the Texas Clean Air Act. Failure to take such appeal constitutes acceptance by the applicant of all terms of the permit.

4. Construction Progress - Start of construction, construction interruptions exceeding 45 days and completion of construction shall be reported to the appropriate regional office of the TNRCC not later than 10 working days after occurrence of the event.

5. Recordkeeping - Information and data concerning production, operating hours, sampling and monitoring data, if applicable, fuel type and fuel sulfur content, if applicable, shall be maintained in a file at the plant site and made available at the request of personnel from the TNRCC or any local air pollution control program having jurisdiction. The file shall be retained for at least two years following the date that the information or data is obtained.

6. Maintenance of Emission Control - The facilities covered by this permit shall not be operated unless all air pollution emission capture equipment and abatement equipment are maintained in good working order and operating properly during normal facility operations.

7. Piping, Valves, Flanges, Pumps and Compressors in Volatile Organic Compound (VOC) Service - Directed Maintenance

   A. These provisions shall not apply (1) where the VOC has an aggregate partial

pressure or vapor pressure of less than 0.5 psia at 100°F or at maximum process operating temperature if less than 100°F, or (2) to piping and valves two inches nominal size and smaller or (3) where the operating pressure is at least 5 kilopascals (0.725 psi) below ambient pressure.

B. Construction of new and reworked piping, valves and pump and compressor systems shall conform to applicable ANSI, API, ASME or equivalent codes.

C. New and reworked underground process pipelines shall contain no buried valves such that fugitive emission monitoring is rendered impractical.

D. To the extent that good engineering practice will permit, new and reworked valves and piping connections shall be so located to be reasonably accessible for leak-checking during plant operation. Non-accessible valves shall be identified in a list to be made available upon request.

E. New and reworked piping connections shall be welded or flanged. Screwed connections are permissible only on piping smaller than two-inch diameter. No later than the next scheduled monthly monitoring period after initial installation or replacement, all new or reworked connections shall be gas tested or hydraulically tested at no less than normal operating pressure and adjustments made as necessary to obtain leak-free performance. Flanges shall be inspected by visual, audible and/or olfactory means at least weekly by operating personnel walk-through.

Each open-ended valve or line shall be equipped with a cap, blind flange, plug or a second valve.

F. Accessible valves shall be monitored by leak-checking for fugitive emissions at least monthly using an approved gas analyzer. Sealless/leakless valves, including but not limited to bellows and diaphragm valves, and relief valves equipped with a rupture disc upstream or venting to a control device are not required to be monitored. For valves equipped with rupture discs, a pressure gauge shall be installed between the relief valve and rupture disc to monitor disc integrity. All leaking discs shall be replaced at the earliest opportunity, but no later than the next process shutdown.

G. Except as may be provided for in the special provisions of this permit, all pump and compressor seals shall be monitored with an approved gas analyzer at least monthly or be equipped with a shaft-sealing system that prevents or detects emissions of VOC from the seal. Seal systems designed and operated to prevent emissions or seals equipped with an automatic seal

failure detection and alarm system need not be monitored. Seal systems that prevent emissions may include, but are not limited to, dual pump seals with barrier fluid at higher pressure than process pressure or seals degassing to vent control systems kept in good working order.

Submerged pumps or sealless pumps, including but not limited to diaphragm, canned or magnetic driven pumps, may be used to satisfy the requirements of this provision and need not be monitored.

H. Damaged or leaking valves, flanges, compressor seals and pump seals found to be emitting VOC in excess of 10,000 ppmv or found by visual inspection to be leaking (e.g., dripping liquids) shall be tagged and replaced or repaired. Every reasonable effort shall be made to repair a leaking component, as specified in this paragraph, within 15 days after the leak is found. If the repair of a component would require a unit shutdown, the repair may be delayed until the next scheduled shutdown. All leaking components which cannot be repaired until a scheduled shutdown shall be identified for such repair by tagging. The Executive Director, at his discretion, may require early unit shutdown or other appropriate action based on the number and severity of tagged leaks awaiting shutdown.

I. The results of the required fugitive monitoring and maintenance program shall be made available to the Executive Director or his designated representative upon request. Records shall indicate appropriate dates, test methods, instrument readings, repair results and corrective actions taken. Records of flange inspections are not required unless a leak is detected.

J. Compliance with the requirements of this provision does not assure compliance with requirements of TNRCC Rules and Regulations, 30 Texas Administrative Code Section 115 (30 TAC §115) (commonly known as Regulation V), an applicable New Source Performance Standard or an applicable National Emission Standard for Hazardous Air Pollutants and does not constitute approval of alternative standards for these regulations.

8. Carbon Compound Waste Gas Streams

Except as may be provided for in the special provisions of this permit, all waste gas from point sources containing VOC and/or other organic compounds shall be routed to a flare. The flare shall operate with no less than 98 percent efficiency in disposing of the carbon compounds captured by the collection system. The waste gas streams shall include process vents, relief valves, analyzer vents, steam jet exhausts, upset emissions, start-up and shutdown-related emissions or purges, blowdowns or other system emissions of waste gas. Storage tank vents,

cooling tower exhaust and process fugitive emissions are excluded from this requirement. Any other exception to this provision requires prior review and approval by the Executive Director and such exceptions may be subject to strict monitoring requirements.

SPECIAL PROVISIONS

Permit No. 21392

EMISSION STANDARDS

1. The total emissions of air contaminants from any of the sources shall not exceed the values stated on the attached table entitled "Emission Sources - Maximum Allowable Emission Rates."

OPERATIONAL LIMITATIONS, WORK PRACTICES AND PLANT DESIGN

2. The daily throughput of feed to the diesel hydrotreater unit shall not exceed 22,750 barrels per-calendar-day (BPCD) or 22,750 barrels per-stream-day (BPSD). A determination of the BPCD shall be made at the end of each calendar year. Records of the throughput shall be maintained for a period of two years.

3. These facilities shall comply with all requirements of Environmental Protection Agency (EPA) Regulations on Standards of Performance for New Stationary Sources Promulgated for Equipment Leaks of Volatile Organic Compounds (VOC) in Petroleum Refineries in Title 40 Code of Federal Regulations Part 60 (40 CFR 60), Subparts A, and GGG.

4. Flares shall be designed and operated in accordance with 40 CFR 60.18 including specifications of minimum heating value of the waste gas, maximum tip velocity and pilot flame monitoring. If necessary to insure adequate combustion, sufficient fuel gas shall be added to make the gases combustible. An infrared monitor is considered equivalent to a thermocouple for flame monitoring purposes.

INITIAL DETERMINATION OF COMPLIANCE

5. The holder of this permit shall perform stack sampling and other testing as required to establish the actual pattern and quantities of air contaminants being emitted into the atmosphere from the Heater Emission Point Number (EPN) 25A. The holder of this permit is responsible for providing sampling and testing facilities and conducting the sampling and testing operations at his expense.

   A. The appropriate Texas Natural Resource Conservation Commission (TNRCC) regional office in the region where the source is located shall be contacted as soon as testing is scheduled, but not less than 45 days prior to sampling to schedule a pretest meeting.

   The notice shall include:

   (1) Date for pretest meeting.
   (2) Date sampling will occur.
   (3) Name of firm conducting sampling.

(4) Type of sampling equipment to be used.
(5) Method or procedure to be used in sampling.

The purpose of the pretest meeting is to review the necessary sampling and testing procedures, to provide the proper data forms for recording pertinent data and to review the format procedures for submitting the test reports.

A written proposed description of any deviation from sampling procedures specified in permit provisions or TNRCC or EPA sampling procedures shall be made available to the TNRCC prior to the pretest meeting. The Regional Manager or the Manager of the Source and Mobile Monitoring Section shall approve or disapprove of any deviation from specified sampling procedures.

Requests to waive testing for any pollutant specified in B of this provision shall be submitted to the TNRCC New Source Review Program, Office of Air Quality. Test waivers and alternate/equivalent procedure proposals for New Source Performance Standard testing which must have EPA approval shall be submitted to the TNRCC Source and Mobile Monitoring Section in Austin.

B. Air contaminants emitted from the Heater EPN 25A to be tested for include (but are not limited to) nitrogen oxides.

C. Sampling shall occur within 60 days after initial start-up of the facilities and at such other times as may be required by the Executive Director of the TNRCC. Requests for additional time to perform sampling shall be submitted to the regional office. Additional time to comply with the applicable requirements of 40 CFR 60 and 40 CFR 61 requires EPA approval, and requests shall be submitted to the TNRCC Source and Mobile Monitoring Section in Austin.

D. The plant shall operate at maximum production rates during stack emission testing. Primary operating parameters that enable determination of production rate shall be monitored and recorded during the stack test. These parameters are to be determined at the pretest meeting. If the plant is unable to operate at maximum rates during testing, then future production rates may be limited to the rates established during testing. Additional stack testing may be required when higher production rates are achieved.

E. Three copies of the final sampling report shall be forwarded to the TNRCC within 30 days after sampling is completed. Sampling reports shall comply with the attached provisions of Chapter 14 of the TNRCC Sampling Procedures Manual. The reports shall be distributed as follows:

One copy to the TNRCC Odessa Regional Office.

One copy to the TNRCC Austin Source and Mobile Monitoring Section Office.

Revised _____

Mr. Gerald L. Shoults
Engineering Advisor
FINA OIL AND CHEMICAL COMPANY
P.O. Box 1311
Big Spring, Texas 79721

Re:
Permit Amendment

Permit No. 21392

Diesel Hydrotreater/Hydrogen
Big
Spring, Howard County

Account ID No. HT-0011-Q

Dear Mr. Shoults:

This is in response to your letter dated October 6, 1993 permit application, Form PI-1, concerning the

proposed amendment to Permit No. 21392. We understand that you propose to increase the raw diesel feed rate to the diesel hydrotreater from 18,500 barrels-per-stream-day (BPSD) or 17,500 barrels-per-calendar-day (BPCD) to 22,750 BPSD and 22,750 BPCD.

Pursuant to Texas Natural Resource Conservation Commission Rule 116.116(a), 30 Texas Administrative Code Chapter 116 (commonly known as Regulation VI), Permit No. 21392 is hereby amended. This information will be incorporated into the existing permit file. Enclosed are revised special provisions pages and a maximum allowable emission rates table. Please return the previously-issued provisions pages and table to this office.

Your cooperation in this matter is appreciated. If you have further questions, please contact Mr. Alfred Reyes of our New Source Review Program, Office of Air Quality.

Sincerely,

Anthony C. Grigsby
Executive Director

Enclosures

cc: Mr. Charley Sims, Air Program Manager, Odessa

New Source Review, Office of Air Quality - 421

Mr. Gerald L. Shoults
Engineering Advisor
FINA OIL AND CHEMICAL COMPANY
P.O. Box 1311
Big Spring, Texas 79721