

## INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT

We Protect Hoosiers and Our Environment.

Northwest Regional Office • 330 W. US Highway 30, Suite F • Valparaiso, IN 46385 (888) 209-8892 • (219) 464-0233 • Fax (219) 464-0553 • www.idem.IN.gov

Eric J. Holcomb

Brian C. Rockensuess Commissioner

August 22, 2022

## VIA ELECTRONIC MAIL:

Timothy Carroll
BP Products North America Inc.
Whiting Business Unit
2815 Indianapolis Boulevard
Whiting, IN 46394-0710
timothy.carroll@bp.com

RE: Enforcement Action/Referral to USEPA,

Region 5

BP Products North America Inc.

Plant ID 089-00453 Whiting, Lake County

Dear Mr. Carroll:

A representative of the Indiana Department of Environmental Management (IDEM), Northwest Regional Office (NWRO), has reviewed the Quarterly Deviation and Compliance Monitoring Report for the first quarter of 2022 submitted by BP Products North America Inc., Whiting Business Unit (BP), located at 2815 Indianapolis Boulevard, Whiting, Indiana. As a result of information obtained during that review, IDEM alleges violations related to Consent Decree (Civil No. 2:12-CV-00207) requirements, Federal air pollution control rules, and conditions of Title V Permit number 089-44305-00453, as follows:

- (1) Between February 8, 2022 and February 24, 2022, fourteen (14) components were found undocumented and unmonitored in the following process units: No. 4 Ultraformer Unit (4UF), Catalytic Reforming Unit (CRU), and No. 11A Pipe Still (11APS), in violation of Consent Decree (Civil No. 2:12-CV-00207) requirements and Conditions D.1.5.a, D.1.5.b, D.16.5.a, D.16.5.b, D.20.5.a, D.20.5.b, F.9.2.3, and F.9.3.8 of Permit number 089-44305-00453, 40 CFR 60, Subpart GGGa, and 40 CFR 60, Subpart VVa.
- (2) Between February 9, 2022 and February 11, 2022, two (2) valves in the CRU and Oil Movements Division (OMD) were believed to be permanently removed from service and missed inspections, in violation of Consent Decree (Civil No. 2:12-CV-00207) requirements and Conditions D.27.1.a, D.27.1.b, F.9.2.3, and F.9.3.8 of Permit number 089-44305-00453, 40 CFR 60, Subpart GGGa, and 40 CFR 60, Subpart VVa.



- (3) Between March 1, 2022 and March 31, 2022, thirty-one (31) components were found undocumented and unmonitored in the following process units: No. 11A Pipe Still (11APS), Alkylation Unit (ALKY), Naphtha Splitting Unit (NSU), Isomerization Unit (ISOM), Fluidized Catalytic Cracking Unit 500 (FCU500), J&L Tank Field (JLTK), South Tank Field (STK), and Oil Movements Division (OMD), in violation of Consent Decree (Civil No. 2:12-CV-00207) requirements and Conditions D.1.5.a, D.1.5.b, D.7.1.a, D.7.1.b, D.9.5.a, D.9.5.b, D.21.4.a, D.21.4.b, D.27.1.a, D.27.1.b, F.9.2.3, and F.9.3.8 of Permit number 089-44305-00453, 40 CFR 60, Subpart GGGa, and 40 CFR 60, Subpart VVa.
- (4) Between March 2, 2022 and March 31, 2022, sixteen (16) valves in the Naphtha Splitting Unit (NSU), Isomerization Unit (ISOM), Distillate Desulfurizer Unit (DDU), Propylene Concentration Unit (PCU), and Oil Movements Division (OMD), were believed to be permanently removed from service and missed inspections, in violation of Consent Decree (Civil No. 2:12-CV-00207) requirements and Conditions D.8.1.a, D.8.1.b, D.9.5.a, D.9.5.b, D.18.6.a, D.18.6.b, D.27.1.a, D.27.1.b, F.9.2.3, and F.9.3.8 of Permit number 089-44305-00453, 40 CFR 60, Subpart GGGa, and 40 CFR 60, Subpart VVa.
- (5) Between January 6, 2022 and January 31, 2022, twenty-two (22) components were found undocumented and unmonitored in the following process units: No. 4 Ultraformer Unit (4UF), Aromatics Recovery Unit (ARU), Blending Oil Unit (BOU), Fluidized Catalytic Cracking Unit 600 (FCU600), Glycol Dehydration Unit (GDU), Propylene Concentration Unit (PCU), Sulfur Recovery Complex (SRC), and Vapor Recovery Unit 300 (VRU300), in violation of Consent Decree (Civil No. 2:12-CV-00207) requirements and Conditions D.4.6.a, D.4.6.b, D.6.1.a, D.6.1.b, D.8.1.a, D.8.1.b, D.10.5.a, D.10.5.b, D.11.5.a, D.11.5.b, D.16.5.a, D.16.5.b, D.22.4.a, D.22.4.b, D.24.6.a, D.24.6.b, F.9.2.3, and F.9.3.8 of Permit number 089-44305-00453, 40 CFR 60, Subpart GGGa, and 40 CFR 60, Subpart VVa.
- (6) Between January 21, 2022 and January 27, 2022, seven (7) valves in the Distillate Hydrotreating (DHT), No. 4 Ultraformer Unit (4UF), Fluidized Catalytic Cracking Unit 500 (FCU500) were believed to be permanently removed from service and missed inspections, in violation of Consent Decree (Civil No. 2:12-CV-00207) requirements and Conditions D.16.5.a, D.16.5.b, D.21.4.a, D.21.4.b, D.37.4.a, D.37.4.b, F.9.2.3, and F.9.3.8 of Permit number 089-44305-00453, 40 CFR 60, Subpart GGGa, and 40 CFR 60, Subpart VVa.

- (7) During January 2022, there were three (3) atmospheric pressure relief devices (PRD) in gas/vapor service that exceeded the leak definition outside of pressure release events at the Vapor Recovery Unit 200 (VRU200), in violation of Consent Decree (Civil No. 2:12-CV-00207) requirements and Conditions D.5.1.a, D.5.1.b, F.9.2.3, and F.9.3.5 of Permit number 089-44305-00453, 40 CFR 60, Subpart GGGa, and 40 CFR 60, Subpart VVa.
- (8) One (1) open-ended line (OEL) was discovered on March 10, 2022 in Propylene Concentration Unit (PCU), in violation of Consent Decree (Civil No. 2:12-CV-00207) requirements and Conditions D.8.1.a, D.8.1.b, F.9.2.3, and F.9.3.7 of Permit number 089-44305-00453, 40 CFR 60, Subpart GGGa, and 40 CFR 60, Subpart VVa.
- (9) One valve in Naphtha Splitting Unit (NSU) did not have a first attempt at repair within 5 calendar days, due January 18, 2022, in violation of Consent Decree (Civil No. 2:12-CV-00207) requirements and Conditions D.9.5.a, D.9.5.b, F.9.2.3, and F.9.3.8 of Permit number 089-44305-00453, 40 CFR 60, Subpart GGGa, and 40 CFR 60, Subpart VVa.
- (10) One (1) open-ended line (OEL) was discovered on January 29, 2022 in Blending Oil Unit (BOU), in violation of Consent Decree (Civil No. 2:12-CV-00207) requirements and Conditions D.11.5.a, D.11.5.b, F.9.2.3, and F.9.3.7 of Permit number 089-44305-00453, 40 CFR 60, Subpart GGGa, and 40 CFR 60, Subpart VVa.
- (11) One (1) open-ended line (OEL) was discovered on January 17, 2022 in Fluidized Catalytic Cracking Unit 500 (FCU500), in violation of Consent Decree (Civil No. 2:12-CV-00207) requirements and Conditions D.21.4.a, D.21.4.b, F.9.2.3, and F.9.3.7 of Permit number 089-44305-00453, 40 CFR 60, Subpart GGGa, and 40 CFR 60, Subpart VVa.
- (12) One (1) pump in Lake George Tank Field (LKGTK) was found leaking on July 16, 2021 and did not have a first attempt at repair within 5 days or repaired within 15 days due to database updating issues, in violation of Consent Decree (Civil No. 2:12-CV-00207) requirements and Conditions D.27.1.a, D.27.1.b, F.9.2.3, and F.9.3.8 of Permit number 089-44305-00453, 40 CFR 60, Subpart GGGa, and 40 CFR 60, Subpart VVa.
- (13) One (1) pump in South Tank Field (STK) was found leaking on September 22, 2021 and was not re-monitored by the 15<sup>th</sup> day to verify that emissions are below the leak definition, in violation of Consent Decree (Civil No. 2:12-CV-00207) requirements and Conditions D.27.1.a, D.27.1.b, F.9.2.3, and F.9.3.8 of Permit number 089-44305-00453, 40 CFR 60, Subpart GGGa, and 40 CFR 60, Subpart VVa.

- (14) On January 10, 2022, for two (2) hours, during the startup of the Isomerization unit, the UIU flare was being used for startup activity. The UIU flare header AOV valve to the flare gas recovery unit was prematurely opened back up to the system and overwhelming it. The No. 4 Ultraformer (4UF) Flare AOV valve was closed as a response, leading to a flaring event at the 4UF flare that exceeded the 3-hr rolling H<sub>2</sub>S average limit of 162ppm, in violation of Consent Decree (Civil No. 2:12-CV-00207) requirements and Condition F.3.2.4 of Permit number 089-44305-00453 and 40 CFR 60, Subpart Ja.
- (15) On March 13, 2022, for sixty-nine (69) hours, the No. 4 Ultraformer (4UF) Flare exceeded the 162 ppm rolling 3-hour H<sub>2</sub>S limit. The flaring event was a result of the G6A reactor charge turbine pump tripping offline, in violation of Consent Decree (Civil No. 2:12-CV-00207) requirements and Condition F.3.2.4 of Permit number 089-44305-00453 and 40 CFR 60, Subpart Ja.
- (16) On March 15, 2022, during three (3) 15-minute periods, while regulated material was being sent to the DDU Flare, the net heating value of flare combustion zone gas (NHVcz) could not be calculated due to a bad pressure valve on the steam flow meter, in violation of Consent Decree (Civil No. 2:12-CV-00207) requirements and Condition H.2.2.18 of Permit number 089-44305-00453 and 40 CFR 63, Subpart CC.
- (17) On January 27, 2022, the VRU300 unit experienced an upset that resulted in a domino effect causing a flaring event at the Alky flare. This incident led to two (2) 15-minute periods that the net heating value of flare combustion zone gas (NHVcz) dropped below 270 Btu/scf, in violation of Consent Decree (Civil No. 2:12-CV-00207) requirements and Condition H.2.2.18 of Permit number 089-44305-00453 and 40 CFR 63, Subpart CC.
- (18) On January 27, 2022, during two (2) 15-minute periods, while regulated material was being sent to the No. 4 Ultraformer (4UF) Flare, the net heating value of flare combustion zone gas (NHVcz) dropped below 270 Btu/scf, in violation of Consent Decree (Civil No. 2:12-CV-00207) requirements and Condition H.2.2.18 of Permit number 089-44305-00453 and 40 CFR 63, Subpart CC.

These violations will be referred to the United States Environmental Protection Agency (USEPA), Region 5, for appropriate action. Please direct any response to this letter or any questions to Sasa Dunovic at (219) 252-3566 or by e-mail at <a href="mailto:sdunovic@idem.in.gov">sdunovic@idem.in.gov</a>.

Sincerely,

Rick Massoels, Deputy Director Indiana Department of Environmental Management, Northwest Regional Office

Il Marsol

ACES ID: 271793

cc: Mr. Mark Messersmith, USEPA, Region 5

messersmith.mark@epa.gov

Mr. Janusz Johnson, Compliance and Enforcement Branch, Office of Air Quality jjohnson@idem.in.gov

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Lake County Health Department

doffinx@lakecountyin.org

Carroll, Timothy From: ROBERTS, GOLDIE To:

Subject: Read: BP Products North America, Inc. - Whiting Business Unit (089-00453) Referral to USEPA, Region 5

Date: Monday, August 22, 2022 10:37:22 AM

Importance:

Your message
To: Carroll, Timothy
Subject: BP Products North America, Inc. - Whiting Business Unit (089-00453) Referral to USEPA, Region 5
Sent: Monday, August 22, 2022 9:22:21 AM (UTC-06:00) Central Time (US & Canada)
was read on Monday, August 22, 2022 9:36:16 AM (UTC-06:00) Central Time (US & Canada).