



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

JUN 11 2015

REPLY TO THE ATTENTION OF:

CERTIFIED MAIL  
RETURN RECEIPT REQUESTED

Larry Fioritto  
Plant Manager  
Perstorp Polyols, Inc.  
600 Matzinger Road  
Toledo, Ohio 43612

Re: Administrative Order EPA-5-15-113(a)-OH-08

Dear Mr. Fioritto:

Enclosed is an executed original of the Administrative Consent Order regarding the above captioned case. If you have any questions about the Order, please contact me at (312) 886-6797.

Sincerely,

A handwritten signature in cursive script, appearing to read "Sarah Marshall".

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

Enclosure:

cc: Kurt Bezeau  
Ohio Environmental Protection Agency

David Nunn  
Eastman & Smith Ltd.



5. Section 112(c) of the Act, 42 U.S.C. § 7412(c), requires EPA to publish a list of categories of sources which EPA finds present a threat of adverse effects to human health or the environment due to emissions of HAP, and to promulgate emission standards for each source category. These standards are known as “national emission standards for hazardous air pollutants” or “NESHAP.” EPA codifies these requirements at 40 C.F.R. Parts 61 and 63.
6. The NESHAPs are national technology-based performance standards for HAP sources in each category that become effective on a specified date. The purpose of these standards is to ensure that all sources achieve the maximum degree of reduction in emissions of HAP that EPA determines is achievable for each source category.
7. Section 112(i)(3) of the Act, 42 U.S.C. § 7412(i)(3), and 40 C.F.R. §§ 61.05 and 63.4 prohibit the owner or operator of any source from operating such source in violation of any NESHAP applicable to such source.
8. The NESHAP, at 40 C.F.R. Part 63, Subpart A, contains general provisions applicable to the owner or operator of any stationary source that contains an affected facility subject to the NESHAP at Part 63. These include definitions at 40 C.F.R. § 63.2.
9. The NESHAP, at 40 C.F.R. § 63.2, defines “existing source” as any affected source that is not a new source.
10. The NESHAP, at 40 C.F.R. § 63.2, defines “new source” as any affected source the construction or reconstruction of which is commenced after EPA first proposes a relevant emission standard under 40 C.F.R. Part 63 establishing an emission standard applicable to such source.
11. The NESHAP, at 40 C.F.R. § 63.2, defines “fugitive emissions” as those emissions from a stationary source that could not reasonably pass through a stack, chimney, vent, or other

functionally equivalent opening. Under Section 112 of the Act, all fugitive emissions are to be considered in determining whether a stationary source is a major source.

12. The NESHAP, at 40 C.F.R. § 63.2, defines “hazardous air pollutants” as any air pollutant listed in or pursuant to Section 112(b) of the Act.
13. On November 10, 2003, EPA promulgated the NESHAP for Miscellaneous Organic Chemical Manufacturing (MON), codified at 40 C.F.R. Part 63, Subpart FFFF. 68 Fed. Reg. 63888. The NESHAP for MON establishes emission standards, requirements to demonstrate initial and continuous compliance with emission limits, operating limits, work practice standards, and recordkeeping requirements associated with miscellaneous organic chemical manufacturing. *See* 40 C.F.R. § 63.2430.
14. The NESHAP for MON, at 40 C.F.R. § 63.2445(b), provides that owners and operators of existing sources subject to the MON must comply with the requirements for existing sources no later than May 10, 2008.
15. The NESHAP for MON, at 40 C.F.R. § 63.2435(a), provides that owners and operators are subject to the MON if they operate miscellaneous organic chemical manufacturing process units (MCPU) that are located at, or are part of, a major source of HAP emissions as defined in Section 112(a) of the Act.
16. The NESHAP for MON, at 40 C.F.R. § 63.2550, defines “miscellaneous organic chemical manufacturing process” as all equipment which collectively functions to produce a product or isolated intermediate that is “material” as described in 40 C.F.R. § 63.2435(b). Process equipment includes any, all, or a combination, of reaction, recovery, separation, purification, or other activity, operation, manufacture, or treatment which is used to produce a product or isolated intermediate.

17. The NESHAP for MON, at 40 C.F.R. § 63.2435(b), provides that a MCPU includes equipment necessary to operate a miscellaneous organic chemical manufacturing process that, among other things, processes, uses, or generates any of the organic HAPs listed in Section 112(b) of the Act. A 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, including but not limited to an organic chemical with an SIC code listed in 40 C.F.R. § 63.2435(b)(1)(i).
18. The NESHAP for MON, at 40 C.F.R. § 63.2550, defines “in organic HAP service” to mean 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 as determined according to Method 18 of 40 C.F.R. Part 60, Appendix A. *See also* 40 C.F.R. § 63.180(d)(1).
19. On April 22, 1994, EPA promulgated the following National Emission Standards for Hazardous Air Pollutants (NESHAP):
  - a. National Emission Standards for Organic Hazardous Air Pollutants from the Synthetic Organic Chemical Manufacturing Industry (SOCMI) at 40 C.F.R. Part 63, Subpart F (59 Fed. Reg. 19454);
  - b. National Emission Standards for Organic Hazardous Air Pollutants from the Synthetic Organic Chemical Manufacturing Industry for Process Vents, Storage Vessels, Transfer Operations, and Wastewater at 40 C.F.R. Part 63, Subpart G (59 Fed. Reg. 19468); and
  - c. National Emission Standards for Organic Hazardous Air Pollutants for Equipment Leaks at 40 C.F.R. Part 63, Subpart H (59 Fed. Reg. 19568).

These standards are collectively known as the Hazardous Organic NESHAP (HON).

20. 40 C.F.R. § 63.113(a) states the owner or operator of a Group 1 process vent as defined in this subpart shall comply with the requirements of paragraph (a)(1), (2), or (3) of this section. The owner or operator who transfers a gas stream that has the characteristics specified in 40 C.F.R. § 63.107 (b) through (h) or meets the criteria specified in 40 C.F.R. § 63.107(i) to an off-site location or an on-site location not owned or operated by the owner or operator of the source for disposal shall comply with the requirements of paragraph (i) of this section.
21. 40 C.F.R. § 60.615(c)(2) states that each owner or operator of a catalytic incinerator, shall record all 3-hour periods of operation during which the average temperature of the vent stream immediately before the catalyst bed is more than 28°C (50°F) below the average temperature of the vent stream during the most recent performance test at which compliance with 40 C.F.R. § 60.612(a) was determined. The owner or operator also shall record all 3-hour periods of operation during which the average temperature difference across the catalyst bed is less than 80 percent of the average temperature difference of the device during the most recent performance test at which compliance with 40 C.F.R. § 60.612(a) was determined.
22. 40 C.F.R. § 63.113(a)(2) states that the owner or operator of a Group 1 process vent shall reduce emissions of total organic hazardous air pollutants by 98 weight-percent or to a concentration of 20 parts per million by volume, whichever is less stringent. For combustion devices, the emission reduction or concentration shall be calculated on a dry basis, corrected to 3-percent oxygen, and compliance can be determined by measuring either organic hazardous air pollutants or total organic carbon using the procedures in 40 C.F.R. § 63.116 of this subpart.

23. 40 C.F.R. § 63.119(a), Subpart G, states that for each storage vessel to which this subpart applies, the owner or operator shall comply with the control technology requirements of paragraphs (a)(1), (a)(2), (a)(3), and (a)(4) of this section according to the schedule provisions of 40 C.F.R. § 63.100 of Subpart F of this part.
24. 40 C.F.R. § 63.122(a), Subpart G, states that for each Group 1 storage vessel, the owner or operator shall comply with the reporting requirements of paragraphs (a)(1) through (a)(5) of this section.
25. 40 C.F.R. § 63.123(a), Subpart G, states that each owner or operator of a Group 1 or Group 2 storage vessel shall keep readily accessible records showing the dimensions of the storage vessel and an analysis showing the capacity of the storage vessel. This record shall be kept as long as the storage vessel retains Group 1 or Group 2 status and is in operation. For each Group 2 storage vessel, the owner or operator is not required to comply with any other provisions of 40 C.F.R. §§ 63.119 through 63.123 of this subpart other than those required by this paragraph unless such vessel is part of an emissions average as described in 40 C.F.R. § 63.150 of this subpart.
26. 40 C.F.R. § 63.160, Subpart H, sets applicability and designation to pumps, compressors, agitators, pressure relief devices, sampling connection systems, open-ended valves or lines, valves, connectors, surge control vessels, bottoms receivers, instrumentation systems, and control devices or closed vent systems required by this subpart that are intended to operate in organic hazardous air pollutant service 300 hours or more during the calendar year within a source subject to the provisions of a specific subpart in 40 CFR Part 63 that references this Subpart.

27. 40 C.F.R. § 63.161, Subpart H, defines “equipment” as each pump, compressor, agitator, pressure relief device, sampling connection system, open-ended valve or line, valve, connector, surge control vessel, bottoms receiver, and instrumentation system in organic hazardous air pollutant service; and any control devices or systems required by this subpart.
28. 40 C.F.R. § 63.162(c), Subpart H, states that each piece of equipment in a process unit to which this subpart applies shall be identified such that it can be distinguished readily from equipment that is not subject to this subpart. 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, or by designation of process unit boundaries by some form of weatherproof identification.
29. 40 C.F.R. § 63.162(d), Subpart H, states that equipment that is in vacuum service is excluded from the requirements of this subpart.
30. 40 C.F.R. § 63.163(b)(1), Subpart H, states the owner or operator of a process unit subject to this subpart shall monitor each pump monthly to detect leaks by the method specified in 40 C.F.R. § 63.180(b) of this subpart and shall comply with the requirements of paragraphs (a) through (d) of this section.
31. 40 C.F.R. § 63.168(b)(1), Subpart H, states that the owner or operator shall monitor all valves to detect leaks by the method specified in 40 C.F.R. § 63.180(b) of this subpart.
32. 40 C.F.R. § 63.168(e)(1), Subpart H, states that percent leaking valves at a process unit shall be determined by the equation in this subparagraph.
33. 40 C.F.R. § 63.172(f)(1)(i), Subpart H, states that each closed-vent system shall have an initial inspection conducted according to the procedures in paragraph (g) of this section.

34. 40 C.F.R. § 63.172(f)(1)(ii), Subpart H, states that each closed-vent system shall have an annual visual inspection for visible, audible, or olfactory indications of leaks.
35. 40 C.F.R. § 63.173(a)(1), Subpart H, states that each agitator shall be monitored monthly to detect leaks by the methods specified in § 63.180(b) of this subpart, except as provided in 40 C.F.R. § 63.162(b) of this subpart.
36. 40 C.F.R. § 63.173(b)(1) states that each agitator shall be checked by visual inspection each calendar week for indications of liquids dripping from the agitator.
37. 40 C.F.R. § 63.174(a)(1), Subpart H, states connectors shall be monitored to detect leaks by the method specified in 40 C.F.R. § 63.180(b) of this subpart.
38. 40 C.F.R. § 63.174(i)(1), Subpart H, states for use in determining the monitoring frequency, as specified in paragraph (b) of this section, the percent leaking connectors shall be initially calculated as specified in paragraphs (i)(1).
39. 40 C.F.R. § 63.174(i)(2), Subpart H, states for use in determining the monitoring frequency, as specified in paragraph (b) of this section, the percent leaking connectors shall be calculated as specified in paragraphs (i)(2) of this section for all subsequent monitoring events after the initial monitoring.
40. 40 C.F.R. § 63.180(b)(1), Subpart H, states that monitoring, as required under this subpart, shall comply with Method 21 of 40 CFR Part 60, Appendix A.
41. 40 C.F.R. Part 60, Appendix A, states that Method 21 is “applicable for the determination of volatile organic compound (VOC) leaks from process equipment. These sources include, but are not limited to, valves, flanges and other connections, pumps and compressors, pressure relief devices, process drains, opened-ended valves, pumps and compressor deals systems degassing vents, accumulator vessel vents, agitator deals, and access door seals.”

42. 40 C.F.R. § 63.180(b)(4), Subpart H, states that a zero gas and mixtures of methane in air at the concentrations specified in paragraphs (b)(4)(ii)(A) through (b)(4)(ii)(C) of this section are to be used as the calibration gases. A calibration gas other than methane in air may be used if the instrument does not respond to methane or if the instrument does not meet the performance criteria specified in paragraph (b)(2)(i) of this section.
43. Table 5 of Subpart G states that for vessels having a capacity between 75 and 151 cubic meters (19,813 and 39,890 gallons), and a vapor pressure of at least 13.1 kiloPascals, the vessel is a Group 1 storage vessel.
44. Under Section 113(a)(3) of the CAA, 42 U.S.C. § 7413(a)(3), the Administrator of EPA may issue an order requiring compliance to any person who has violated or is violating the NESHAP regulations. The Administrator has delegated this authority to the Director of the Air and Radiation Division.
45. The Administrator of EPA may require any person who owns or operates an emission source to make reports; install, use and maintain monitoring equipment; sample emissions; and provide information required by the Administrator under Section 114(a)(1) of the Act, 42 U.S.C. § 7414(a)(1). The Administrator has delegated this authority to the Director of the Air and Radiation Division.

#### **Findings**

46. Perstorp owns and operates a facility located at 600 Matzinger Road, Toledo, Ohio 43612.
47. Perstorp processes and manufactures industrial organic chemicals at the facility.
48. Perstorp operated under Title V Permit Number P0103993, reissued by the Ohio Environmental Protection Agency (OEPA) February 8, 2011.

49. Perstorp operates three process units, Penta Plant, TMP, and Formox, that are subject to the HON.
50. On January 1, 2006, November 29, 2006, and June 19, 2007, EPA issued Section 114 Information Requests to Perstorp relating to the performance testing and operation of each of the catalytic incinerators (Penta Plant/TMP and Formox) at the site.
51. On October 30, 31, and November 1, 2006, EPA conducted a HON LDAR inspection at the site, including reviewing the performance testing and operation of the catalytic incinerators.
52. In response to EPA's Information Requests to Perstorp and inspections of the site, Perstorp conducted additional performance testing of its catalytic incinerators in 2007.
53. On November 13, 2013, EPA conducted an inspection at the facility (EPA Inspection).
54. During the EPA Inspection, Perstorp personnel stated that they did not have any closed-vent systems for Penta Plant, TMP, or Formox process units.
55. During the EPA Inspection, based on the process description provided by the Perstorp personnel, each process has a closed-vent system as defined by 40 C.F.R. Part 63, Subpart H.
56. On December 6, 2013, Perstorp submitted a letter to EPA following EPA's November 13, 2013, inspection (December 2013 Letter).
57. In the December 2013 Letter, Perstorp included two spreadsheets containing inlet and differential temperatures for each of the catalytic incinerators (Penta Plant/TMP and Formox) at the site as well as indicating when the periods of time temperature deviations were detected requiring recording under 40 C.F.R. §60.615(c)(2).
58. In the December 2013 Letter, Perstorp indicated that two acetaldehyde storage vessels (V-130A and V-130B) that previously were not considered Group 1 storage vessels per the HON, now meet the criteria in Table 5 of the HON for Group 1 storage vessels.

59. Perstorp manufactures sulfonated melamine formaldehyde (SMF) in the SMF process unit.
60. The SMF process uses formaldehyde and other chemicals to manufacture SMF.
61. Formaldehyde is a HAP as defined at 40 C.F.R. § 63.2, 42 U.S.C. §7412(b).
62. For purposes of MON analysis, the manufacturing of SMF is an organic chemical manufacturing process classified using the 1987 version of SIC code 282, 283, 284, 285, 286, 287, 289, or 386.
63. For purposes of MON analysis, the manufacturing of SMF is an organic chemical manufacturing process classified using the 1997 version of NAICS code 325.
64. Perstorp is a “major source” for HAP.
65. Perstorp owns and operates equipment that is considered an affected source under Subpart H.
66. EPA issued a Finding of Violation (FOV) to Perstorp on March 31, 2014.
67. The FOV alleged that Perstorp violated the following requirements:
  - a) Identifying each agitator listed below, for at least the period of December 2001 through December 6, 2013, in the Formox, SMF, Penta Plant, and TMP process units, as required by 40 C.F.R. § 63.162(c):
    - i. A-510 (Formox/SMF);
    - ii. A-520 (Formox/SMF);
    - iii. A-530 (Formox/SMF);
    - iv. A-1100 (Formox/SMF);
    - v. A-200 (Penta); and
    - vi. A-250 (TMP).
  - b) Monitoring each agitator listed in paragraph 67(a) monthly, for at least the period of December 2001 through December 6, 2013, to detect leaks by the methods specified in 40 C.F.R. § 63.180(b), as required by 40 C.F.R. § 63.173(a)(1).

- c) Checking each agitator listed in paragraph 67(a) weekly, for at least the period of December 2001 through December 6, 2013, for indications of liquids dripping from the agitator, as required by 40 C.F.R. § 63.173(b)(1).
- d) Identifying each closed vent system, for at least the period of December 2001 through December 6, 2013, in the Formox, SMF, Penta Plant, and TMP process units, as required by 40 C.F.R. § 63.162(c).
- e) Inspecting each closed vent system, for at least the period of December 2001 through December 6, 2013, using the procedures in 40 C.F.R. § 63.172(g), as required by 40 C.F.R. § 63.172(f)(1)(i).
- f) Inspecting each closed vent system annually, after the initial inspection, for visible, audible, or olfactory indication of leaks for at least the period of December 2002 through December 6, 2013, as required by 40 C.F.R. § 63.172(f)(1)(ii).
- g) Conducting Method 21 of 40 C.F.R. Part 60, Appendix A, properly on valves, connectors, and pumps, for at least the period of December 2001 through the present, by using an improper calibration gas (i.e. isobutylene) as well as a calibration gas at a concentration (100 parts per million) below the leak concentration of valves, connectors, and pumps, as required by 40 C.F.R. §§ 63.180(b)(4), 63.163(b)(1), 63.168(b)(1), and 63.174(a)(1).
- h) Identifying two acetaldehyde storage tanks as Group 1 storage tanks for at least the period of September 22, 1994, through the present, as required by 40 C.F.R. §§ 63.119(a), 63.122(a), and 63.123(a).
- i) Properly calculating the percent leaking valves and connectors, for least the period of December 2001 through the present, by including valves and connectors in vacuum

service, as required by 40 C.F.R. §§ 63.168(e)(1), 63.162(d), 63.174(i)(1), and 63.174(i)(2).

- j) Complying with the requirements of the NESHAP for MON by May 10, 2008, which includes emission standards, operating limits, work practice standards, recordkeeping and reporting requirements, for the SMF process, as required by 40 C.F.R. Part 63, Subpart FFFF and Section 112 of the Act, 42 U.S.C. § 7412.
- k) Complying with the Group 1 process vent provisions for the Formaldehyde, Penta Plant, and TMP process units and corresponding catalytic incinerators on the certain dates, as required by 40 C.F.R. §§ 63.113(a)(2), 60.615(c)(2), and Conditions C.3.c.4, C.4.c.4, C.5.c.2 and C.5.c.4 of Title V Permit Number P0103993.

68. In response to the FOV, EPA and Perstorp had a Section 113 conference on May 6, 2014. Both during and following this conference, Perstorp provided EPA with information and documentation of actions taken by Perstorp to respond to the issues identified in the FOV.

#### Compliance Program

- 69. By no later than the Effective Date of this Order, Perstorp must purchase and use a toxic vapor analyzer (TVA) to conduct Method 21 of 40 C.F.R. Part 60, Appendix A, properly on valves, connectors, and pumps. Perstorp must use proper calibration gas as well as proper calibration gas concentrations, as required by 40 C.F.R. §§ 63.180(b)(4), 63.163(b)(1), 63.168(b)(1), and 63.174(a)(1).
- 70. By no later than the Effective Date of this Order, Perstorp must include all closed vent systems referenced in Paragraph 67(d) – (f) and all agitators referenced in Paragraph 67(a) in the facility's LDAR program.

71. By no later than December 31, 2015, Perstorp must submit a permit application to the Ohio Environmental Protection Agency (OEPA). The permit application must include a request to amend Perstorp's permit to establish new temperature ranges for the incinerators based on the lowest inlet and temperature differential demonstrating compliance with the emission requirements, as shown by performance testing conducted by H&H Monitoring on October 23 and November 5, 2014.
72. By no later than three months after the Effective Date of this Order, Perstorp shall develop a document that describes, for its Facility: (i) the LDAR program as it applies to equipment at the process units that are subject to LDAR requirements referenced in Subparts FFFF, F, G, and H (Process Units) (*e.g.*, applicability of regulations to process units and/or specific equipment; leak definitions; monitoring frequencies); (ii) a tracking program (*e.g.*, Management of Change) that ensures that new pieces of equipment added to the Process Units for any reason are, as applicable, integrated into the LDAR program and that pieces of equipment that are taken out of service are, as applicable, removed from the LDAR program; (iii) the roles and responsibilities of all employee and contractor personnel assigned to LDAR functions at the Process Units; and (iv) how the number of personnel dedicated to LDAR functions is sufficient to satisfy the requirements of the LDAR program.
73. Commencing by no later than in the first full calendar quarter after the Effective Date of this Order, at times that are not announced to the LDAR monitoring technician(s), an LDAR-trained employee or contractor of Perstorp, who does not serve on a routine basis as an LDAR monitoring technician at the Facility, shall undertake the following no less than once per calendar quarter for the period of one year in the Process Units:
- a. Verify that equipment was monitored at the appropriate frequency under applicable LDAR regulations;

- b. Verify that proper documentation and sign-offs have been recorded for all equipment placed on the delay of repair list;
- c. Ensure that repairs have been performed in the required periods under applicable LDAR regulations;
- d. Review monitoring data and equipment counts (e.g., number of pieces of equipment monitored per day) for feasibility and unusual trends;
- e. Verify that proper calibration records and monitoring instrument maintenance information are maintained;
- f. Verify that other LDAR program records are maintained as required; and
- g. Observe in the field each LDAR monitoring technician who is conducting leak detection monitoring to ensure that monitoring during the quarterly period is being conducted in accordance with Method 21, as required.

Perstorp shall promptly correct any deficiencies detected or observed. Perstorp shall maintain a log that: (i) records the date and time that the reviews, verifications, and observations required by this Paragraph are undertaken; and (ii) describes the nature and timing of any corrective actions taken.

74. By no later than 180 days of the Effective Date of this Order, Perstorp must conduct a third-party LDAR audit at the Process Units. The audit shall include: (i) reviewing compliance with all applicable LDAR regulations, including all applicable LDAR requirements related to valves, connectors, pumps, agitators, and open-ended lines; (ii) reviewing and/or verifying the same items that are required to be reviewed and/or verified in Paragraph 73 and making a qualitative evaluation of Paragraph 73; (iii) reviewing whether any pieces of equipment that are required to be in the LDAR program are not included; and (iv) "comparative monitoring" as described in Paragraph 75.

75. Comparative Monitoring. Comparative monitoring conducted during the LDAR audit required by Paragraph 74 must be undertaken as follows:

- a. Calculating a Comparative Monitoring Audit Leak Percentage. Equipment shall be monitored in order to calculate a leak percentage for the Process Units, broken down by equipment type (*i.e.*, valves, pumps, agitators, and connectors). For descriptive purposes under this section, the monitoring that takes place during the audit shall be called “Comparative Monitoring” and the leak percentages derived from the Comparative Monitoring shall be called the “Comparative Monitoring Audit Leak Percentages.” In undertaking Comparative Monitoring, Perstorp shall not be required to monitor every component in the Process Unit—monitoring approximately 30% of the each equipment type (*i.e.*, valves, pumps, agitators, and connectors) in the Process Unit shall be sufficient to satisfy the requirements of this paragraph.
- b. Calculating the Historic, Average Leak Percentage from Prior Periodic Monitoring Events. The historic, average leak percentage from prior periodic monitoring events, broken down by equipment type (*i.e.*, valves (excluding pressure relief valves), pumps, agitators, and connectors) shall be calculated. The following number of complete monitoring periods immediately preceding the Comparative Monitoring shall be used for this purpose: valves - 4 periods; pumps and agitators - 12 periods; and connectors – 2 periods.
- c. Calculating the Comparative Monitoring Leak Ratio. For each type of equipment, the ratio of the Comparative Monitoring Audit Leak Percentage from Subparagraph 75.a to the historic, average leak percentage from Subparagraph 75.b shall be calculated. This ratio shall be called the “Comparative Monitoring Leak Ratio.” If the denominator in this calculation is “zero,” it shall be assumed (for purposes of this calculation but not for any other purpose under this Order or under any applicable laws and regulations) that one leaking piece of equipment was found in the Unit through routine monitoring during the applicable period referenced in Subparagraph 75.b.

#### 76. Corrective Action Plan (CAP)

- a. Requirements of a CAP. By no later than the date that is one month after the receipt of the third-party LDAR audit report, Perstorp shall develop a preliminary CAP if: (i) the results of the LDAR audit identify any deficiencies; or (ii) a Comparative Monitoring Leak Ratio calculated pursuant to Subparagraph 75.c is 3.0 or higher *and* the Comparative Monitoring Audit Leak Percentage calculated pursuant to Subparagraph 75.a is greater than or equal to 0.5 percent. The preliminary CAP shall describe the actions that Perstorp has taken or shall take to address: (i) the deficiencies and/or (ii) the causes of a Comparative Monitoring Leak Ratio that is 3.0 or higher (but only if the Comparative Monitoring Audit Leak Percentage is at or above 0.5 percent). Perstorp shall include a

schedule by which actions that have not yet been completed will be completed. Perstorp shall promptly complete each corrective action item with the goal of completing each action within the date that is three months after receipt of the third-party LDAR audit report. If any action is not completed or not expected to be completed within three months after receipt of the third-party LDAR audit report, Perstorp shall explain the reasons and propose a schedule for prompt completion in the final CAP to be submitted under Subparagraph 76.b.

- b. Submission of the Final CAP to EPA. By no later than the date that is four months after receipt of the third-party LDAR audit report, Perstorp shall submit the final CAP to EPA, together with a certification of the completion of each item of corrective action. If any action is not completed within three months after receipt of the third-party LDAR audit report, Perstorp shall explain the reasons, together with a proposed schedule for prompt completion. Perstorp shall submit a supplemental certification of completion by no later than one month after completing all actions.

77. Perstorp must send all reports required by this Order to:

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

#### General Provisions

78. Perstorp neither admits nor denies the factual allegations and findings in this Order or the FOV, but Perstorp agrees to the terms of this Order and waives any right to contest or appeal the issuance of this Order.
79. This Order does not affect Perstorp's responsibility to comply with other federal, state, and local laws.
80. This Order does not restrict EPA's authority to enforce Section 112 of the CAA or any other section of the CAA.
81. Nothing in this Order limits the EPA's authority to seek appropriate relief, including penalties, under Section 113 of the CAA, 42 U.S.C. § 7413, for Perstorp's violation of

Section 112 of the CAA and the NESHAPs at 40 C.F.R. Part 63, Subparts FFFF, F, G, H, and it's Title V Permit P0103993.

82. Failure to comply with this Order may subject Perstorp to penalties of up to \$37,500 per day for each violation under Section 113 of the CAA, 42 U.S.C. § 7413, and 40 C.F.R. Part 19.
83. The terms of this Order are binding on Perstorp, its assignees and successors. Perstorp must give notice of this Order to any successors in interest prior to transferring ownership and must simultaneously verify to EPA, at the above address, that it has given the notice.
84. Perstorp may assert a claim of business confidentiality under 40 C.F.R. Part 2, Subpart B, for any portion of the information it submits to EPA. Information subject to a business confidentiality claim is available to the public only to the extent allowed by 40 C.F.R. Part 2, Subpart B. If Perstorp fails to assert a business confidentiality claim, EPA may make all submitted information available, without further notice, to any member of the public who requests it. Emission data provided under Section 114 of the Act, 42 U.S.C. § 7414, is not entitled to confidential treatment under 40 C.F.R. Part 2, Subpart B. "Emission data" is defined at 40 C.F.R. § 2.301.
85. This Order is not subject to the Paperwork Reduction Act, 44 U.S.C. § 3501 et seq., because it seeks collection of information by an agency from specific individuals or entities as part of an administrative action or investigation.
86. EPA may use any information submitted under this Order in an administrative, civil judicial or criminal action.
87. This Order is effective on the date of signature by the Director of the Air and Radiation Division (Effective Date). This Order will terminate two years from the Effective Date, provided that Perstorp has complied with all terms of the Order throughout its duration.

88. Each party agrees to pay its own costs and attorneys' fees relating to this Order.

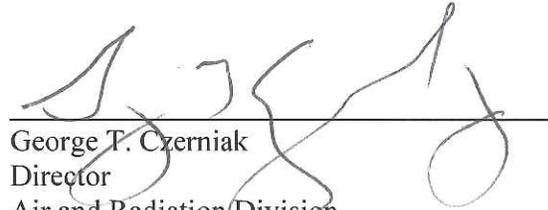
89. This Order constitutes the entire agreement between the parties.

**Administrative Consent Order  
In the Matter of Perstorp Polyols, Inc.  
EPA-5-15-113(a)-OH-08**

June 1, 2015  
Date

  
Larry Fioritto  
Site Manager  
Perstorp Polyols, Inc.

6/17/15  
Date

  
George T. Czerniak  
Director  
Air and Radiation Division

CERTIFICATE OF MAILING

I, Loretta Shaffer, certify that I sent the Administrative Consent Order, EPA-5-15-113(a)-OH-08, by certified mail, return receipt requested, to:

Larry Fioritto  
Plant Manager  
Perstorp Polyols, Inc.  
600 Matzinger Road  
Toledo, Ohio 43612

I also certify that I sent a copy of the Administrative Consent Order, EPA- EPA-5-15-113(a)-OH-08, by first-class mail to:

Robert Hodanbosi  
Ohio EPA - DAPC  
Lazarus Government Center  
50 W. Town St., Suite 700  
P.O. Box 1049  
Columbus, Ohio 43216

Karen Granata  
Administrator  
Toledo Division of Environmental Services  
348 South Erie Street  
Toledo, Ohio 43604

Kurt Bezeau  
Division of Environmental Services  
348 South Erie Street  
Toledo, Ohio 43604

David W. Nunn  
Eastman & Smith Ltd.  
One Seagate 24th Floor  
P.O. Box 10032  
Toledo, Ohio 43699

On the 15<sup>th</sup> day of June 2015.

Kathy Jones  
for Loretta Shaffer  
Program Technician  
AECAB, PAS

CERTIFIED MAIL RECEIPT NUMBER: 7014 2870 0001 9580 5159