



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

SEP 20 2013

CERTIFIED MAIL
RETURN RECEIPT REQUESTED

REPLY TO THE ATTENTION OF:

Alphonse McMahon
Senior Counsel, EHSS
Saudi Basic Industries Corporation
1 Lexan Lane
Mount Vernon, IN 47620

Re: Administrative Consent Order and Consent Agreement and Final Order for SABIC Innovative Plastics US LLC of Ottawa, Illinois

Dear Mr. McMahon:

Enclosed is a countersigned and file-stamped Consent Agreement and Final Order (CAFO) which resolves SABIC Innovative Plastics US LLC, Docket No. CAA-05-2013-0043. As indicated by the filing stamp on the first page the document, we filed the CAFO with the Regional Hearing Clerk on SEP 20 2013.

Pursuant to paragraph 29 of the CAFO, SABIC Innovative Plastics US LLC must pay the civil penalty within 30 days of SEP 20 2013. Your check or electronic funds transfer must display the case name and case docket number CAA-05-2013-0043.

Additionally, enclosed is the countersigned Administrative Consent Order.

Please direct any questions regarding this case to Andre Daugavietis, Associate Regional Counsel, at (312) 886-6663.

Sincerely,

A handwritten signature in black ink, appearing to read "Sarah Marshall".

Sarah Marshall, Chief
Air Enforcement and Compliance Assurance Branch (MI/WI)

Enclosure

cc: Regional Hearing Clerk/E-19J
Ann Coyle, Regional Judicial Officer/C-14J
Andre Daugavietis/C-14J
Ray Pilapil/ Illinois Environmental Protection Agency

**UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
REGION 5**

In the Matter of:)	Docket No. CAA-05-2013-0043
)	
SABIC Innovative Plastics US LLC)	Proceeding to Assess a Civil Penalty
Ottawa, Illinois)	Under Section 113(d) of the Clean Air Act
)	42 U.S.C. § 7413(d)
Respondent)	
)	

Consent Agreement and Final Order

I. Preliminary Statement

1. This is an administrative action commenced and concluded under Section 113(d) of the Clean Air Act (the Act), 42 U.S.C. § 7413(d), and Sections 22.1(a)(2), 22.13(b), and 22.18(b)(2) and (3) of the Consolidated Rules of Practice Governing the Administrative Assessment of Civil Penalties and the Revocation/Termination or Suspension of Permits (Consolidated Rules), as codified at 40 C.F.R. Part 22.
2. Complainant is the Director of the Air and Radiation Division, U.S. Environmental Protection Agency (EPA), Region 5.
3. Respondent is SABIC Innovative Plastics US LLC, a company doing business in Illinois.
4. Where the parties agree to settle one or more causes of action before the filing of a complaint, the administrative action may be commenced and concluded simultaneously by the issuance of a consent agreement and final order (CAFO). 40 C.F.R. § 22.13(b).
5. The parties agree that settling this action without the filing of a complaint or the adjudication of any issue of fact or law is in their interest and in the public interest.
6. Respondent consents to the assessment of the civil penalty specified in this CAFO and to the terms of this CAFO.

II. Jurisdiction and Waiver of Right to Hearing

7. Respondent admits the jurisdictional allegations in this CAFO and neither admits nor denies the findings and factual allegations in this CAFO.
8. Respondent waives its right to request a hearing as provided at 40 C.F.R. § 22.15(c), any right to contest the allegations in this CAFO, and its right to appeal this CAFO.

III. Statutory and Regulatory Background

9. Each state must submit to the Administrator of EPA a plan for attaining and maintaining the National Ambient Air Quality Standards under Section 110 of the Act, 42 U.S.C. § 7410.
10. On February 21, 1980, EPA approved Illinois Rule 35 Illinois Administrative Code (IAC) 215 as part of the federally enforceable State Implementation Plan (SIP) for Illinois. 45 Fed. Reg. 11,472.
11. The Illinois State Implementation Plan (Illinois SIP) at IAC 215.301 and 302(a) allows the release of volatile organic material (VOM) waste gas streams containing more than 8 pounds/hour of VOM if such emissions are controlled by one of the following methods: (A) flame, thermal or catalytic incineration so as either to reduce such emissions to 10 ppm equivalent methane (molecular weight 16) or less, or to convert 85 percent of the hydrocarbons to carbon dioxide and water; (B) a vapor recovery system which adsorbs and/or condenses at least 85 percent of the total uncontrolled organic material that would otherwise be emitted to the atmosphere; or (C) any other air pollution control equipment approved by the Agency capable of reducing by 85 percent or more the uncontrolled organic material that would be otherwise emitted to the atmosphere.
12. Certain equipment within the latex process is subject to National Emissions Standards for Hazardous Air Pollutants (NESHAP) Group IV Polymers and Resins (Subpart JJJ). The flare is used as a control device to comply with Subpart JJJ, and is required to meet the flare requirements in 40 C.F.R. 63 Subpart A. Specifically, 40 C.F.R. § 63.11(b)(6)(ii) states, "Flares shall be used only with the net heating value [NHV] of the gas being combusted at 11.2 MJ/scm (300 BTU/scf) or greater if the flare is steam-assisted."
13. On March 7, 1995, EPA gave the Illinois Title V Clean Air Act Permit Program (CAAPP) interim approval as a 40 C.F.R. Part 70 permit program under the authority of Section 502 of the Act, 42 U.S.C. § 7661(a) (60 Fed. Reg. 12478). On December 4, 2001, EPA gave the Illinois Title V CAAPP final approval as a 40 C.F.R. Part 70 permit program (66 Fed. Reg. 62946). The regulation at 40 C.F.R. § 70.6(b)(1) specifies that all terms and conditions in a permit issued under a Part 70 program are enforceable by the EPA under the Act. SABIC was issued Title V Permit No. 96010032 for source 099829AAA on November 25, 2003. SABIC appealed the Title V permit in a timely manner, and the Title V permit is currently stayed.
14. The Administrator of EPA (the Administrator) may assess a civil penalty of up to \$37,500 per day of violation up to a total of \$295,000 for violations that occurred after January 12, 2009 under Section 113(d)(1) of the CAA, 42 U.S.C. § 7413(d)(1), and 40 C.F.R. Part 19.
15. Section 113(d)(1) limits the Administrator's authority to matters where the first alleged date of violation occurred no more than 12 months prior to initiation of the administrative action, except where the Administrator and the Attorney General of the United States

jointly determine that a matter involving a longer period of violation is appropriate for an administrative penalty action.

16. The Administrator and the Attorney General of the United States, each through their respective delegates, have determined jointly that an administrative penalty action is appropriate for the period of violations alleged in this CAFO.

IV. Findings

17. SABIC uses a flare to control emissions from its latex process (latex flare). The latex flare is steam-assisted, which means that steam is added to the waste, or vent gas stream, to enhance combustion and prevent the formation of smoke. Steam is added in proportion to the amount of vent gas. It is common practice to measure the amount of steam as a ratio of the mass of steam per unit mass of vent gas (lb/lb).
18. In July 1983, the EPA released report "EPA 600/2-83-052," titled Flare Efficiency Study (1983 Flare Study). This study, partially funded by EPA and the Chemical Manufacturers Association (CMA), included various tests to determine the combustion efficiency and hydrocarbon destruction efficiency of flares under a variety of operating conditions. Certain tests were conducted on a steam-assisted flare provided by John Zink Company. The tests performed included a wide range of steam flows and steam-to-vent gas ratios. The data collected showed decreasing combustion efficiencies when the steam-to-vent gas ratio was above 3.5. The tests showed the following efficiencies at the following steam-to-vent gas (S/V) ratios:

Pounds of Steam to One Pound of Vent Gas	Combustion Efficiency (%)
3.45	99.7
5.67	82.18
6.86	68.95

The report concluded that excessive steam-to-vent gas ratios caused steam quenching of the flame during the tests which resulted in lower combustion efficiency.

19. The EPA has identified other publicly available studies and reports that evaluate how flare combustion efficiency is affected by steam addition. The conclusions of these studies support those of EPA 600/2-83-052.
20. On July 1, 2011, and August 31, 2011, SABIC provided information to the EPA in response to an EPA information request, including design documents and operating data on the latex flare for the period from January 19, 2007 to May 26, 2011. Documents provided by SABIC include the Material Requisition and Operation, Maintenance and Installation Instructions. EPA reviewed all information provided by SABIC.

21. Documents provided by SABIC set forth both steam and vent gas flow rates. These documents indicate an S/V ratio of 0.25 to 0.4. Specifically:
- a. In the Material Requisition from Crawford & Russell dated May 30, 1973, on page 2 in the Design Summary 3.2.D, it calls for “150 psig steam – 0.4 lb steam/lb waste”, or an S/V ratio of 0.4;
 - b. In the Operating & Installation Instructions (undated), under V – Waste Design Rates, it calls for a Waste Flow Rate of 1275 lb/hr and steam flow rate of 320 lb/hr, providing an S/V ratio of 0.25; and
 - c. In the Operating, Maintenance and Installation Instructions for a John Zink ZTOF Ground Flare (undated), on the Specifications Sheet (page 5), under Section A. Waste Data, it indicates a flow rate of 1,275 lb/hr, and under Section C, Purging, it indicates a flow rate of 320 lb/hr of steam. This yields an S/V ratio of 0.25.

Actual operating information provided by SABIC indicates operation of the flare above S/V of 0.4 at all times the flare was operated for the period from January 1, 2007 through May 26, 2011. Flare testing data indicates that such operations would have reduced the efficiency of the flare and subsequently increased emissions. Moreover, the flare was operated at an S/V ratio greater than ten times above 0.4 (i.e. an S/V ratio of 4.0) for an estimated 13,990 hours during this period.

22. By supplying excess steam, SABIC reduced the combustion efficiency of the latex flare on a consistent basis below 85% and released a waste gas stream to the environment with an organic material concentration greater than 10 ppm and at a rate exceeding 8 lb/hr. This constitutes a violation of the Illinois SIP at IAC 215.301 and 302(a). Information provided by SABIC and the 1983 Flare Study suggests this prohibited condition occurs when the S/V ratio exceeds 5.31. SABIC operated in this condition for a total of 13,951 hours for the period of January 1, 2007 through May 26, 2011.
23. SABIC provided NHV values for operating scenarios for the period from January 1, 2007 through May 26, 2011. Some of the NHV values are below the requirement for steam-assisted flares of 300 BTU/scf specified in 40 C.F.R. § 63.11(b)(6)(ii). Based on information provided by SABIC, EPA determined that SABIC violated this condition for a total of 1,035 hours for the period from January 1, 2007 through May 26, 2011.
24. On May 23, 2011, EPA issued SABIC an information request for flare operating data.
25. On January 4, 2012, EPA issued to SABIC a Notice of Violation/Finding of Violation (NOV/FOV) alleging the violations in paragraphs 21 through 23 above.
26. On February 8, 2012, representatives of SABIC and EPA discussed the January 4, 2012 NOV/FOV.
27. SABIC neither admits nor denies the allegations and findings above.

V. Civil Penalty

28. Based on analysis of the factors specified in Section 113(e) of the Act, 42 U.S.C. § 7413(e), the facts of this case, information that Respondent has provided to EPA, Respondent's cooperation and willingness to promptly return to compliance, cooperation in agreeing to the terms of an administrative compliance order, Respondent's agreement to install and operate a new flaring system above and beyond minimum compliance requirements, Complainant has determined that an appropriate civil penalty to settle this action is \$157,872.
29. Within 30 days after the effective date of this CAFO, Respondent must pay a \$157,872 civil penalty by Automated Clearinghouse (ACH) electronic funds transfer, payable to "Treasurer, United States of America," and sent to:

US Treasury REX/Cashlink ACH Receiver
ABA: 051036706
Account Number: 310006, Environmental Protection Agency
CTX Format Transaction Code 22-checking

In the comment area of the electronic funds transfer, state Respondent's name, the docket number of this CAFO and the billing document number.

30. Respondent must send a notice of payment that states Respondent's name, the docket number of this CAFO and the billing document number to the Compliance Tracker, Air Enforcement and Compliance Assurance Branch and to EPA counsel at the following addresses when it pays the penalty:

Attn: Compliance Tracker, (AE-17J)
Air Enforcement and Compliance Assurance Branch
Air and Radiation Division
U.S. Environmental Protection Agency, Region 5
77 W. Jackson Boulevard
Chicago, Illinois 60604

Andre Daugavietis (C-14J)
Office of Regional Counsel
U.S. Environmental Protection Agency, Region 5
77 W. Jackson Boulevard
Chicago, Illinois 60604

31. This civil penalty is not deductible for federal tax purposes.
32. If Respondent does not timely pay the civil penalty, EPA may request the Attorney General of the United States to bring an action to collect any unpaid portion of the penalty with interest, nonpayment penalties and the United States enforcement expenses for the collection action under Section 113(d)(5) of the Act, 42 U.S.C. § 7413(d)(5).

33. Respondent must pay the following on any amount overdue under this CAFO. Interest will accrue on any overdue amount from the date payment was due at a rate established by the Secretary of the Treasury pursuant to 26 U.S.C. § 6621(a)(2). Respondent must pay the United States enforcement expenses, including but not limited to attorneys' fees and costs incurred by the United States for collection proceedings. In addition, Respondent must pay a quarterly nonpayment penalty each quarter during which the assessed penalty is overdue. This nonpayment penalty will be 10 percent of the aggregate amount of the outstanding penalties and nonpayment penalties accrued from the beginning of the quarter. 42 U.S.C. § 7413(d)(5).

VI. General Provisions

34. This CAFO resolves only Respondent's liability for federal civil penalties for the violations alleged in this CAFO.
35. The CAFO does not affect the rights of EPA or the United States to pursue appropriate injunctive or other equitable relief or criminal sanctions for any violation of law.
36. This CAFO does not affect Respondent's responsibility to comply with the Act and other applicable federal, state and local laws. Except as provided in paragraph 34, above, compliance with this CAFO will not be a defense to any actions subsequently commenced pursuant to federal laws administered by EPA.
37. An Administrative Consent Order requiring Respondent to implement a 12-month compliance plan will be filed simultaneously, or closely in time, with this CAFO.
38. This CAFO constitutes an "enforcement response" as that term is used in EPA's Clean Air Act Stationary Civil Penalty Policy to determine Respondent's "full compliance history" under Section 113(e) of the Act, 42 U.S.C. § 7413(e).
39. The terms of this CAFO bind Respondent, its successors and assigns.
40. Each person signing this consent agreement certifies that he or she has the authority to sign for the party whom he or she represents and to bind that party to its terms.
41. Each party agrees to bear its own costs and attorneys' fees in this action.
42. This CAFO constitutes the entire agreement between the parties.

SABIC Innovative Plastics US LLC, Respondent

9/11/2013
Date

Michael Walsh
Michael Walsh
Vice President
SABIC Innovative Plastics US LLC

United States Environmental Protection Agency, Complainant

9/17/13
Date


George Czerniak
George Czerniak
Director
Air and Radiation Division
U.S. Environmental Protection Agency
Region 5

Consent Agreement and Final Order
In the Matter of: SABIC Innovative Plastics US LLC
Docket No. CAA-05-2013-0043

VII. Final Order

This Consent Agreement and Final Order, as agreed to by the parties, shall become effective immediately upon filing with the Regional Hearing Clerk. This Final Order concludes this proceeding pursuant to 40 C.F.R. §§ 22.18 and 22.31. IT IS SO ORDERED.

9-19-2013
Date



Susan Hedman
Regional Administrator
U.S. Environmental Protection Agency
Region 5

Consent Agreement and Final Order

In the Matter of: SABIC Innovative Plastics US LLC of Ottawa, Illinois

Docket No. CAA-05-2013-0043

Certificate of Service

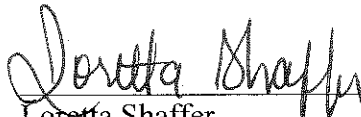
I certify that I filed the original and one copy of the Consent Agreement and Final Order (CAFO), docket number CAA-05-2013-0043 with the Regional Hearing Clerk, U.S. Environmental Protection Agency, Region 5, 77 W. Jackson Boulevard, Chicago, Illinois 60604, and that I mailed a second original copy by first-class, postage prepaid, certified mail, return receipt requested, by placing it in the custody of the United States Postal Service addressed as follows:

Alphonse McMahon
Senior Counsel, EHSS
Saudi Basic Industries Corporation
1 Lexan Lane
Mount Vernon, IN 47620

I also certify that I delivered a copy of the ACO and CAFO by intra-office mail, addressed as follows:

Ann Coyle
Regional Judicial Officer (C-14J)
U.S. Environmental Protection Agency, Region 5
77 W. Jackson Boulevard
Chicago, Illinois 60604

On the 20 day of September 2013.



Loretta Shaffer
Administrative Program Assistant
Planning and Administration Section

RECEIVED
REGIONAL HEARING CLERK
U.S. ENVIRONMENTAL PROTECTION AGENCY
77 W. JACKSON BOULEVARD
CHICAGO, ILLINOIS 60604
SEP 20 2013

CERTIFIED MAIL RECEIPT NUMBER:

7009 1680 0000 76695701