OhioEPA
State of Ohio Environmental Protection Agency

STREET ADDRESS:
1800 WaterMark Drive
Columbus, OH 43215-1099

TELE: (614) 644-3020 FAX: (614) 644-2329

MAILING ADDRESS:
P.O. Box 1049
Columbus, OH 43216-1049

Re: Permit to Install
Lucas County
Application No: 04-1010
NESHAP

CERTIFIED MAIL

July 31, 1996

BP OIL CO., TOLEDO REFINERY
RONALD H. YOUNGS
P.O. BOX 696
TOLEDO, OH 43697

Enclosed please find an Ohio EPA Permit to Install which will allow you to install the described source(s) in a manner indicated in the permit. Because this permit contains several conditions and restrictions I urge you to read it carefully.

The Ohio EPA is urging companies to investigate pollution prevention and energy conservation. Not only will this reduce pollution and energy consumption, but it can also save you money. If you would like to learn ways you can save money while protecting the environment, please contact our Office of Pollution Prevention at (614) 644-3469.

You are hereby notified that this action by the Director is final and may be appealed to the Ohio Environmental Board of Review pursuant to Chapter 3745.04 of the Ohio Revised Code. The appeal must be in writing and set forth the action complained of and the grounds upon which the appeal is based. It must be filed with the Environmental Board of Review within thirty (30) days after notice of the Director's action. A copy of the appeal must be served on the Director of the Ohio Environmental Protection Agency within three (3) days of filing with the Board. An appeal may be filed with the Environmental Board of Review at the following address:

Environmental Board of Review
236 East Town Street, Room 300
Columbus, Ohio 43215

Very truly yours,

Thomas G. Rigo, Manager
Field Operations & Permit Section
Division of Air Pollution Control

cc: US EPA
TOLEDO ENVIRONMENTAL SERVICES DIVISION
MICHAEL J. WHITE, CITY OF OREGON

George V. Voinovich, Governor
Nancy P. Hollister, Lt. Governor
Donald R. Schregardus, Director

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OhioEPA

State of Ohio Environmental Protection Agency

Permit to Install
Terms and Conditions

Application No. 04-1010
APS Premise No. 0448020007
Permit Fee: $1800.00

Name of Facility: BP OIL CO., TOLEDO REFINERY

Person to Contact: RONALD H. YOUNGS

Address: P.O. BOX 696
TOLEDO, OH 43697

Location of proposed source(s): 4001 CEDAR POINT ROAD
OREGON, OHIO

Description of proposed source(s):
COKER NO. 1 MODIFICATION AND SCALTECH UNIT INSTALLATION.

Date of Issuance: July 31, 1996

Effective Date: July 31, 1996

The above named entity is hereby granted a permit to install for the above described source(s) pursuant to Chapter 3745-31 of the Ohio Administrative Code. Issuance of this permit does not constitute expressed or implied approval or agreement that, if constructed or modified in accordance with the plans included in the application, the above described source(s) of environmental pollutants will operate in compliance with applicable State and Federal laws and regulations, and does not constitute expressed or implied assurance that if constructed or modified in accordance with those plans and specifications, the above described source(s) of pollutants will be granted the necessary permits to operate (air) or NPDES permits as applicable.

This permit is granted subject to the conditions attached hereto.

Ohio Environmental Protection Agency

Donald R Schregardus

Director

TERMINATION OF PERMIT TO INSTALL

Substantial construction for installation must take place within 18 months of the effective date of this permit. This deadline may be extended by up to 12 months if application is made to the Director within a reasonable time before the termination date and the party shows good cause for any such extension.

NOTICE OF INSPECTION

The Director of the Ohio Environmental Protection Agency, or his authorized representatives, may enter upon the premises of the above-named applicant during construction and operation at any reasonable time for the purpose of making inspections, conducting tests, or to examine records or reports pertaining to the construction, modification or installation of the source(s) of environmental pollutants identified within this permit.

CONSTRUCTION OF NEW SOURCES

The proposed source(s) shall be constructed in strict accordance with the plans and application submitted for this permit to the Director of the Ohio Environmental Protection Agency. There may be no deviation from the approved plans without the express, written approval of the Agency. Any deviations from the approved plans or the above conditions may lead to such sanctions and penalties as provided under Ohio law. Approval of these plans does not constitute an assurance that the proposed facilities will operate in compliance with all Ohio laws and regulations. Additional facilities shall be installed upon orders of the Ohio Environmental Protection Agency if the proposed sources are inadequate or cannot meet applicable standards.

If the construction of the proposed source(s) has already begun or has been completed prior to the date the Director of the Environmental Protection Agency approves the permit application and plans, the approval does not constitute expressed or implied assurance that the proposed facility has been constructed in accordance with the approved plans. The action of beginning and/or completing construction prior to obtaining the Director's approval constitutes a violation of Ohio Administrative Code (OAC) Rule 3745-31-02. Furthermore, issuance of the Permit to Install does not constitute an assurance that the proposed source will operate in compliance with all Ohio laws and regulations. Approval of the plans in any case is not to be construed as an approval of the facility as constructed and/or completed. Moreover, issuance of the Permit to Install is not to be construed as a waiver of any rights that the Ohio Environmental Protection Agency (or other persons)

may have against the applicant for starting construction prior to the effective date of the permit. Additional facilities shall be installed upon orders of the Ohio Environmental Protection Agency if the proposed facilities prove to be inadequate or cannot meet applicable standards.

PERMIT TO INSTALL FEE

In accordance with Ohio Revised Code 3745.11, the specified Permit to Install fee must be remitted within 30 days of the effective date of this permit to install.

PUBLIC DISCLOSURE

The facility is hereby notified that this permit, and all agency records concerning the operation of this permitted source, are subject to public disclosure in accordance with OAC Rule 3745-49-03.

APPLICABILITY

This Permit to Install is applicable only to the contaminant sources identified. Separate application must be made to the Director for the installation or modification of any other contaminant sources.

BEST AVAILABLE TECHNOLOGY

As specified in OAC Rule 3745-31-05, all new sources must employ Best Available Technology (BAT). Compliance with the terms and conditions of this permit will fulfill this requirement.

PERMIT TO OPERATE APPLICATION

A Permit to Operate application must be submitted to the appropriate field office for each air contaminant source in this Permit to Install. In accordance with OAC Rule 3745-35-02, the application shall be filed no later than thirty days after commencement of operation.

SOURCE OPERATION AFTER COMPLETION OF CONSTRUCTION

This facility is permitted to operate each source described by this permit to install for a period of up to one year from the date the source commenced operation. This permission to operate is granted only if the facility complies with all requirements contained in this permit and all applicable air pollution laws, regulations, and policies.

AIR EMISSION SUMMARY

The air contaminant sources listed below comprise the Permit to Install for BP OIL CO., TOLEDO REFINERY located in Lucas County. The sources listed below shall not exceed the emission limits/control requirements contained in the table. This condition in no way limits the applicability of any other state or federal regulations. Additionally, this condition does not limit the applicability of additional special terms and conditions of this permit.

Ohio EPA Source Number	Source Identification Description	BAT Determination	Applicable Federal & OAC Rules	Permit Allowable Mass Emissions and/or Control/Usage Requirements
P016	Coker No. 1/ delayed petroleum coker	Blowdown drum emissions vented to a flare	3745-21-09 3745-31-05 NSPS GGG 40 CFR 63 Subpart CC	15.2 lbs VOC/cycle and 4.8 tons VOC/yr from flare stack 26 tons fugitive VOC/yr <5 minutes of smoking in any 120 minute period for the flare
P802	Scaltech unit	Venting to emissions to a carbon adsorber	3745-21-09 3745-31-05 NSPS GGG 40 CFR 63 Subpart CC	0.23 lb VOC/hr and 1.0 ton/yr VOC stack emissions 3.3 tons/yr fugitive VOC

SUMMARY
TOTAL PERMIT TO INSTALL ALLOWABLE EMISSIONS

Pollutant	Tons/Year
Organic compounds	34.3 (5.5 ton/year increase)

NSPS REQUIREMENTS

The following sources are subject to the applicable provisions of the New Source Performance Standards (NSPS) as promulgated by the United States Environmental Protection Agency, 40 CFR Part 60.

Source No.	Source Description	NSPS Regulation (Subpart)
P016	Coker No. 2	GGG
P802	Scaltech unit	GGG

The application and enforcement of these standards are delegated to the Ohio EPA. The requirements of 40 CFR Part 60 are also federally enforceable.

Pursuant to the NSPS, the source owner/operator is hereby advised of the requirement to report the following at the appropriate times:

a. construction date (no later than 30 days after such date);
b. anticipated start-up date (not more than 60 days or less than 30 days prior to such date);
c. actual start-up date (within 15 days after such date); and
d. date of performance testing (If required, at least 30 days prior to testing).

Reports are to be sent to:

Ohio Environmental Protection Agency
DAPC - Permit Management Unit
P.O. Box 163669
Columbus, OH 43216-3669

and Toledo Pollution Control Division
26 Main Street
Toledo, Ohio 43605

PERFORMANCE TEST REQUIREMENTS

The permittee shall conduct, or have conducted, performance testing on the air contaminant source(s) in accordance with procedures approved by the Agency. Two copies of the written report describing the test procedures followed and the results of such tests shall be submitted and signed by the person responsible for the test. The Director, or an Ohio EPA representative, shall be allowed to witness the test, examine testing equipment, and require the acquisition or submission of data and information necessary to assure that the source operation and testing procedures provide a valid characterization of the emissions from the source and/or the performance of the control equipment.

A. A completed Intent to Test form shall be submitted to the appropriate Ohio EPA District Office or Local Air Pollution Control Agency where the original permit application was filed. This notice shall be made 30 days in advance and shall specify the source operating parameters, the proposed test procedures, and the time, date, place and person(s) conducting such tests.

B. Two copies of the test results shall be submitted within 30 days after the completion of the performance test.

C. Tests shall be performed for the following source(s) and pollutants(s):

Source	Pollutants
P802	VOC

RECORD(S) RETENTION AND AVAILABILITY

All records required by this Permit to Install shall be retained on file for a period of not less than three years unless otherwise indicated by Ohio Environmental Protection Agency. All records shall be made available to the Director, or any representative of the Director, for review during normal business hours.

REPORTING REQUIREMENTS

Unless otherwise specified, reports required by the Permit to Install need only be submitted to Toledo Pollution Control Division, 26 Main Street, Toledo, Ohio 43605.

WASTE DISPOSAL

The owner/operator shall comply with any applicable state and federal requirements governing the storage, treatment, transport and disposal of any waste material generated by the operation of the sources.

MAINTENANCE OF EQUIPMENT

This source and its associated air pollution control system(s) shall be maintained regularly in accordance with good engineering practices and the recommendations of the respective manufacturers in order to minimize air contaminant emissions.

MALFUNCTION/ABATEMENT

In accordance with OAC RULE 3745-15-06, any malfunction of the source(s) or associated air pollution control system(s) shall be reported immediately to the Toledo Pollution Control Division, 26 Main Street, Toledo, Ohio 43605.

Except as provided by OAC Rule 3745-15-06(A)(3), scheduled maintenance of air pollution control equipment that requires the shutdown or bypassing of air pollution control system(s) must be accompanied by the shutdown of the associated air pollution sources.

AIR POLLUTION NUISANCES PROHIBITED

The air contaminant source(s) identified in this permit may not cause a public nuisance in violation of OAC Rule 3745-15-07.

NINETY DAY OPERATING PERIOD

The facility will be permitted to operate during a 90-day period in accordance with OAC Rule 3745-35-02(C)(4)(b). The purpose of this period of operation is to fulfill the performance tests conditions used in the determination of compliance with the provisions of this Permit to Install or other applicable Ohio EPA rules.

ADDITIONAL SPECIAL TERMS AND CONDITIONS

1. These Special Terms & Conditions do not release the owner or operator from meeting all applicable requirements of NSPS Subpart GGG and the Petroleum Refinery NESHAP (40 CFR Part 63 Subpart CC).

PUMPS IN LIGHT LIQUID SERVICE

2. In accordance with 40 CFR 60.482-2, each pump in light liquid service shall be monitored monthly to detect leaks by the methods specified in 40 CFR 60.485(b), except as provided in 40 CFR 60.482-1(c) and 40 CFR 60.482-2(d), (e) and (f).

3. Each pump in light liquid service shall be checked by visual inspection each calendar week for indications of liquids dripping from the pump seal.

4. If an instrument reading of 10,000 ppm or greater is measured, a leak is detected.

5. If there are indications of liquids dripping from the seal, a leak is detected.

6. When a leak is detected, it shall be repaired as soon as practicable, but not later than 15 calendar days after the leak is detected except as provided in 40 CFR 60.482-9.

7. A first attempt at repair shall be made no later than 5 calendar days after each leak is detected.

STANDARDS: PRESSURE RELIEF DEVICES IN GAS/VAPOR SERVICE

8. All pressure relief devices shall be equipped with a closed-vent system meeting the requirements of 40 CFR 60.482-10.

STANDARDS: SAMPLING CONNECTION SYSTEMS

9. Each sampling connection system shall be equipped with a closed purge system or closed vent system, except as provided by 60.482-1(c).

10. Each closed purge system or closed vent system shall:

    A. return the purged process fluid directly to the process line with zero VOC emissions to the atmosphere; or

    B. collect and recycle the purged process fluid with zero VOC emissions to the atmosphere; or

    C. be designed and operated to capture and transport all the purged process fluid to a control device that complies with the requirements of 60.482-10.

STANDARDS: OPEN-ENDED VALVES OR LINES

11. Each open-ended valve or line shall be equipped with a cap, blind flange, plug, or a second valve, except as provided in 40 CFR 60.482-1(c).

12. The cap, blind flange, plug or second valve shall be operated in a manner such that the valve on the process fluid end is closed before the second valve is closed.

VALVES IN GAS/VAPOR SERVICE IN LIGHT LIQUID SERVICE

13. In accordance with 40 CFR 60.483-1, the owner or operator shall maintain a percentage of valves leaking of equal to or less than 2.0 percent.

14. All valves in gas/vapor and light liquid service shall be monitored within 180 days of startup and monthly thereafter to determine leaks by the methods specified in 40 CFR 60.485(b). Any valve for which a leak is not detected for 2 successive months may be monitored the first month of every quarter, beginning with the next quarter, until a leak is detected. If a leak is detected, the valve shall be monitored monthly until a leak is not detected for 2 successive months.

15. If an instrument reading of 10,000 ppm or greater is measured, a leak is detected.

16. If a leak is detected, it shall be repaired as soon as practicable, but not later than 15 calendar days after the leak is detected, except as provided in 40 CFR 60.482-9:

    A. a first attempt shall be made no later than 5 calendar days after each leak is detected.

17. First attempts at repair include, but are not limited to, the following best practices where practicable:

    A. tightening of bonnet bolts;

    B. replacement of bonnet bolts;

    C. tightening of packing gland nuts; and

    D. injection of lubricant into lubricated packing.

18. The leak percentage shall be determined by dividing the number of valves in gas/vapor and light liquid service.

STANDARDS: PUMPS AND VALVES IN HEAVY LIQUID SERVICE, PRESSURE RELIEF DEVICES IN LIGHT LIQUID OR HEAVY LIQUID SERVICE, AND FLANGES AND OTHER CONNECTORS

19. In accordance with 40 CFR 60.482-8, pumps and valves in heavy liquid service, pressure relief devices in light liquid or heavy liquid service, and flanges and other connectors shall be monitored within 5 days by the method specified in paragraph 60.485(b) if evidence of a potential leak is found by visual, audible, olfactory, or any other detection method.

20. If an instrument reading of 10,000 ppm or greater is measured, a leak is detected.

21. When a leak is detected, it shall be repaired a soon as practicable, but not later than 15 calendar days after it is detected, except as provided in 40 CFR 60.482-9.

22. The first attempt at repair shall be made no later than 5 calendar days after each leak is detected.

23. First attempts at repair include, but are not limited to, the best practices described under 40 CFR 60.482-7(e).

CONTROL EQUIPMENT MONITORING

24. A pilot flame shall be maintained at all times in the flare's pilot light burner.

25. The owner or operator shall monitor the concentration level of the organic compounds in the exhaust vent stream from the carbon adsorption system, and the existing carbon shall be replaced with fresh carbon immediately when carbon breakthrough is indicated. The exhaust shall be monitored at intervals no greater than 20 percent of the design carbon replacement interval. As an alternative to conducting this monitoring, the owner or operator may replace the carbon in the carbon adsorption system with fresh carbon at a regular pre-determined interval that is less than the carbon replacement interval that is determined by the maximum design

flow rate and organic concentration in the gas stream vented to the carbon adsorption system.

RECORDKEEPING REQUIREMENTS

26. When each leak is detected as specified in 40 CFR 60.482-2, -3, -7, -8, and 40 CFR 60.483-2, the following requirements apply:

    A. a weatherproof and readily visible identification, marked with the equipment identification number, shall be attached to the leaking equipment;

    B. the identification on a valve may be removed after it has been monitored for 2 successive months as specified in 40 CFR 60.482-7(c) and no leak has been detected during those 2 months; and

    C. the identification on equipment, except on a valve, may be removed after it has been repaired.

27. When each leak is detected as specified in 40 CFR 60.482-2, 60.482-3, 60.482-7, 60.482-8, and 60.483-2, the following information shall be recorded in a log and be kept in a readily accessible location:

    A. the instrument and operator identification numbers and the equipment identification number;

    B. the date the leak was detected and the dates of each attempt to repair the leak;

    C. repair methods applied in each attempt to repair the leak;

    D. "above 10,000" if the maximum instrument reading measured by the methods specified in 40 CFR 60.485(a) after each repair attempt is equal to or greater than 10,000 ppm;

    E. "repair delayed" and the reason for the delay if a leak is not repaired within 15 calendar days after discovery of the leak;

    F. the signature of the owner or operator (or designate) whose decision it was that repair could not be effected without a process shutdown;

    G. the expected date of successful repair of the leak if a leak is not repaired within 15 days; and

    H. dates of process unit shutdown that occur while the equipment is un-repaired.

28. The following information pertaining to the design requirements for closed vent systems and control devices described in 40 CFR 60.482-10 shall be recorded and kept in a readily accessible location:

    A. detailed schematics, design specifications, and piping and instrumentation diagrams;

    B. the dates and descriptions of any changes in the design specifications;

    C. a description of the parameter or parameters monitored, as required in 40 CFR 60.482-10(e), to ensure that control devices are operated and maintained in conformance with their design and an explanation of why that parameter (or parameters) was selected for the monitoring; and

    D. periods when the closed-vent system and control devices required in 40 CFR 60.482-2, 60.482-3, 60.482-4 and 60.482-5 are not operated as designed including periods when a flare pilot light does not have a flame.

29. The following information pertaining to all equipment subject to the requirements in 40 CFR 60.482-1 to 60.482-10 shall be recorded in a log that is kept in a readily accessible location:

    A. a list of identification numbers for equipment subject to the requirements of 40 CFR 60.480;

    B. a list of identification numbers for equipment that are designated for no detectable emissions under the provisions of 40 CFR 60.482-2(e), 60.482-3(i) and 60.482-7(f);

    C. the designation of equipment as subject to the requirements of 40 CFR 60.482-2(e), 60.482-3(i) or 60.482-7(f) shall be signed by the owner or operator;

    D. a list of equipment identification numbers for pressure relief devices required to comply with 40 CFR 60.482-4;

    E. the dates of each compliance test as required in 60.482-2(e), 60.482-3(i), 60.482-4 and 60.482-7(f);

    F. the background level measured during each compliance test;

    G. the maximum instrument reading measured at the equipment during each compliance test; and

    H. a list of identification numbers for equipment in vacuum service.

30. The following information pertaining to all valves subject to the requirements of 40 CFR 60.482-7(g) and (h) shall be recorded in a log that is kept in a readily accessible location:

    A. a list of i.d. numbers for valves that are designated as unsafe-to-monitor, an explanation for each valve stating why each valve is unsafe-to-monitor, and the plan for monitoring each valve; and

    B. a list of i.d. numbers for valves that are designated as difficult to monitor, and the schedule for monitoring each valve.

31. The following information shall be recorded for valves complying with 40 CFR 60.483-2:

    A. a schedule for monitoring; and

    B. The percent of valves found leaking during each monitoring period.

32. The following information shall be recorded in a log that is kept in a readily accessible location:

    A. design criterion required in 40 CFR 60.482-3(e)(2) and explanation of the design criterion; and

    B. any changes to this criterion and the reasons for the changes.

33. The following information shall be recorded in a log that is kept in a readily accessible location for use in determining exemptions as provided in 40 CFR 60.480(d):

    A. an analysis demonstrating the design capacity of the affected facility;

    B. a statement listing the feed or raw materials and products from the affected facilities and an analysis demonstrating whether these chemicals are heavy liquids or beverage alcohol, and;

    C. an analysis demonstrating that the equipment is not in VOC service.

34. Information and data used to demonstrate that a piece of equipment is not in VOC service shall be recorded in a log that is kept in a readily accessible location.

35. The provisions of 40 CFR 60.7(b) and (d) do not apply to affected facilities subject to 40 CFR 60.480.

36. The owner or operator shall maintain the following records for control devices in this Permit:

    A. the dates and times when the control device are monitored; and,

    B. when carbon breakthrough is measured, and shall record the date and time that the existing carbon in the control device is replaced with fresh carbon.

37. The owner or operator shall maintain records for all permanently shut down sources, included in the net contemporaneous emission increase/decrease table on the following page. Such records shall be maintained until such a time as the sources are physically removed from the facility and shall include the following information for each source; type of equipment (i.e. refinery fuel gas fired boiler), location, description, and shutdown date.

REPORTING REQUIREMENTS

38. BP Oil Company shall submit written semiannual reports in accordance with 40 CFR 60.487 (leak monitoring) to the Toledo Division of Environmental Services(TDES) beginning six months after the initial start-up date. Monitoring reports for the months of January through June shall be submitted by July 30 of each year. Monitoring reports for the months of July through December shall be submitted by January 30 of each year.

39. The initial semi-annual report to TDES shall include the following information:

    A. process unit identification;

    B. number of valves subject to the requirements of 40 CFR 60.482-7, excluding those valves designated for no detectable emissions under the provisions of 40 CFR 60.482-7(f);

    C. number of pumps subject to the requirements of 40 CFR 60.482-2, excluding those designated for no detectable emissions under the provisions of 40 CFR 60.482-2(e) and those pumps complying with 40 CFR 60.482-2(f); and

    D. number of compressors subject to the requirements of 40 CFR 60.482-3, excluding those compressors designated for no detectable emissions under the provisions of 40 CFR 60.482-3(i) and those compressors complying with 40 CFR 60.482-3(h).

40. All semi-annual reports to TDES shall include the following information, summarized from the information in 40 CFR 60.486:

A. process unit identification;

B. for each month during the semiannual reporting period:

i. number of valves for which leaks were detected as described in 40 CFR 60.482(7)(b) or 60.483-2;

ii. number of valves for which leaks were not repaired as required in 40 CFR 60.482-7(d)(1);

iii. number of pumps for which leaks were detected as described in 40 CFR 60.482-2(b) and (d)(6)(i);

iv. number of pumps for which leaks were not repaired as required in 40 CFR 60.482-2(c)(1) and (d)(6)(ii);

v. number of compressors for which leaks were detected as described in 40 CFR 60.482-3(f);

vi. number of compressors for which leaks were not repaired as required in 40 CFR 60.482-3(g)(1); and

vii. the facts that explain each delay of repair and where appropriate, why a process unit shutdown was technically infeasible.

C. Dates of process unit shutdowns which occurred within the semi-annual reporting period.

D. Revisions to items reported according 40 CFR 60.487(b) if changes have occurred since the initial report or subsequent revisions to the initial report.

41. If the owner or operator elects to comply with the provisions of 40 CFR 60.483-1 and 60.483-2, TDES shall be notified of the alternative standard selected 90 days before implementing either of the provisions.

42. The owner or operator shall report the results of all performance tests in accordance with 40 CFR 60.8 of the General Provisions. The provisions 40 CFR 60.8(d) do not apply to affected facilities subject to the provisions of NSPS Subpart VV except that the owner or operator must notify TDES of the schedule for the initial performance test at least 30 days before the initial performance tests.

43. The owner or operator shall report each occurrence when the carbon in a carbon adsorber system is not replaced at the predetermined interval specified in Special Term and Condition (ST&C) 25. These reports shall be submitted on a semi-annual basis by July 30 and January 30 of each year and shall contain information about the previous 6 months.

44. The owner or operator shall maintain records for all permanently shut down emissions units, included in the net

contemporaneous emission increase/decrease table. Such records shall be maintained until such a time as the emissions units are physically removed from the facility and shall include the following information for each emissions unit; type of equipment (i.e. refinery fuel gas fired boiler), location, description, and shutdown date.

Table 1
BP OIL COMPANY, TOLEDO REFINERY
NET CONTEMPORANEOUS EMISSION INCREASE/DECREASE SUMMARY

EMISSIONS UNIT	PM	SO2	VOC	NOX	CO
PTI# 04-678 (6/30/91)			14.24		
PTI# 04-678 Never Installed			-14.24		
PTI# 04-702 (8/30/91)			1.46		
WW Channel (11/1/91)			-85.76		
PTI# 04-708 (3/27/92)	1.10	14.98	77.27	48.14	52.94
PTI# 04-759 (05/12/92)			0.10		
PTI# 04-770 (9/26/92)			0.00		
PTI# 04-791 (8/10/92)			1.46		
PTI# 04-792 (8/12/92)			0.00		
PTI# 04-794 (8/12/92)			0.00		
PTI# 04-804 (5/26/93)	4.00	2.20	0.55	6.70	7.80
PTI# 04-811 (8/18/93)			0.01		
PTI# 04-816 (10/27/93)			3.83		

BP OIL COMPANY, TOLEDO REFINERY
NET CONTEMPORANEOUS EMISSION INCREASE/DECREASE SUMMARY

EMISSIONS UNIT	PM	SO2	VOC	NOX	CO
PTI# 04-875 (1/26/94)			2.70		
PTI# 04-896 (5/18/94)			1.80		
PTI# 04-924 5-26-95			0.01		
PTI # 04-945 5-12-95		7.50	3.40		
PTI# 04-959 10-23-95	0.6	5.6	0.4	-14.1	10.4
PTI# 04-1010 (Not Issued)			5.5		
TOTAL	5.7	30.3	3.5	40.7	71.1