

BEFORE THE
OHIO ENVIRONMENTAL PROTECTION AGENCY

In the Matter of:

BP Products North America
Toledo Refinery
4001 Cedar Point Rd
Oregon, Ohio 43616

Director's Final Findings
and Orders

OHIO E.P.A.
NO. 19 2003
JOURNAL

PREAMBLE

It is hereby agreed that:

I. JURISDICTION

These Director's Final Findings and Orders ("Orders") are issued to BP Products North America, Toledo Refinery ("Respondent"), pursuant to the authority vested in the Director of the Ohio Environmental Protection Agency ("Ohio EPA") under Ohio Revised Code ("ORC") §§3704.03 and 3745.01.

II. PARTIES BOUND

These Orders shall apply to and be binding upon Respondent and successors in interest liable under Ohio law. No change in ownership relating to the Facility shall in any way alter Respondent's obligations under these Orders.

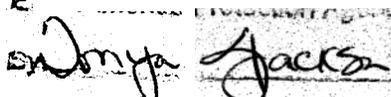
III. DEFINITIONS

Unless otherwise stated, all terms used in these Orders shall have the same meanings as used in R.C. Chapter 3704 and the regulations promulgated thereunder.

IV. FINDINGS OF FACT

All of the findings necessary for the issuance of these Orders pursuant to ORC §§ 3704.03 and 3745.01 have been made and are outlined below. Nothing in the findings shall be considered to be an admission by Respondent of any matter of law or fact. The Director of Ohio EPA has determined the following findings:

1. The City of Toledo, Department of Public Utilities, Division of Environmental Services ("TDES") acts as an agent of Ohio EPA for the Division of Air Pollution Control in Lucas County.
2. Respondent operates a petroleum refinery ("Facility") in Oregon, Lucas County,

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Ohio. Respondent operates the following emissions units at the Facility:

- a. an aviation gasoline loading rack ("J001");
- b. a fluidized catalytic cracking unit ("P007");
- c. Coker 3 ("P036"); and
- d. Alkylation Unit No. 1 ("P021").

Emissions Unit J001

3. Respondent operates J001 under OAC rule 3745-21-09(Q) that prohibits the loading of more than 20,000 gallons of aviation gasoline during any one day without using a vapor collection and control system.
4. In correspondence dated August 16, 2002, Respondent notified TDES that a records review indicated the daily allowed maximum throughput for J001 had been exceeded on January 11, 2002 (20,760 gallons) and March 9, 2002 (25,000 gallons).
5. In an NOV dated August 26, 2002, TDES notified Respondent that the excess daily loading volumes for J001, indicated in Finding 4 above, were a violation of OAC rule 3745-21-09(Q)(1).

Emissions Units P007 and P036

6. On December 5, 2002, the fluidized catalytic cracking unit ("FCCU") malfunctioned and required the unit to be shut down. Gas oil was vented to the CO boiler prior to emissions being vented to the bypass stack. This resulted in the formation of excessive soot in the CO boiler. The refinery operated the CO boiler soot blowers to remove the soot from the boiler tubes. The soot was released to the atmosphere with subsequent deposition of soot on neighbors' homes, cars and other property. Waste gas emissions from P007 are normally routed to a fuel gas system where the fuel value of the waste gases is recovered, sulfur is removed and unreacted waste gases are burned in a flare. The flare burning exhaust waste gases from P007 was overloaded. Respondent performed washing of playground equipment and pets.
7. While the FCCU was shut down, the refinery flare gas recovery system, used to recover fuel for use in the refinery fuel gas system and remove sulfur from waste gas streams, could not operate.

8. Respondent operates Coker 3 ("P036") under the terms and conditions of PTI 04-1046 which requires the off-gases from this unit to be vented to the refinery flare gas recovery system and into the refinery fuel gas system.
9. From December 5, 2002 to January 3, 2003, the refinery flare gas recovery system was not operating and sulfur-containing off-gases from P036, normally routed through the refinery flare gas recovery system, were routed directly to a flare. This by-passed the unit that removed sulfur from the off-gases and resulted in approximately 6.2 tons of sulfur dioxide emitted from P036.
10. In an NOV dated December 17, 2002, TDES informed Respondent that soot emissions from the CO boiler stack on December 5, 2002 was a violation of OAC rule 3745-15-07(A), and rerouting of the off-gases from P036 to an uncontrolled flare was a violation of OAC rule 3745-31-05(A)(3).

Emissions Unit P021

- 11 Respondent operates emissions unit P021, an alkylation unit ("Alky 1") which includes a compressor ("Alky 1 compressor") that is subject to the leak detection and repair requirements of OAC rule 3745-21-09(T).

Prior to March 2003, the Alky 1 compressor had periodic seal problems resulting in leaks in excess of 10,000 ppm of volatile organic compounds ("VOC"). In an effort to eliminate this problem, Respondent undertook, in conjunction with the compressor manufacturer, to redesign the seals to provide better performance.

In March 2003, during a regularly scheduled turnaround of Alky 1, newly designed seals were installed on the Alky 1 compressor. However, upon retest following start-up, monitoring revealed that the newly designed seals did not reduce the leak to below 10,000 ppm of VOC.

Following this monitoring, Respondent placed the Alky 1 compressor on delay of repair, in accordance with OAC rule 3745-21-09(T)(2), since repair of the new seals was not possible without a shutdown of the Alky 1 unit it serves. Respondent then initiated a new engineering effort to develop a mechanism to reduce leaks to less than 10,000 ppm of VOC from the Alky 1 compressor.

15. In October 2003, before the effort to develop a mechanism to reduce leaks from the Alky 1 compressor could be completed, Alky 1 suffered an unscheduled shutdown as a result of insufficient availability of feed. Since this shut down lasted more than 24 hours, Respondent contacted TDES to determine whether the Alky 1 compressor (and therefore Alky 1) could be restarted and operated prior to the completion of the engineering design work and installation of new seals.

16. Respondent has estimated operation of the Alky 1 compressor, with its existing seals, from November 2003 to October 2004 would result in 1.6 tons of VOC emissions.
17. The Director has given consideration to, and based his determination on, evidence relating to the technical feasibility and economic reasonableness of complying with the following Orders and their benefits to the people of the State to be derived from such compliance.

V. ORDERS

The Director hereby issues the following Orders:

1. Within thirty days of the date these Orders are entered into the Director's journal, Respondent shall submit a written report meeting the requirements of OAC rule 3745-15-06(B)(3) detailing the steps Respondent has taken to prevent the recurrence of the nuisance situation described in Finding 10 above.
2. If, after the date these Orders are entered into the Director's journal, Respondent exceeds the maximum daily throughput for J001, the Director may consider requiring Respondent to submit a permit application to install a vapor collection system on J001 and operate it in accordance with the requirements of OAC rule 3745-21-09(Q).
3. Respondent shall install a newly designed seal system on the Alky 1 compressor by no later than October 31, 2004. Until the newly designed seal system is installed, Respondent is authorized to operate the Alky 1 compressor with its current seal system, which may result in a leak in excess of 10,000 ppm of VOC.
4. During the period prior to installation of the new seal system on the Alky 1 compressor, Respondent shall conduct monthly leak detection monitoring on the Alky 1 Compressor.
5. Respondent shall report the monthly monitoring results on the Alky 1 compressor to TDES within fifteen days after the end of the month in which the monitoring was performed.
6. The Director may revoke the authorization to operate the Alky 1 compressor with its current seal system if the Director concludes emissions from the seal system are causing imminent and substantial danger to health and the environment.
7. Within twenty-one (21) days after the effective date of these Orders, Respondent shall pay Ohio EPA the amount one hundred and six thousand dollars (\$106,000) in settlement of Ohio EPA's claims for civil penalties, which may be assessed pursuant to ORC Chapter 3704. Payment shall be made by an official check made

payable to "Treasurer, State of Ohio". The official check shall be submitted together with a letter identifying the Respondent and the Facility to the following:

Brenda Case (or Successor)
Ohio EPA
Office of Fiscal Administration
P.O. Box 1049
Columbus, Ohio 43216-1049

A copy of the check shall be sent to James A. Orlemann, Manager, Engineering Section, or his successor, at the following address:

Division of Air Pollution Control
Ohio Environmental Protection Agency
Lazarus Government Center
P.O. Box 1049
Columbus, Ohio 43216-1049

VI. TERMINATION

Respondent's obligations under these Orders shall terminate upon installation of the new seal system on the Alky 1 compressor pursuant to Order 3 of Section V of these Orders and Ohio EPA's receipt of the official check required by Order 7 of Section V of these Orders.

VII. OTHER CLAIMS

Nothing in these Orders shall constitute or be construed as a release from any claim, cause of action or demand in law or equity against any person, firm, partnership or corporation, not a party to these Orders, for any liability arising from, or related to, the operation of Respondent's emissions units.

VIII. OTHER APPLICABLE LAWS

All actions required to be taken pursuant to these Orders shall be undertaken in accordance with the requirements of all applicable local, state and federal laws and regulations. These Orders do not waive or compromise the applicability and enforcement of any other statutes or regulations applicable to Respondent.

IX. MODIFICATIONS

These Orders may be modified by agreement of the parties. Modifications shall be in writing and shall be effective on the date entered in the journal of the Director of Ohio EPA.

X. NOTICE

All documents required to be submitted by Respondent pursuant to these Orders shall be addressed to:

Karen Granata
City of Toledo
Division of Environmental Services
348 South Erie Street
Toledo, Ohio 43602

and to:

Ohio Environmental Protection Agency
Lazarus Government Center
Division of Air Pollution Control
P.O. Box 1049
Columbus, Ohio 43216-1049
Attn: Tammy VanWalsen

or to such persons and addresses as may hereafter be otherwise specified in writing by Ohio EPA.

XI. RESERVATION OF RIGHTS

Ohio EPA and Respondent each reserve all rights, privileges and causes of action except as specifically waived in Section XII of these Orders.

XII. WAIVER

In order to resolve disputed claims, without admission of fact, violation or liability, and in lieu of further enforcement action by Ohio EPA for only the violations specifically cited in these Orders, Respondent consents to the issuance of these Orders and agrees to comply with these Orders. Compliance with these Orders shall be a full accord and satisfaction for Respondent's liability for the violations specifically cited herein.

Respondent hereby waives the right to appeal the issuance, terms and conditions, and service of these Orders, and Respondent hereby waives any and all rights Respondent may have to seek administrative or judicial review of these Orders either in law or equity.

Notwithstanding the preceding, Ohio EPA and Respondent agree that if these Orders are appealed by any other party to the Environmental Review Appeals Commission, or any court, Respondent retains the right to intervene and participate in such appeal. In such an event, Respondent shall continue to comply with these Orders

notwithstanding such appeal and intervention unless these Orders are stayed, vacated or modified.

XIII. EFFECTIVE DATE

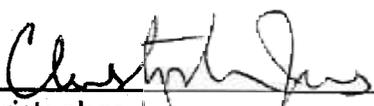
The effective date of these Orders is the date these Orders are entered into the Ohio EPA Director's journal.

XIV. SIGNATORY AUTHORITY

Each undersigned representative of a party to these Orders certifies that he or she is fully authorized to enter into these Orders and to legally bind such party to these Orders.

IT IS SO ORDERED AND AGREED:

Ohio Environmental Protection Agency

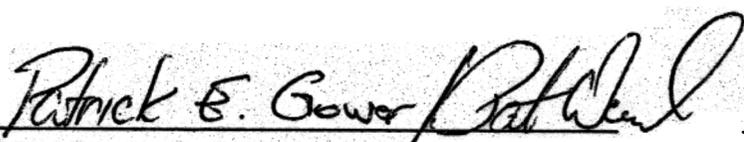


Christopher Jones
Director

11-17-03
Date

IT IS SO AGREED:

BP Products North America, Inc.



Name

11/12/03
Date

Patrick E. Gower
Printed or Typed Name

Business Unit Leader
Title