

#### UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

#### REGION 5 77 WEST JACKSON BOULEVARD CHICAGO, IL 60604-3590

December 30, 2020

#### VIA E-MAIL DELIVERY RECEIPT REQUESTED

Susan V. Harris, Counsel, Sidley Austin LLP Solvay Specialty Polymers LLC 17005 State Route 7 Marietta, Ohio 45750

Email: svharris@sidley.com

Dear Ms. Harris:

Enclosed is a file-stamped Consent Agreement and Final Order (CAFO) which resolves Solvay Specialty Polymers LLC, docket no. CAA-05-2021-0004 . As indicated by the filing stamp on its first page, we filed the CAFO with the Regional Hearing Clerk on December 30, 2020 .

Pursuant to paragraph 126 of the CAFO, Solvay Specialty Polymers LLC must pay the civil penalty within 30 days of the filing date. Your check must display the case name and case docket number.

Please direct any questions regarding this case to James Morris, Office of Regional Counsel, 312-886-6632.

Sincerely,

SARAH Digitally signed by SARAH MARSHALL Date: 2020.12.21 15:16:01 - 06'00'

Sarah G. Marshall, Chief

Air Enforcement and Compliance Assurance Section (MI/WI)

#### Enclosure

cc: Ann Coyle, Regional Judicial Officer/via electronic mail

Regional Hearing Clerk/via electronic mail

James Morris/via electronic mail Marcy Toney/via electronic mail

Bob Hodanbosi, Ohio EPA, <u>bob.hodanbosi@epa.ohio.gov</u> James Kavalec, Ohio EPA, james.kavalec@epa.ohio.gov

Devan Roof, Ohio EPA, devan.roof@epa.ohio.gov

# UNITED STATES ENVIRONMENTAL PROTECTION AGENCY REGION 5

In the Matter of:	)	<b>Docket No.</b> CAA-05-2021-0004
	)	
Solvay Specialty Polymers LLC	)	Proceeding to Assess a Civil Penalty
Marietta, Ohio	)	Under Section 113(d) of the Clean Air Act.
	)	42 U.S.C. § 7413(d)
Respondent.	)	
_	)	

#### **Consent Agreement and Final Order**

#### **Preliminary Statement**

- 1. This is an administrative action commenced and concluded under Section 113(d) of the Clean Air Act (the CAA), 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 Enforcement and Compliance Assurance Division, U.S. Environmental Protection Agency (EPA), Region 5.
- 3. Respondent is Solvay Specialty Polymers LLC ("Solvay"), a corporation, doing business in Ohio.
- 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.

#### Jurisdiction and Waiver of Right to Hearing

- 7. Respondent admits the jurisdictional allegations in this CAFO and neither admits nor denies the 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.

#### **Statutory and Regulatory Background**

#### NESHAP for Miscellaneous Organic Chemicals Manufacturing (MON or Subpart FFFF)

- 9. On November 10, 2003, EPA promulgated Subpart FFFF, 68 Fed. Reg. 63888 (November 10, 2003). The owner or operator of an affected source as of November 10, 2003, must comply with the provisions of this subpart no later than May 10, 2008, as required under 40 C.F.R. § 63.2445(b).
- 10. Subpart FFFF, at 40 C.F.R. § 63.2440, applies to each miscellaneous organic chemical manufacturing affected source, which is the facility wide collection of miscellaneous organic chemicals manufacturing process units (MCPUs) and heat exchange systems, wastewater, and waste management units that are associated with materials described in 40 C.F.R. § 63.2435(b)(1).
- 11. Subpart FFFF, at 40 C.F.R. § 63.2435(a), applies to owners or operators of MCPUs that are located at, or are part of, a major source of hazardous air pollutant (HAP) emissions, as defined in Section 112(a) of the CAA, 42 U.S.C. § 7412(a).
- 12. Subpart FFFF, at 40 C.F.R. § 63.2435(b), states that an MCPU includes equipment necessary to operate a miscellaneous organic chemical manufacturing process, as defined in 40 C.F.R. § 63.2550, that satisfies all of the conditions specified in paragraphs (b)(1) through (3) of 40 C.F.R. § 63.2435. An MCPU also includes any assigned storage tanks and transfer racks; equipment in open systems that is used to convey or store water having the same

concentration and flow characteristics as wastewater; and components such as pumps, compressors, agitators, pressure relief devices, sampling connection systems, open-ended valves or lines, valves, connectors, and instrumentation systems that are used to manufacture any material or family of materials described in paragraphs (b)(1)(i) through (v) of 40 C.F.R. § 63.2435.

- 13. Subpart FFFF, at 40 C.F.R. § 63.2450(e) (1), requires that, if the owner or operator of MCPUs is reducing the organic HAP emissions by venting emissions through a closed-vent system to any combination of control devices (except a flare) or recovery devices, the owner or operator must meet the requirements of 40 C.F.R. § 63.982(c) and the requirements referenced therein.
- 14. Subpart FFFF, at 40 C.F.R. § 63.2460(a), states that owners or operators of MCPUs "must meet each emission limit in Table 2 to this subpart that applies to you, and you must meet each applicable requirement specified in paragraphs (b) and (c) of this section."
- 15. Table 2 of Subpart FFFF requires owners or operators of MCPUs to reduce collective uncontrolled organic HAP emissions from the sum of all Group 1 batch process vents within each process with Group 1 batch process units by ≥98 percent by weight by venting emissions from a sufficient number of the vents through one or more closed-vent systems to any combination of control devices (except a flare).
- 16. Table 2 of Subpart FFFF requires owners or operators of MCPUs to use a halogen reduction device after the combustion control device, and to reduce overall emissions of hydrogen halide and halogen HAP by ≥99 percent, or to ≤0.45 kg/hr, or to a concentration ≤20 parts per million by volume (ppmv), for halogenated Group 1 batch process vents for which the owner or operator uses a combustion device to control organic HAP emissions.

- 17. Subpart FFFF, at 40 C.F.R. § 63.2460(c)(1), requires owners or operators of MCPUs to determine whether a condenser is a control device for a batch process vent or a process condenser from which the uncontrolled HAP emissions are evaluated as part of the initial compliance demonstration for each MCPU and report the results with supporting rationale in the owner or operator's notification of compliance status report.
- 18. Subpart FFFF, at 40 C.F.R. § 63.2550, defines "process condenser" as a condenser whose primary purpose is to recover material as an integral part of an MCPU. All condensers recovering condensate from an MCPU at or above the boiling point or all condensers in line prior to a vacuum source are considered process condensers.
- 19. Subpart FFFF, at 40 C.F.R. § 63.2460(c)(2)(v), states that if a process condenser is used for any boiling operations, the owner or operator must demonstrate that it is properly operated according to the procedures specified in 40 C.F.R. § 63.1257(d)(2)(i)(C)(4)(ii) and (d)(3)(iii)(B), and the demonstration must occur only during the boiling operation.
- 20. Subpart FFFF, at 40 C.F.R. § 63.2480(a), states that owners or operators of MCPUs must meet each requirement in Table 6 to this subpart that applies to the owner or operator's equipment leaks, except as specified in paragraphs (b) through (d) of 40 C.F.R. § 63.2480.
- 21. Subpart FFFF, at 40 C.F.R. § 63.2550, defines "equipment" as each pump, compressor, agitator, pressure relief device, sampling connection system, open-ended valve or line, valve, connector, and instrumentation system in organic HAP service; and any control devices or systems used to comply with Table 6 to this subpart.
- 22. Table 6 of Subpart FFFF requires that all equipment in organic HAP service must comply with the requirements of either 40 C.F.R. Part 63, Subpart UU, or Subpart H, and the

requirements referenced therein, except as specified in 40 C.F.R. § 63.2480(b) and (d), or 40 C.F.R. Part 65, Subpart F, and the requirements referenced therein, except as specified in 40 C.F.R. § 63.2480(c) and (d).

- 23. Subpart FFFF, at 40 C.F.R. § 63.2550, defines "in organic HAP service" as a piece of equipment that either contains or contacts a fluid (liquid or gas) that is at least 5 percent by weight of total organic HAP as determined according to the provisions of 40 C.F.R. § 63.180(d).
- 24. Subpart FFFF, at 40 C.F.R. § 63.2485(a), states that owners or operators of MCPUs "must meet each requirement in Table 7 to this subpart that applies to your wastewater streams and liquid streams in open systems within an MCPU, except as specified in paragraphs (b) through (o) of this section."
- 25. Table 7 of Subpart FFFF requires that each process wastewater stream must comply with the requirements in 40 C.F.R. §§ 63.132 through 63.148 of the HON and the requirements referenced therein, except as specified in 40 C.F.R. § 63.2485.
- 26. Subpart FFFF, at 40 C.F.R. § 63.2485(j), requires owners or operators to determine the annual average concentration and annual average flowrate for wastewater streams for each MCPU. The procedures for flexible operation units specified in 40 C.F.R. § 63.144 (b) and (c) do not apply for the purposes of this subpart.
- 27. Subpart FFFF, at 40 C.F.R. § 63.2550, defines "point of determination (POD)" as each point where process wastewater exits the MCPU or control device.
- 28. Subpart FFFF, at 40 C.F.R. § 63.2550, defines "wastewater" as the water that is discarded from an MCPU or control device through a POD and that contains either: an annual average concentration of compounds in tables 8 and 9 to this subpart of at least 5 parts per

millions by weight (ppmw) and has an annual average flowrate of 0.02 liters per minute or greater; or an annual average concentration of compounds in tables 8 and 9 to this subpart of at least 10,000 ppmw at any flowrate. Wastewater means process wastewater or maintenance wastewater.

- 29. Subpart FFFF, at 40 C.F.R. § 63.2550, defines "Group 1 wastewater stream" as a wastewater stream consisting of process wastewater at an existing or new source that meets the criteria for Group 1 status in 40 C.F.R. § 63.2485(c) for compounds in Tables 8 and 9 to this subpart and/or a wastewater stream consisting of process wastewater at a new source that meets the criteria for Group 1 status in 40 C.F.R. § 63.132(d) for compounds in Table 8 to subpart G of Part 63.
- 30. Subpart FFFF, at 40 C.F.R. § 63.2550, defines "Group 2 wastewater stream" as any process wastewater stream that does not meet the definition of a Group 1 wastewater stream.

  NESHAP for the Synthetic Organic Chemical Manufacturing Industry for Process Vents, Storage Vessels, Transfer Operations, and Wastewater (HON or Subpart G)
- 31. On April 22, 1994, EPA promulgated the NESHAP for the Synthetic Organic chemical Manufacturing Industry for Process Vents, Storage Vessels, Transfer Operations and Wastewater (HON or Subpart G) 59 Fed. Reg. 19468 (April 22, 1994). This subpart applies to all process vents, storage vessels, transfer racks, wastewater streams and in-process equipment subject to 40 C.F.R. § 63.149 within a source subject to Part 63, Subpart F.
- 32. Subpart G, at 40 C.F.R. § 63.111, defines a "wastewater stream" as "...a stream that contains only wastewater as defined in 40 C.F.R. §63.101 of subpart F of this part."
- 33. Subpart G, at 40 C.F.R. § 63.111, defines a "sewer line" as "... a lateral, trunk line, branch line, or other conduit including, but not limited to, grates, trenches, etc., used to convey wastewater streams or residuals to a downstream waste management unit."

- 34. Subpart G, at 40 C.F.R. § 63.132(a)(1), requires an owner or operator to determine whether each wastewater stream requires control for Table 9 compounds by complying with the requirements in either paragraph (a)(1)(i) or (a)(1)(ii) of this section, and comply with the requirements in paragraph (a)(1)(iii) of this section.
- 35. Subpart G, at 40 C.F.R. § 63.132(c), provides instructions for determining whether a wastewater stream is Group 1 or Group 2 for Table 9 compounds. This section states, "Total annual average concentration shall be determined according to the procedures specified in § 63.144(b) of this subpart. Annual average flow rate shall be determined according to the procedures specified in § 63.144(c) of this subpart."
- 36. Subpart G, at 40 C.F.R. § 63.132(d), provides instructions for determining whether a wastewater stream is Group 1 or Group 2 for Table 8 compounds. This section states, "Annual average concentration for each Table 8 compound shall be determined according to the procedures specified in § 63.144(b) of this subpart. Annual average flow rate shall be determined according to the procedures specified in § 63.144(c) of this subpart."
- 37. Subpart G, at 40 C.F.R. §§ 63.132(c)(3)-(d)(3), requires an owner or operator of a Group 2 wastewater to re-determine group status for each Group 2 stream, as necessary, to determine whether the stream is Group 1 or Group 2 whenever process changes are made that could reasonably be expected to change the stream to a Group 1 stream. Examples of process changes include, but are not limited to, changes in production capacity, production rate, feedstock type, or whenever there is a replacement, removal, or addition of recovery or control equipment.
- 38. Subpart G, at 40 C.F.R. § 63.144(b), requires an owner or operator who elects to comply with the requirements of paragraph (a)(1) of 40 C.F.R. § 63.144 to determine the annual

average concentration for Table 8 and/or Table 9 compounds according to paragraph (b)(1) of this section for existing sources.

- 39. Subpart G, at 40 C.F.R. § 63.144(b)(5), requires an owner or operator who elects to comply with paragraph (a)(1) of this section by measuring the concentration for the relevant Table 8 or Table 9 compounds, to comply with the requirements of this paragraph. For each wastewater stream, measurements shall be made either at the point of determination, or downstream of the point of determination with adjustment for concentration changes made according to paragraph (b)(6) of this section. A minimum of three samples from each wastewater stream shall be taken. Samples may be grab samples or composite samples.
- 40. Subpart G, at 40 C.F.R. § 63.144(b)(5)(ii), requires an owner or operator to prepare a sampling plan. Wastewater samples shall be collected using sampling procedures which minimize loss of organic compounds during sample collection and analysis and maintain sample integrity.
- 41. Subpart G, at 40 C.F.R. § 63.144(c)(1), states that an owner or operator may use knowledge of the wastewater stream and/or the process to determine the annual average flow rate. Where knowledge is used to determine the annual average flow rate, the owner or operator shall provide sufficient information to document the flow rate for wastewater streams determined to be Group 2 wastewater streams.

NESHAP for Organic Hazardous Air Pollutants From the Synthetic Organic Chemical Manufacturing Industry (Subpart F)

42. Subpart F, at 40 C.F.R. § 63.101, defines "wastewater" as water that "....(1) contains either: (i) an annual average concentration of Table 9 compounds (as defined in § 63.111 of subpart G) of at least 5 parts per million by weight and has an annual average flow rate of 0.02 liter per minute or greater, or (ii) an annual average concentration of Table 9

compounds (as defined in § 63.111 of subpart G) of at least 10,000 parts per million by weight at any flow rate, and that (2) is discarded from a chemical manufacturing process unit that meets all of the criteria specified in § 63.100 (b)(1) through (b)(3) of this subpart. Wastewater is process wastewater or maintenance wastewater.

#### NESHAP for Equipment Leaks – Control Level 2 (Subpart UU)

- 43. On June 29, 1999, EPA promulgated the 40 C.F.R. Part 63, Subpart UU, 64 Fed. Reg. 34899 (June 29, 1999).
- 44. As stated in paragraphs 12 and 14, among the requirements of 40 C.F.R Part 63, Subpart FFFF is 40 C.F.R. § 63.2480(a) and Table 6, which require that organic manufacturing facilities comply with either Subpart UU, or 40 C.F.R. Part 63, Subpart H, or 40 C.F.R. Part 65, Subpart F. On October 7, 2008, Solvay elected to comply with Subpart UU.
- 45. Subpart UU, at 40 C.F.R. § 63.1020, defines "open-ended valve or line" as any valve, except relief valves, having one side of the valve seat in contact with process fluid and one side open to atmosphere, either directly or through open piping.
- 46. Subpart UU, at 40 C.F.R. § 63.1022(a), states that "equipment subject to this subpart shall be identified. Identification of the equipment does not require physical tagging of the equipment. For example, the equipment may be identified on a plant site plan, in log entries, by designation of process unit or affected facility boundaries by some form of weatherproof identification, or by other appropriate methods."
- 47. Subpart UU, at 40 C.F.R. § 63.1023(a), requires that the owner or operator of a regulated source subject to this subpart shall monitor regulated equipment as specified in paragraph (a)(1) of this section for instrument monitoring and paragraph (a)(2) of this section for sensory monitoring.

- 48. Subpart UU, at 40 C.F.R. § 63.1023(a)(i), requires that the valves in gas and vapor service and in light liquid service shall be monitored pursuant to 40 C.F.R. § 63.1025(b).
- 49. Subpart UU, at 40 C.F.R. § 63.1023(b), requires instrument monitoring shall comply with the requirements specified in paragraphs (b)(1) through (b)(6) of this section.
- 50. Subpart UU, at 40 C.F.R. § 63.1023(b)(1), requires monitoring shall comply with Method 21 of 40 CFR Part 60, Appendix A, except as otherwise provided in this section.
- 51. Subpart UU, at 40 C.F.R. § 63.1024(a), requires the owner or operator of an affected source to repair each leak detected as soon as practical, but not later than 15 calendar days after it is detected, except as provided in paragraphs (d) and (e) of this section. A first attempt at repair as defined in this subpart shall be made no later than 5 calendar days after the leak is detected.
- 52. Subpart UU, at 40 C.F.R. § 63.1024(d), requires the owner or operator of an affected source to maintain a record of the facts that explain any delay of repairs and, where appropriate, why the repair was technically infeasible without a process unit shutdown.
- 53. Subpart UU, at 40 C.F.R. § 63.1024(d)(5), states that delay of repair beyond a process unit or affected facility shutdown will be allowed for a valve if valve assembly replacement is necessary during the process unit or affected facility shutdown, and valve assembly supplies have been depleted, and valve assembly supplies had been sufficiently stocked before the supplies were depleted. Delay of repair beyond the second process unit or affected facility shutdown will not be allowed unless the third process unit or affected facility shutdown occurs sooner than 6 months after the first process unit or affected facility shutdown.
- 54. Subpart UU, at 40 C.F.R. § 63.1025(b), states that all valves shall be monitored for leaks at the intervals specified in paragraphs (b)(3) and/or (b)(4) of this section.

- 55. Subpart UU, at 40 C.F.R. § 63.1025(b)(1), states that valves shall be monitored to detect leaks by the method specified in 40 C.F.R. § 63.1023(b) and, as applicable, 40 C.F.R. § 63.1023(c).
- 56. Subpart UU, at 40 C.F.R. § 63.1025(d)(2), states that, after a leak has been repaired, the valve shall be monitored at least once within the first 3 months after the leak has been repaired. The monitoring required by this paragraph is in addition to the monitoring required to satisfy the definition of repaired and first attempt at repair.
- 57. Subpart UU, at 40 C.F.R. § 63.1026(b)(1), states that that each pump in light liquid service shall be monitored monthly to detect leaks by the method specified in 40 C.F.R. § 63.1023(b) and, as applicable, 40 C.F.R. § 63.1023(c).
- 58. Subpart UU, at 40 C.F.R. § 63.1026(b)(4), states that that each pump shall be checked by visual inspection each calendar week for indications of liquids dripping from the pump seal. The owner or operator shall document that the inspection was conducted and the date of the inspection.
- 59. Subpart UU, at 40 C.F.R. § 63.1027(b), states that the owner or operator shall monitor all connectors in gas and vapor and light liquid service as specified in paragraphs (a) and (b)(3) of this section, except as allowed in 40 C.F.R. § 63.1021(b), 40 C.F.R. § 63.1036, 40 C.F.R. § 63.1037, or as specified in paragraph (e) of this section.
- 60. Subpart UU, at 40 C.F.R. § 63.1028(c)(3), requires that each agitator seal in gas or vapor or light liquid service shall be checked by visual inspection each calendar week for indications of liquids dripping from the agitator seal. The owner or operator shall document that the inspection was conducted and the date of the inspection.

- 61. Subpart UU, at 40 C.F.R. § 63.1029(b), states that "...Pumps, valves, connectors, and agitators in heavy liquid service...shall be monitored within 5 calendar days by the method specified in § 63.1023(b) and, as applicable, § 63.1023(c), if evidence of a potential leak to the atmosphere is found by visual, audible, olfactory, or any other detection method, unless the potential leak is repaired as required in paragraph (c) of this section."
- 62. Subpart UU, at 40 C.F.R. § 63.1030(c), states that, after each pressure release of a pressure relief device in gas or vapor service, the pressure relief device shall be returned to a condition indicated by an instrument reading of less than 500 parts per million, as soon as practical, but no later than 5 calendar days after each pressure release, except as provided in 40 C.F.R. § 63.1024(d).
- 63. Subpart UU, at 40 C.F.R. § 63.1030(c)(3), requires the owner or operator of an affected source to record the dates and results of the monitoring required by paragraph (c)(2) of 40 C.F.R. § 63.1030 following a pressure release, including the background level measured and the maximum instrument reading measured during the monitoring.
- 64. Subpart UU, at 40 C.F.R. § 63.1033(b)(1), states that each open-ended valve or line shall be equipped with a cap, blind flange, plug, or a second valve.
- 65. 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 \$320,000 for CAA violations that occurred after December 6, 2013 through November 2, 2015 and/or \$48,192 per day of violation up to a total of \$385,535 for violations that occurred after November 2, 2015 under Section 113(d)(1) of the CAA, 42 U.S.C. § 7413(d)(1), and 40 C.F.R. Part 19.
- 66. The Administrator may assess a penalty greater than \$385,535 where the Administrator and the Attorney General of the United States jointly determine that a matter

involving a larger penalty is appropriate for an administrative penalty action. 42 U.S.C. § 7413(d)(1) and 40 C.F.R. Part 19.

- 67. The Administrator and the Attorney General of the United States, each through their respective delegates, have determined jointly that this matter involving a penalty greater than \$385,535 is appropriate for an administrative penalty action.
- 68. 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.
- 69. 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.

#### **U.S. EPA's Factual Allegations and Alleged Violations**

- 70. Solvay owns and operates a resin manufacturing plant at 17005 State Route 7, Marietta, Ohio ("Facility").
- 71. Solvay emits monochlorobenzene (MCB), methyl chloride (MeCl), and other HAPs in a combined quantity of over 25 tons per year, and is thus a major source of HAPs, as defined in Section 112(a) of the CAA, 42 U.S.C. § 7412(a).
- 72. Solvay owns and operates two MCPUs as defined at 40 C.F.R. § 63.2435(b), in the resin manufacturing process at the facility: the Udel Resin unit process (P003) and the Radel Resin unit process (P010). P003 and P010 are subject to the requirements of 40 C.F.R. Part 63, Subpart FFFF and, by reference, Subpart A, Subpart G, Subpart UU, and Subpart SS. Process

vents, storage vessels, transfer operations, and wastewater at the facility are also subject to the requirements at 40 C.F.R. Part 63, Subpart G.

- 73. From June 9, 2015, through June 12, 2015, EPA conducted an unannounced CAA investigation of the facility for compliance with Subpart FFFF (hereafter referred to as the "2015 Inspection").
- 74. During the 2015 Inspection, EPA found that the facility has a total of 29 and 27 process condensers for the P003 and P010, respectively. In its Notification of Compliance Status MON report for the facility, dated October 7, 2008 ("2008 Notification"), Solvay identified a total of 12 process condensers for the P010, three of which were used in boiling operations. In its Notification of Compliance Status MON report for the facility dated October 20, 2009 ("2009 Notification"), Solvay identified a total of four process condensers for the P003, two of which were used in boiling operations.
- 75. During the 2015 Inspection, EPA found that the facility had expanded its production capacity on at least three occasions since 2007. Specifically, EPA alleges P003 was expanded in 2009 (a total of three reactors were added to the process), and P010 was last expanded in 2014. In addition, the facility's vent stream control devices (i.e., the carbon adsorption system and the cryogenic condenser) were replaced by two thermal oxidizer/wet scrubber control systems in May 2009.
- 76. During the 2015 Inspection, EPA discovered five open-ended lines (OELs) at P010 without a cap, blind flange, plug, or second valve, identified as: (1) the west line of MMV 571-04; (2) the line by pump G-942; (3) unrecorded location, shown to Solvay personnel during the inspection; (4) the line near the pump G-1598; and (5) the line south of the pump G-1598. The last two lines were equipped with second valves. According to Solvay personnel, all second

valves were less than 300 hours in service at the time of the 2015 Inspection, and thus were not subject to the facility's leak detection and repair (LDAR) program.

- 77. During the 2015 Inspection, EPA found two valves at P010 to be visually leaking; the valve east of Tank 885, and the valve by pump G-1806 to the MCB tank near MMV 1802-08B.
- 78. During the 2015 Inspection, EPA found polymer on the ground from three sample lines at P010.
- 79. During the 2015 Inspection, EPA found two valves (715-10 and 720-10) at P003 to be visually leaking.
- 80. During the 2015 Inspection, EPA found a visual leak of dried polymer at two valves at 721-05 (P003).
- 81. During the 2015 Inspection, EPA found that insulated valves are not monitored by Solvay. Solvay personnel stated that insulated valves are not required to be monitored by the MON.
- 82. After the 2015 Inspection, Solvay submitted two letters to EPA on June 10, 2015, and June 11, 2015, respectively ("June 2015 Letters").
- 83. On June 23, 2015, Solvay provided EPA with the LDAR monitoring data from its LeakDAS database.
- 84. In the June 2015 Letters, Solvay provided to EPA the "August 2005 MON MACT Wastewater Characterization" report ("2005 Report"). The 2005 Report shows procedures and rationales, including lab reports that were used to determine the facility's process wastewater Group status. The 2005 Report states that "Results for samples collected on December 6, 2004 and the morning of December 7, 2004 are not valid due to high sample blank concentrations."

However, the analytical results for sample collected on the afternoon of December 7, 2004, were used for the wastewater Group status determination, and the lab analytical report dated December 22, 2004, shows no daily blank sample taken on December 7, 2004.

- 85. Solvay conducted performance testing on the carbon adsorption system on September 23 through 24, 2008 (2008 Report). Two additional HAPs, methanol and 1,3-butadiene, which were not included in the air emission profile, were detected during the performance test. Methanol is a soluble HAP listed in Table 9 of the MON, and 1,3-butadiene is a partially soluble HAP listed in Table 8 of the MON. These soluble and partially soluble HAPs, present at Solvay's process vent stream, were not analyzed during the wastewater stream Group status determination.
- 86. In its 2008 Report, Solvay states that "Solvay has estimated that annual average concentrations for wastewater HAPs are less than 1,000 ppmw. Therefore, the flow rate in liters per minute does not affect the applicability determination."
- 87. In its semi-annual MON report for the facility dated August 30, 2011, and covering the reporting period of January 1, 2011, through June 30, 2011, Solvay identified the following deviations:
  - a. OELs; and
  - b. Failed to perform follow-up monitoring for several valves previously found leaking;
- 88. In its semi-annual MON report for the facility dated February 24, 2012, and covering the reporting period of July 1, 2011, through December 31, 2011, Solvay identified the following deviations:
  - a. OELs;
  - b. Failed to perform follow-up monitoring for several valves previously found leaking; and

- c. Failed to perform monthly Method 21 monitoring for few pumps;
- 89. In its semi-annual MON report for the facility dated August 31, 2012, and covering the reporting period of January 1, 2012, through June 30, 2012, Solvay identified the following deviations:
  - a. OELs; and
  - b. Failed to perform follow-up monitoring for two (2) valves previously found leaking.
- 90. In its semi-annual MON report for the facility dated February 26, 2013, and covering the reporting period of July 1, 2012, through December 31, 2012, Solvay identified the following deviations:
  - a. OELs;
  - b. Failed to perform follow-up monitoring for nine (9) valves previously found leaking;
  - c. Failed to record two (2) rupture disks delayed repairs; and
  - d. Failed to record into facility's LeakDAS the Method 21 monitoring performed on the pressure relieve device PSV-920-104, following the pressure relief event.
- 91. In its semi-annual MON report for the facility dated August 30, 2013, and covering the reporting period of January 1, 2013, through June 30, 2013, Solvay identified the following deviations:
  - a. OELs;
  - b. Failed to perform weekly visual inspections for leaks for three (3) valves;
  - c. Failed to perform initial Method 21 monitoring for three (3) valves;
  - d. Failed to perform weekly visual inspections for leaks for one (1) pump; and
  - e. Failed to perform monthly Method 21 monitoring for one (1) pump.

- 92. In its semi-annual MON report for the facility dated February 27, 2014, and covering the reporting period of July 1, 2013, through December 31, 2013, Solvay identified the following deviations:
  - a. OELs;
  - b. Failed to perform monthly Method 21 monitoring for one (1) pump;
  - c. Failed to perform weekly visual inspections for leaks for a few pumps;
  - d. Failed to make a first attempt at repair of two (2) valves within five (5) calendar days; and
  - e. Failed to make a first attempt at repair of one (1) rupture disk within five (5) calendar days.
- 93. In its semi-annual MON report for the facility dated August 29, 2014, and covering the reporting period of January 1, 2014, through June 30, 2014, Solvay identified the following deviations:
  - a. OELs;
  - b. Failed to perform weekly visual inspections for leaks for a few pumps;
  - c. Failed to perform monthly Method 21 monitoring for one (1) pump;
  - d. Failed to perform follow-up monitoring for one (1) valve previously found leaking;
  - e. Method 21 monitoring performed within nine (9) days from when the visual leak was observed for one (1) connector. The connector was placed on delay of repair within five (5) days of performing Method 21 monitoring;
  - f. Delay of repair for two (2) P003 components extended beyond the process unit shutdown; and
  - g. Used incorrect calibration gas concentrations for Method 21 monitoring.
- 94. In its semi-annual MON report for the facility dated February 27, 2015, and covering the reporting period of July 1, 2014, through December 31, 2014, Solvay identified the following deviations:

- a. OEL;
- b. Failed to perform a weekly visual inspection for leaks for two (2) pumps;
- c. Failed to perform monthly Method 21 monitoring for one (1) pump;
- d. Failed to perform follow-up monitoring for some valves previously repaired;
- e. Failed to perform follow-up monitoring for one (1) flange previously repaired;
- f. Failed to make a first attempt at repair of three (3) valves within five (5) calendar days;
- g. Failed to perform Method 21 monitoring for certain difficult-to-monitor valves. All valves were monitored in January 2015;
- h. Delay of repair for two (2) valves in P003 extended beyond two (2) unscheduled process unit shutdowns; and
- i. Missing identification designations for a number of components.
- 95. In its semi-annual MON report for the facility dated August 31, 2015, and covering the reporting period of January 1, 2015, through June 30, 2015, Solvay identified the following deviations:
  - a. Two (2) OELs;
  - b. Failed to record weekly visual inspections for leaks for certain pumps and agitators;
  - c. Failed to perform monthly Method 21 monitoring for two (2) pumps removed from HAP service, and for one (1) newly installed pump;
  - d. Failed to perform follow-up monitoring for six (6) valves previously repaired;
  - e. Failed to make a first attempt at repair of four (4) valves within five (5) calendar days;
  - f. Failed to make a first attempt at repair of one (1) instrumentation within five (5) calendar days;
  - g. Delay of repair for one (1) pump in P003 extended beyond the process unit shutdown; and
  - h. Required update of equipment identification designations for a number of components.

- 96. In its semi-annual MON report for the facility dated February 26, 2016, and covering the reporting period of July 1, 2015, through December 31, 2015, Solvay identified the following deviations:
  - a. OEL;
  - b. Failed to perform monthly visual inspections for leaks for one (1) bypass line;
  - c. Missing equipment identification designations for a number of components (valves, pumps, etc.);
  - d. Missing records of weekly visual inspections for leaks for pumps; and
  - e. Missing records of weekly visual inspections for leaks for agitators.
- 97. In its semi-annual MON reports for the facility dated August 30, 2011, February 24, 2012, August 31, 2012, February 26, 2013, August 30, 2013, February 27, 2014, August 29, 2014, February 27, 2015, August 31, 2015, and February 26, 2016, covering the reporting period of January 1, 2011, through December 31, 2015, Solvay reported the following:
  - a. P003 LDAR Summary of Numbers of Valves Monitored for Leaks:

	1st Quarter	2 <sup>nd</sup> Quarter	3 <sup>rd</sup> Quarter	4 <sup>th</sup> Quarter
2011	1,920	1,928	1,886	1,802
2012	1,646	1,814	1,817	1,814
2013(1)	1,739	1,779	Not Reported	1,667
			•	
2014	1,899	1,900	1,581	(2)
	ĺ	ĺ	ĺ	
2015			Not applicable	1,789
			11	,

<sup>(1)</sup> Total number of valves counts revised to 1,749 and 2,609 for the Udel and Radel Resin units, respectively, during the 2nd half of 2013 reporting period.

#### b. P010 LDAR Summary of Numbers of Valves Monitoring for Leaks:

	1st Quarter	2 <sup>nd</sup> Quarter	3 <sup>rd</sup> Quarter	4 <sup>th</sup> Quarter
2011	2,738	2,710	2,654	2,603

<sup>(2)</sup> The number represent the July 2014 through June 2015 operational period. Based on previous percent leak values, Solvay elected to monitor each valve once every four (4) quarters starting in July 2014.

2012	2,164	2,509	2,936	2,801
2013(1)	2,445	2,442	Not Reported	2,551
2014	2,538	2,873	2,627	7(2)
2015			Not applicable	2,926

<sup>(1)</sup> Total number of valves counts revised to 1,749 and 2,609 for the Udel and Radel Resin units, respectively, during the 2nd half of 2013 reporting period.

- c. No system downtimes;
- d. No new operating scenarios;
- e. No process changes; and
- f. Solvent Feed Tank (C-1897) placed into service in March 2011 for the Radel Resin unit.
- 98. On September 28, 2016, EPA issued to Solvay a Finding of Violation (FOV) alleging that Solvay violated the NESHAPs at Subpart FFFF, Subpart G, Subpart UU, and Subpart SS. Specifically, among other things and as further detailed in Paragraphs 99 123 below, Solvay failed to: (1) perform process condenser uncontrolled HAP emission evaluation and demonstrate proper operation of process condensers used for any boiling operations; (2) properly determine its wastewater streams group status and required controls; (3) install a cap, plug, blind flange, or second valve on open-ended lines; (4) attempt to repair leaks at valves, pumps, rupture disks, connectors, and instrumentation within 5 days, and completely repair these within 15 days; (5) perform weekly visual inspections for leaks for pumps; (6) perform monthly EPA Reference Method 21 monitoring for pumps; and (7) perform follow-up EPA Reference Method 21 monitoring for pumps and valves following repairs.
- 99. Solvay failed to perform process condenser uncontrolled HAP emissions evaluations and report the results with supporting rationales in its notification of compliance

<sup>(2)</sup> The number represent the July 2014 through June 2015 operational period. Based on previous percent leak values, Solvay elected to monitor each valve once every four (4) quarters starting in July 2014.

status reports for its P003, in violation of the MON at 40 C.F.R.  $\S$  63.2460(c)(1) and 63.2460(c)(2)(v).

- 100. Solvay failed to perform process condenser uncontrolled HAP emissions evaluations and report the results with supporting rationales in its notification of compliance status reports for its P010, in violation of the MON at 40 C.F.R. § 63.2460(c)(1) and 63.2460(c)(2)(v).
- 101. Solvay failed to demonstrate proper operation of the process condensers used for any boiling operations at the facility, in violation of the MON at 40 C.F.R. § 63.2460(c)(2)(v).
- 102. Solvay failed to properly determine wastewater streams group status by not analyzing wastewater stream samples for two additional Table 8 and Table 9 process knowledge HAPs, in violation of the MON at 40 C.F.R. § 63.2480(a) and the HON at 40 C.F.R. § 63.132(a)(1), 63.132(c), and 63.132(d).
- 103. Solvay failed to provide sufficient information to document the flow rate for wastewater streams determined to be Group 2 wastewater streams, in violation of the MON at 40 C.F.R. § 63.2480(a) and the HON at 40 C.F.R. § 63.144(c).
- 104. Solvay failed to properly determine wastewater stream group status by not taking a minimum of three samples from each wastewater stream, in violation of the HON at 40 C.F.R. § 63.144(5).
- 105. Solvay failed to follow sampling procedures outline in its sampling plan by not taking a blank sample, in violation of the HON at 40 C.F.R. § 63.144(b)(5)(ii).
- 106. Solvay failed to properly re-determine its process wastewater group status for each Group 2 stream, to determine whether the stream is Group 1 or Group 2, in violation of the HON at 40 C.F.R. § 63.132(c)(3)-(d)(3).

- 107. Solvay failed to equip each open-ended line at the facility with a cap, blind flange, plug, or second valve, in violation of the MON at 40 C.F.R. § 63.2480(a) and Subpart UU at 40 C.F.R. § 63.1033(b)(1).
- 108. Solvay failed to perform Method 21 leak monitoring for a pressure relief device following a pressure release at the facility, in violation of the MON at 40 C.F.R. § 63.2480(a) and Subpart UU at 40 C.F.R. § 63.1030(c).
- 109. Solvay failed to perform weekly visual pump inspections for leaks at the facility, in violation of the MON at 40 C.F.R. § 63.2480(a) and Subpart UU at 40 C.F.R. § 63.1026(b)(4).
- 110. Solvay failed to perform weekly visual inspections for leaks for valves at the facility, in violation of the MON at 40 C.F.R. § 63.2480(a) and Subpart UU at 40 C.F.R. § 63.1025(b)(1).
- 111. Solvay failed to perform weekly visual inspections for leaks for agitators at the facility, in violation of the MON at 40 C.F.R. § 63.2480(a) and Subpart UU at 40 C.F.R. § 63.1028(c)(3).
- 112. Solvay failed to perform monthly Method 21 monitoring for leaks of pumps at the facility, in violation of the MON at 40 C.F.R. § 63.2480(a) and Subpart UU at 40 C.F.R. § 63.1026(b)(1).
- 113. Solvay failed to perform follow-up monitoring for leaks for valves following repairs at the facility, in violation of the MON at 40 C.F.R. § 63.2480(a) and Subpart UU at 40 C.F.R. § 63.1025(d)(2).
- 114. Solvay failed to perform follow-up monitoring for leaks for one (1) connector following repairs at the facility, in violation of the MON at 40 C.F.R. § 63.2480(a) and Subpart UU at 40 C.F.R. § 63.1027(b).

- 115. Solvay failed to make a first attempt at repair of rupture disks at the facility within five (5) calendar days of discovering evidence of a leak, in violation of the MON at 40 C.F.R. § 63.2480(a) and Subpart UU at 40 C.F.R. § 63.1024(a).
- 116. Solvay failed to repair completely ruptured disks at the facility within fifteen (15) calendar days of discovering evidence of a leak, in violation of the MON at 40 C.F.R. § 63.2480(a) and Subpart UU at 40 C.F.R. § 63.1024(a).
- 117. Solvay failed to make a first attempt at repair of valves at the facility within five (5) calendar days of discovering evidence of a leak, in violation of the MON at 40 C.F.R. § 63.2480(a) and Subpart UU at 40 C.F.R. § 63.1024(a).
- 118. Solvay failed to make a repair of valves at the facility during a process unit shutdown, in violation of the MON at 40 C.F.R. § 63.2480(a) and Subpart UU at 40 C.F.R. § 63.1024(d).
- 119. Solvay failed to make a first attempt at repair of one (1) connector at the facility within five (5) calendar days of discovering evidence of a leak, in violation of the MON at 40 C.F.R. § 63.2480(a) and Subpart UU at 40 C.F.R. § 63.1029(b).
- 120. Solvay failed to make a first attempt at repair of one (1) instrumentation at the facility within five (5) calendar days of discovering evidence of a leak, in violation of the MON at 40 C.F.R. § 63.2480(a) and Subpart UU at 40 C.F.R. § 63.1029(b).
- 121. Solvay failed to properly perform Method 21 monitoring for leaks by using incorrect calibration gas concentrations for its monitoring device, in violation of the MON at 40 C.F.R. § 63.2480(a) and Subpart UU at 40 C.F.R. § 63.1023(b).

- 122. Solvay failed to identify several components, such as valves and pumps, at its facility, in violation of the MON at 40 C.F.R. § 63.2480(a) and Subpart UU at 40 C.F.R. § 63.1022(a).
- 123. Solvay failed to monitor all valves during each periodic monitoring event, as referenced in Paragraphs 76 and 93, in violation of the MON at 40 C.F.R. § 63.2480(a) and Subpart UU at 40 C.F.R. § 63.1025(b).
- 124. On November 22, 2016, and subsequently thereafter, representatives of Solvay and EPA discussed the September 28, 2016, FOV. Solvay worked cooperatively with EPA to address its concerns.

#### **Civil Penalty**

- 125. Based on analysis of the factors specified in Section 113(e) of the CAA, 42 U.S.C. § 7413(e), the alleged facts of this case, as well as Respondent's cooperation and prompt return to compliance, Complainant has determined that an appropriate civil penalty to settle this action is \$260,000.
- 126. Within 30 days after the effective date of this CAFO, Respondent must pay a \$260,000 civil penalty by sending a cashier's or certified check, payable to "Treasurer, United States of America," to:

U.S. EPA Fines and Penalties Cincinnati Finance Center P.O. Box 979077 St. Louis, Missouri 63197-9000

The check must note Respondent's name and the docket number of this CAFO.

127. Respondent must send a notice of payment that states Respondent's name and the docket number of this CAFO to EPA at the following addresses when it pays the penalty:

Attn: Compliance Tracker (ECA-18J)
Air Enforcement and Compliance Assurance Branch
Enforcement and Compliance Assurance Division
U.S. Environmental Protection Agency, Region 5
77 W. Jackson Boulevard
Chicago, Illinois 60604

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

Regional Hearing Clerk (E-19J)
U.S. Environmental Protection Agency, Region 5
77 W. Jackson Boulevard
Chicago, Illinois 60604

- 128. This civil penalty is not deductible for federal tax purposes.
- 129. If Respondent does not pay timely 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 CAA, 42 U.S.C. § 7413(d)(5). The validity, amount and appropriateness of the civil penalty are not reviewable in a collection action.
- 130. 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).

#### **General Provisions**

- 131. The parties consent to service of this CAFO by e-mail at the following e-mail addresses: morris.james@epa.gov (for Complainant), and <a href="mailto:svharris@sidley.com">svharris@sidley.com</a> (for Respondent). The parties waive their right to service by the methods specified in 40 C.F.R. § 22.6.
- 132. This CAFO resolves only Respondent's liability for federal civil penalties for the violations alleged in the FOV and for violations alleged in this CAFO.
- 133. This 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.
- 134. This CAFO does not affect Respondent's responsibility to comply with the CAA and other applicable federal, state and local laws. Except as provided in paragraph 132, above, compliance with this CAFO will not be a defense to any actions subsequently commenced pursuant to federal laws administered by EPA.
- 135. Respondent certifies that it is complying fully with Subpart F, Subpart G, Subpart UU, and Subpart FFFF.
- 136. This CAFO will terminate upon Respondent's payment of the civil penalty delineated in paragraph 125.
- 137. 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 CAA, 42 U.S.C. § 7413(e).
  - 138. The terms of this CAFO bind Respondent, its successors and assigns.
- 139. 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.

- 140. Each party agrees to bear its own costs and attorneys' fees in this action.
- 141. This CAFO constitutes the entire agreement between the parties.

# In the Matter of: Solvay Specialty Polymers LLC Consent Agreement and Final Order

**Solvay Specialty Polymers LLC, Respondent** 

12/18/2020	W.J.Kandel
Date	Wally Kandel, Senior Vice President
	and Marietta Site Manager

# In the Matter of: Solvay Specialty Polymers LLC Consent Agreement and Final Order

### **United States Environmental Protection Agency**

	MICHAEL HARRIS Digitally signed by MICHAEL HARRIS Date: 2020.12.28 11:45:01 -06'00'
Date	Michael D. Harris
	Division Director
	Enforcement and Compliance Assurance Division
	U.S. Environmental Protection Agency, Region 5

In the Matter of: Solvay Specialty Polymers LLC

**Consent Agreement and Final Order** 

Docket No. CAA-05-2021-0004

### **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.

	ANN COYLE Digitally signed by ANN COYLE Date: 2020.12.30 11:15:08 -06'00'
Date	Ann L. Coyle
	Regional Judicial Officer
	U.S. Environmental Protection Agency
	Region 5

Consent Agreement and Final Order

In the matter of: Solvay Specialty Polymers LLC

Docket Number: CAA-05-2021-0004

## **CERTIFICATE OF SERVICE**

•	ect copy of the foregoing Consent Agreement and Final, which was filed on December 30, 2020, in the following
Copy by E-mail to Attorney for Respondent:	Susan V. Harris, Counsel, Sidley Austin LLP svharris@sidley.com
Copy by E-mail to Attorney for Complainant:	Marcy Toney toney.marcy@epa.gov
Copy by E-mail to Regional Judicial Officer:	Ann Coyle coyle.ann@epa.gov
Dated:	LADAWN WHITEHEAD Digitally signed by LADAWN WHITEHEAD Date: 2020.12.30 12:52:37 -06'00'  LaDawn Whitehead Regional Hearing Clerk

U.S. Environmental Protection Agency, Region 5