



**UNITED STATES ENVIRONMENTAL PROTECTION AGENCY**

REGION 5

77 WEST JACKSON BOULEVARD

CHICAGO, IL 60604-3590

DEC 4 1996

REPLY TO THE ATTENTION OF:

AE-17J

**CERTIFIED MAIL**  
**RETURN RECEIPT REQUESTED**

Patrick M. Conrath, Site Director  
INEOS USA, LLC  
1900 Fort Amanda Road  
Lima, Ohio 45804

Dear Mr. Conrath:

This is to advise you that the U.S. Environmental Protection Agency has determined that INEOS USA, LLC's (INEOS's) facility at 1900 Fort Amanda Road, Lima, Ohio (Lima Facility) is in violation of the Clean Air Act (CAA) and associated state or local pollution control requirements. A list of the requirements violated is provided below. A Notice of Violation/Finding of Violation (NOV/FOV) for these violations is being issued and is enclosed for your review.

The CAA requires the development of Primary and Secondary National Ambient Air Quality Standards (NAAQS) to protect public health and welfare. To attain and maintain these standards, each State is required to develop an implementation plan. Ohio's State Implementation Plan (Ohio SIP) provides that the Ohio Environmental Protection Agency may issue air pollution permits that include emissions standards and related requirements to limit the quantity of Volatile Organic Compounds (VOC) which can be emitted from stacks. These requirements are incorporated into the Lima Facility's Permits to Install and Title V Permits. The purpose of these requirements is to reduce emissions that can compromise public health and welfare. Specifically, these requirements ensure that VOCs and Hazardous Air Pollutants (HAPs) are being controlled to reduce the potential harm to the human respiratory system and reduce the risk of cancer.

In addition to provisions addressing the NAAQS, the CAA requires EPA to develop National Emission Standards for Hazardous Air Pollutants (NESHAPs) to protect the public from emissions of HAPs. The Lima Facility is subject to the requirements of the several NESHAPs found at 40 C.F.R. Part 63, Subparts F, G, H, and JJJ. These requirements include both specific emission control requirements for HAP emissions from process vent streams, as well as certain Leak Detection and Repair (LDAR) program requirements to reduce fugitive HAP emissions.

The CAA additionally requires EPA to develop New Source Performance Standards (NSPS) for categories of stationary sources including those categories that, in EPA's judgment, cause or contribute significantly to air pollution which may reasonably be anticipated to endanger public health or welfare. One such category, Synthetic Organic Chemical Manufacturing Industry (SOCMI) distillation operations, is subject to the NSPS promulgated under 40 C.F.R. Part 60, Subpart NNN. The Lima Facility's SOCMI distillation operations are affected sources subject to NSPS requirements.

EPA finds that the Lima Facility has violated several Permit to Install (PTI), NESHAP, NSPS and/or Title V permit requirements with respect to: (1) LDAR; (2) absorber off-gas incinerator emission control device requirements for the Acrylonitrile Reaction and Absorption Section (P035); and (3) flare emission control device requirements for the Acetonitrile Reactor and Absorption Section (P048), the Acetonitrile Recovery and Purification Section (P074), and the Acrylonitrile Plant #2 Recovery and Purification Section (P075).

Section 113 of the CAA gives us several enforcement options to resolve these violations, including, issuing an administrative compliance order, issuing an administrative penalty order, bringing a judicial civil action, and bringing a judicial criminal action. The option we select, in part, depends on the efforts taken by INEOS to correct the alleged violations and the timeframe in which you can demonstrate and maintain continuous compliance with the requirements cited in the NOV/FOV.

Section 113 of the CAA provides you with the opportunity to request a conference with us about the violations alleged in the NOV/FOV. This conference will provide you a chance to present information on the identified violations, any efforts you have taken to comply, and the steps you will take to prevent future violations. Please plan for your facility's technical and management personnel to take part in these discussions. You may have an attorney represent and accompany you at this conference.

The EPA contacts in this matter are Brian Dickens and Ray Cullen. You may call them at (312) 886-6073 and (312) 886-0538, respectively, if you wish to request a conference. EPA hopes that this NOV/FOV will encourage INEOS to comply with the requirements of the CAA.

Sincerely,



Cheryl D. Newton  
Director

Air and Radiation Division

Enclosure

cc: Mark Budge, Unit Manager  
Ohio EPA, Northwest District Office



**a. Subpart F**

5. The requirements of Subpart F apply to chemical manufacturing process units that: (1) manufacture as a primary product tetrahydrobenzaldehyde, crotonaldehyde, or one or more of the chemicals listed in Table 1 of Subpart F; (2) use as a reactant or manufacture as a product, or co-product, one or more of the organic HAPs listed in Table 2 of Subpart F; and (3) are located at a plant site that is a major source as defined in Section 112(a) of the CAA. 40 C.F.R. § 63.100(b).

6. A “chemical manufacturing process unit,” or “CMPU” is defined, *inter alia*, as the equipment assembled and connected by pipes or ducts to process raw materials and to manufacture an intended product. 40 C.F.R. § 63.101(b). A CMPU includes but is not limited to pumps, compressors, agitators, pressure relief devices, sampling connection systems, open-ended valves or lines, valves, connectors, instrumentation systems, and control devices or systems. *Id.*

7. Owners and operators of sources that are subject to Subpart F are required to comply with Subparts G and H. 40 C.F.R. § 63.102(a).

**b. Subpart G: Process Vents**

8. Subpart G applies, *inter alia*, to all process vents within a source that is itself subject to Subpart F. 40 C.F.R. § 63.110.

9. A “process vent” is defined as the point of discharge to the atmosphere (or the point of entry into a control device, if any) of a gas stream if the gas stream has certain characteristics specified in 40 C.F.R. §§ 63.107(b) - (h), or meets certain criteria specified in 40 C.F.R. § 63.107(i). 40 C.F.R. § 63.101(b).

10. A “Group 1 process vent” is defined as a process vent for which the vent stream flow rate is greater than or equal to 0.005 standard cubic meter per minute, the total organic HAP concentration is greater than or equal to 50 parts per million by volume (ppmv), and the total resource effectiveness (TRE) index value, calculated according to 40 C.F.R. § 63.115, is less than or equal to 1.0. 40 C.F.R. § 63.111.

11. An owner or operator of a Group 1 process vent must comply with one of three control requirements: (1) reduce emissions of organic HAP using a flare; (2) reduce emissions of total organic HAP by 98 weight-percent or to a concentration of 20 ppmv, whichever is less stringent; or (3) achieve and maintain a TRE index value greater than 1.0 at the outlet of the final recovery device, or prior to release of the vent stream to the atmosphere if no recovery device is present. 40 C.F.R. §§ 63.113(a)(1) - (3).

12. An owner or operator of a process vent that elects to comply with either 40 C.F.R. § 63.113(a)(1) or 40 C.F.R. § 63.113(a)(2) is not required to perform the group determination in 40 C.F.R. § 63.115. 40 C.F.R. § 63.113(h).

*c. Subpart H*

13. Subpart H sets forth work practice standards and testing and recordkeeping requirements to ensure that any leaks of organic HAPs from equipment are timely detected and repaired. The provisions in Subpart H commonly are referred to as "Leak Detection and Repair" provisions, or "LDAR" for short.

14. Subpart H, at 40 C.F.R. § 63.160(a), applies 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 that are intended to operate in organic HAP service 300 hours or more during the calendar year. Subpart H, at 40 C.F.R. § 63.161, defines equipment in organic HAP service as equipment that either contains or contacts a fluid that is at least 5% by weight of total organic HAPs.

15. Each piece of equipment in a process unit to which Subpart H applies is required to be identified such that it can be distinguished readily from equipment that is not subject to Subpart H. 40 C.F.R. § 63.162(c).

16. Subpart H, at 40 C.F.R. § 63.168(b)(1), requires owners and operators to monitor valves in gas/vapor and light liquid service (valves) by the method specified in 40 C.F.R. § 63.180(b), at intervals specified at 40 C.F.R. § 63.168(d).

17. Subpart H, at 40 C.F.R. § 63.180(b)(1), requires each owner or operator to comply with the monitoring procedures and requirements of Method 21 at 40 C.F.R. Part 60, Appendix A.

18. Subpart H has leak inspection requirements for closed-vent systems at 40 C.F.R. § 63.172. A "closed-vent system" is defined as a system that is not open to the atmosphere and that is composed of hard-piping, ductwork, connection and, if necessary, flow-inducing devices that transport gas or vapor from a piece or pieces of equipment to a control device or back into a process. 40 C.F.R. § 63.161.

19. A closed-vent system constructed of hard piping is required to have annual visual inspections for visible, audible, or olfactory indications of leaks. 40 C.F.R. § 63.172(f)(1)(ii).

20. Subpart H, at 40 C.F.R. § 63.181(g)(3), requires the owner or operator to keep records of inspections of closed-vent systems conducted pursuant to Section 63.172(f)(1), and such documentation must include a date of inspection, and a statement that no leaks were found if that is the case. If a leak is detected, the source must keep records of the date the leak was discovered, the date of successful repair, operators names, and other items specified at Sections 63.181(d) and 63.181(g)(3)(ii). Owners and operators must report these leaks to EPA in periodic reports under Section 63.1335(e)(6), and repair the leaks in accordance with Section 63.172(h)(2)(i).

*d. Subpart JJJ*

21. Pursuant to Section 112(c) of the CAA, 42 U.S.C. § 7412(c), EPA identified the production of, *inter alia*, seven polymers and resins as source categories of HAPs. 57 Fed. Reg. 31576, 31591 (Table 1) (July 16, 1992) (identifying as source categories the production of: acrylonitrile-butadiene-styrene; methyl methacrylate-acrylonitrile-butadiene-styrene; methyl methacrylate-butadiene-styrene terpolymers; polyethylene terephthalate; polystyrene; and styrene-acrylonitrile); 61 Fed. Reg. 28197, 28202 (Table 1) (June 4, 1996) (identifying nitrile resins production).
22. Pursuant to Section 112(d) of the CAA, 42 U.S.C. § 7412(d), EPA regulated these source categories under what it characterized as the “Group IV” Polymers and Resins NESHAP, found at 40 C.F.R. Part 63, Subpart JJJ. 40 C.F.R. §§ 63.1310 - 63.1336. These provisions commonly are referred to as “Subpart JJJ” or the “Group IV Polymers and Resins MACT.”
23. The “affected source” to which the emission standards of Subpart JJJ apply is either an “existing affected source” or a “new affected source.” 40 C.F.R. § 63.1310(a)(1).
24. An “existing affected source” is defined, *inter alia*, as each group of one or more thermoplastic product process units (TPPU) and associated equipment, as listed in 40 C.F.R. § 1310(a)(4), that is manufacturing the same primary product and is located at a plant site that is a major source for HAPs. 40 C.F.R. § 63.1310(a)(2).
25. A “TPPU” is defined as a collection of equipment assembled and connected by hard-piping or ductwork, used to process raw materials and to manufacture a thermoplastic product as its primary product. 40 C.F.R. § 1312(b).
26. “Associated equipment” includes, *inter alia*, equipment required by or utilized as a method of compliance with Subpart JJJ. 40 C.F.R. § 63.1310(a)(4).
27. A “thermoplastic product” is one of 19 specifically-identified products listed in the definition of “thermoplastic product” at 40 C.F.R. § 63.1312(b).
28. The owner or operator of each affected source under Subpart JJJ is required to comply with Subpart H. 40 C.F.R. § 63.1331(a).
29. “Equipment” for purposes of Subpart H compliance under 40 C.F.R. § 63.1331(a) does not have the same meaning as “associated equipment” under Subpart JJJ at 40 C.F.R. § 1310(a). Rather, “equipment” means each pump, compressor, agitator, pressure relief device, sampling connection system, open-ended valve or line, valve, connector, surge control vessel, bottoms receivers, and instrumentation system in organic HAP service; and any control devices or systems required by Subpart H. 40 C.F.R. § 1312(b); 40 C.F.R. § 1331(a)(11) (stating that the term “equipment” for Subpart JJJ compliance is defined in 40 C.F.R. § 1312).

30. Existing affected sources were required to be in compliance with 40 C.F.R. § 63.1331(a) (and therefore Subpart H) by no later than June 19, 2001. 40 C.F.R. § 63.1311(d).

## **2. Ohio State Implementation Plan: Permit to Install**

31. To achieve the objectives of the National Ambient Air Quality Standards (NAAQS) and the CAA, Section 110 of the CAA, 42 U.S.C. § 7410, requires each state to adopt and submit to EPA for approval a plan that provides for the attainment and maintenance of the NAAQS in each air quality control region with each state. This plan is known as a State Implementation Plan (SIP).

32. Under Section 110(a)(2) of the CAA, 42 U.S.C. § 7410(a)(2), each SIP must include a permit program to regulate the modification and construction of any stationary source of air pollution as necessary to assure that NAAQS are achieved.

33. Pursuant to Section 113(a) and (b) of the CAA, 42 U.S.C. § 7413(a) and (b), upon EPA approval, SIP requirements are federally enforceable under Section 113. Under 40 C.F.R. § 52.23, any permit limitation or condition contained within a permit issued under an EPA-approved program that is incorporated in a SIP, is a requirement of the SIP, and is federally enforceable under Section 113.

34. On October 31, 1980, EPA approved Ohio Administrative Code (OAC) Rule 3745-31, permit to install regulations, as part of the federally enforceable SIP for Ohio. 45 Fed. Reg. 72146 (1980). Since then, EPA has approved several revisions to OAC 3745-31 into the federally enforceable SIP. The rules were substantially revised and approved as a revision to the SIP on September 8, 1993. 58 Fed. Reg. 47211 (1993).

35. OAC 3745-31-02(A) states that no person shall cause, permit, or allow the installation of a new source of air pollutants or allow the modification of an air contaminant source without first obtaining a permit to install (PTI) from the Director of the Ohio Environmental Protection Agency (Ohio EPA).

36. OAC Rule 3745-31-05(D) states that the Director may impose such special terms and conditions in a PTI as are appropriate or necessary to ensure compliance with the applicable laws and to ensure adequate protection of environmental quality.

## **3. New Source Performance Standards**

37. Section 111(b)(1)(A) of the CAA, 42 U.S.C. § 7411(b)(1)(A), requires EPA to publish and periodically revise a list of categories of stationary sources including those categories that, in EPA's judgment, cause or contribute significantly to air pollution which may reasonably be anticipated to endanger public health or welfare.

38. Once a category is included on the list, Section 111(b)(1)(B), 42 U.S.C. § 7411(b)(1)(B), requires EPA to promulgate a federal standard of performance for new sources within the

category, also known as a New Source Performance Standard (NSPS). Section 111(e) of the CAA, 42 U.S.C. § 7411(e), prohibits an owner or operator of a new source from operating that source in violation of a NSPS after the effective date of the NSPS applicable to such source.

39. “New source” is defined as any stationary source, the construction or modification of which is commenced after the publication of the NSPS regulations or proposed NSPS regulations applicable to such sources. 42 U.S.C. § 7411(a)(2). “Stationary source” is defined as a building, structure, facility, or installation which emits or may emit any air pollutant. 42 U.S.C. §7411(a)(3).

40. Pursuant to Section 111(b)(1)(A) of the CAA, 42 U.S.C. § 7411(b)(1)(A), EPA has identified SOCFI air oxidation unit processes and distillation operations as two categories of stationary sources that cause, or contribute significantly to, air pollution that may reasonably be anticipated to endanger public health or welfare. EPA promulgated a NSPS for SOCFI distillation operations at 40 C.F.R. Part 60, Subpart NNN, §§ 60.660-60.668 (Subpart NNN).

41. Pursuant to Section 111(b)(1)(B) of the CAA, 42 U.S.C. § 7411(b)(1)(B), EPA has promulgated regulations that contain general provisions applicable to all NSPS sources. 40 C.F.R. Part 60, Subpart A, §§ 60.1- 60.19 (Subpart A).

42. The provisions of 40 C.F.R. Part 60 “apply to the owner or operator of any stationary source which contains an affected facility, the construction or modification of which is commenced after the publication [in Part 60] of any standard (or, if earlier, the date of publication of any proposed standard) applicable to that facility.” 40 C.F.R. § 60.1.

43. “Affected facility” is defined as “any apparatus to which a standard is applicable.” 40 C.F.R. § 60.2.

44. The “affected facility” to which Subpart NNN applies is defined, in relevant part, as each combination of two or more distillation units and the common recovery system into which their vent streams are discharged, for which construction, modification, or reconstruction commenced after December 30, 1983. 40 C.F.R. § 60.660.

45. At all times, including periods of startup, shutdown, and malfunction, owners and operators shall, to the extent practicable, maintain and operate any affected facility including associated air pollution control equipment in a manner consistent with good air pollution control practice for minimizing emissions. 40 C.F.R. § 60.11(d).

#### **4. Title V**

46. Title V of the CAA, 42 U.S.C. §§ 7661-7661f, establishes an operating permit program for certain air pollution sources, including “major sources.” The purpose of Title V is to ensure that all “applicable requirements” for compliance with the CAA are collected in one place.

47. "Major source" under Title V includes , *inter alia*, any stationary source that is a "major source" as defined in Section 112 of the CAA, 42 U.S.C. § 7412.
48. Pursuant to Section 502(b) of the CAA, 42 U.S.C. § 7661a(b), EPA promulgated regulations implementing the requirements of Title V and establishing the minimum elements of a Title V permit program to be administered by any state or local air pollution control agency. 57 Fed. Reg. 32250 (July 21, 1992). These regulations are codified at 40 C.F.R. Part 70.
49. Section 502(a) of the CAA, 42 U.S.C. § 7661a(a), and the implementing regulation at 40 C.F.R. § 70.7(b), make it unlawful for any person to violate any requirement of a permit issued under Title V or to operate a major source except in compliance with a permit issued by a permitting authority under Title V.
50. EPA approved Ohio EPA's Part 70 (Title V) program, codified at OAC 3745-77, on August 15, 1995, with an effective date of October 1, 1995. 60 Fed. Reg. 42045 (1995).
51. 40 C.F.R. § 70.6(b)(1) specifies that all terms and conditions in a permit issued under a Part 70 program, including any provisions designed to limit a source's potential to emit, are enforceable by the Administrator of EPA under the CAA.

### **The Lima Facility**

52. INEOS owns and/or operates the chemical manufacturing plant located at 1900 Fort Amanda Road, Lima, Ohio 45804 (Lima Facility).
53. The Lima Facility consists of several process units including units that manufacture, among other things, acrylonitrile, acetonitrile, and nitrile resins, and the Facility previously included a unit that manufactured butanediol.
54. The Lima Facility's process units that manufacture, among other things, acrylonitrile, acetonitrile, and nitrile resins, and previously manufactured butanediol, are and were located at a plant site that is a major source.
55. With respect to acrylonitrile and acetonitrile production, the Lima Facility has the following process units:
- a. P035 - Acrylonitrile Plant # 2 Reactor and Absorption Section.
  - b. P048 - Acetonitrile Reactor and Absorption Section.
  - c. P074 - Acetonitrile Recovery and Purification Section.
  - d. P075 - Acrylonitrile Plant # 2 Recovery and Purification Section.

56. On November 14, 1996, Ohio EPA issued a PTI to the Lima Facility for modification of the Acrylonitrile Reactor and Absorption Section (P035) and Acrylonitrile Recovery and Purification Section (P075)(PTI 03-9227). PTI 03-9227 was subsequently modified on June 28, 2001 and November 20, 2003.

57. On April 10, 2001, Ohio EPA issued a PTI to the Lima Facility for the modification of the acetonitrile manufacturing plant (“P048” and “P074”) (PTI 03-13534).

58. Acrylonitrile and acetonitrile are listed chemicals in Table 1 of Subpart F. Table 1 classifies them as “Group 1” chemicals.

59. Acrylonitrile and acetonitrile are organic HAPs listed in Table 2 of Subpart F.

60. P035, P048, P074, and P075 comprise “CMPUs” within the meaning of Subpart F. 40 C.F.R. §§ 63.100(b), 63.101(b), and are subject to the NESHAP requirements of Subparts F, G, and H.

61. P035, P048, P074, and P075 have process vent streams either designated as “Group 1 process vent streams” subject to HAP emission standards under 40 C.F.R. § 63.113(a), as defined under 40 C.F.R. § 63.111, or the Lima Facility has elected to have the process vents streams comply with 40 C.F.R. §§ 63.113(a)(1) or (a)(2) in lieu of performing a group determination, as provided under 40 C.F.R. § 63.113(h).

62. P048, P074, and P075 are affected facilities subject to the NSPS Subpart NNN.

63. To comply with the PTI, NSPS, and NESHAP process vent emission standards, the Lima Facility relies upon the following control devices to limit process vent emissions:

P035 - Absorber Off-gas Incinerator (AOGI)

P048 – Flare

P074 – Flare

P075 – Combination of Vent Scrubber and Flare

Emissions from P075 are first controlled by a vent scrubber and then sent to the flare also used by P048 and P074 (the “Flare”). At various times, the Lima Facility bypasses the vent scrubber and sends P075 emissions directly to the Flare.

64. On October 29, 2004, Ohio EPA issued a Title V permit numbered 03-02-02-0015, with an effective date of January 3, 2005, to the Lima Facility (Lima Facility’s Title V Permit). The Lima Facility’s Title V Permit incorporates as federally-enforceable requirements, *inter alia*, the applicable requirements of 40 C.F.R. Parts 60 and 63, and the Lima Facility’s PTI No. 03-9227 and PTI 03-13534.

65. Until March 16, 2005, the Facility housed a process unit that manufactured as a primary product butanediol.
66. Butanediol is a listed chemical in Table 1 of Subpart F. Table 1 classifies it as a "Group 1" chemical.
67. The Butanediol Process Unit used as a reactant or manufactured as a product, or co-product maleic anhydride, methanol, and acrylic acid.
68. Maleic anhydride, methanol, and acrylic acid are organic HAPs listed in Table 2 of Subpart F.
69. The Butanediol Process Unit was a CMPU within the meaning of Subpart F, 40 C.F.R. §§ 63.100(b) and 63.101(b), and is subject to the NESHAP requirements of Subparts F, G, and H.
70. The Facility includes a unit that manufactures a product known as nitrile resins. Nitrile resins are a thermoplastic product within the meaning of 40 C.F.R. § 63.1312(b).
71. The processing unit that manufactures nitrile resins is known as the Barex Process Unit. The Barex Process Unit includes a collection of equipment assembled and connected by hard-piping or ductwork used to process raw materials and to manufacture nitrile resins as its primary product.
72. The Barex Process Unit is a TTPU within the meaning of 40 C.F.R. § 63.1312(b).
73. The Barex Process Unit and its associated equipment, as listed in 40 C.F.R. § 63.1310(a)(4), is an "existing affected source" within the meaning of 40 C.F.R. § 63.1310(a)(2).
74. The Barex Process Unit is subject to the standards found at 40 C.F.R. Part 63, Subpart JJJ and, with certain exceptions not relevant here, Subpart H. 40 C.F.R. § 63.1331(a).
75. The Barex Process Unit has been subject to the requirements of Subparts JJJ and H since June 19, 2001.

#### **VIOLATION ONE**

##### **LDAR – Failure to Record Inspections of Closed-Vent System**

76. The Lima Facility's Acrylonitrile Process includes a system of hard-piping, ductwork, connection, and a flow-inducing device that transports gases or vapors from the Acrylonitrile Process Unit to a control device or back into the process. This system is not open to the atmosphere and is a "closed-vent system" within the meaning of 40 C.F.R. § 63.161.

77. This system is subject to the standards for closed-vent systems and control devices found in Subpart H, 40 C.F.R. § 63.172, and the recordkeeping requirements associated therewith. 40 C.F.R. § 63.181.

78. Subpart H requires that a closed-vent system consisting of hard piping have annual visual inspections for visible, audible, or olfactory indications of leaks. 40 C.F.R. § 63.172(f)(1)(ii).

79. Subpart H requires that the owner or operator create and maintain records of closed-vent system inspections. 40 C.F.R. § 63.181(g)(3).

80. For at least calendar years 2004 and 2005, the Lima Facility failed to create and maintain records of closed-vent system inspections conducted on the Acrylonitrile Process pursuant to Subpart H, in violation of Section 112 of the CAA, 42 U.S.C. § 7412, and the implementing regulation at 40 C.F.R. § 63.181(g).

## **VIOLATION TWO**

### **Failure to Identify Equipment Subject to LDAR Requirements**

81. Subpart H requires each piece of equipment in a process unit to which Subpart H applies to be identified such that it can be distinguished readily from equipment that is not subject to Subpart H. 40 C.F.R. § 63.162(c).

82. Beginning no later than January 2005, and likely commencing earlier than that, the Lima Facility failed to identify numerous pieces of equipment in the Acetonitrile, Acrylonitrile, Barex, and Butanediol Process Units that were subject to Subpart H in a manner that readily distinguished those pieces of equipment from equipment that was not subject to Subpart H.

83. The Lima Facility's failure to identify each piece of equipment in process units to which the leak detection and repair requirements of Subpart H applies is in violation of Section 112 of the CAA, 42 U.S.C. § 7412, and the implementing regulation at 40 C.F.R. § 63.162(c).

## **VIOLATION THREE**

### **Failure to Send Process Vent Stream from the Acrylonitrile Reaction and Absorption Section (P035) to a Control Device**

84. PTI 03-9227 provides that emissions from P035 shall be controlled by the use of a closed process vent system. The process vent stream emissions from P035 shall be vented to an AOGI that is designed and operated to either:

- a. reduce Volatile Organic Compounds (VOC) emissions vented to it with an efficiency of at least 98% by weight; or
- b. emit VOC (minus methane and ethane) at a concentration less than twenty ppmv, dry basis corrected to 3% oxygen.

85. To comply with the NEHAP process vent control requirements of Subpart G applicable to P035, the Lima Facility relies on the AOGI. Under 40 C.F.R. § 63.113(a)(2), the Lima Facility is required to reduce the P035 emissions of total organic HAPs by 98% by weight, or to a concentration of 20 ppmv, whichever is less stringent.

86. The Lima Facility's Title V Permit requires that "emissions from [the P035] unit shall be controlled by the use of a closed process vent system that is vented to the AOGI . . ." Lima Facility's Title V Permit, Part III.A.I.2.e.

87. On July 3 and 4, 2006, July 17 and 18, 2006, and November 5 and 6, 2008, process vent emissions from P035 were released to the atmosphere without being vented to and controlled by the AOGI, in violation of Sections 110, 112 and 502 of the CAA, 42 U.S.C. §§ 7410, 7412, and 7661a, 40 C.F.R. §§ 52.23, 63.113(a)(2), 70.7(b), PTI 03-9227, and the Lima Facility Title V Permit.

**VIOLATION FOUR**  
**Failure to Operate Flare in Conformance with its Design**

88. As part of the conditions for operation of P048, P074, and P075, PTI 03-9227 and PTI 03-13534 each provide that the Lima Facility shall ensure the flare is operated and maintained in conformance with its design.

89. On multiple days in 2004, the Lima Facility applied too much steam relative to the process vent gas sent to the flare for proper flare combustion, such that the flare could not operate in conformance with its design. Based upon information submitted by the Lima Facility in response to a request for information issued pursuant to Section 114 of the CAA, 42 U.S.C. § 7414, days where the average daily steam-to-vent gas ratio were particularly excessive include the following:

Day (2004)	Steam (lbs/hr)	Vent gas Flow Rate (lbs/hr)	Steam to Vent Gas Ratio (lbs/lbs)
February 2	1633	1071	1.525
March 24	1591	976	1.630
April 29	758	464	1.635
May 3	925	458	2.021
May 4	3068	432	7.104
May 5	2262	409	5.530
May 6	1761	367	4.804
May 7	609	400	1.522
May 8	3372	986	3.419
May 9	1307	863	1.515
May 25	582	198	2.931
May 26	345	50	6.858
May 28	72	14	5.233
June 10	2591	1410	1.837
September 22	1948	1295	1.505

90. The Lima Facility's failure to operate the flare in conformance with its design is a violation of Section 110 of the CAA, 42 U.S.C. § 7410, 40 C.F.R. § 52.23, PTI 03-9227, and PTI 03-13534.

#### **VIOLATION FIVE**

#### **Failure to Operate Affected Facilities Including Associated Air Pollution Control Equipment in a Manner Consistent with Good Air Pollution Control Practice for Minimizing Emissions**

91. As indicated in Paragraph 89, above, on multiple days in 2004, the Lima Facility applied too much steam relative to the process vent gas sent to the flare to assure proper flare combustion, which was not consistent with good air pollution control practice for minimizing emissions.

92. By applying too much steam relative to the process vent gas sent to the flare to assure proper flare combustion, the Lima Facility failed to operate P048, P074, and P075, including associated air pollution control equipment, in a manner consistent with good air pollution control practice for minimizing emissions, in violation of Section 111 of the CAA, 42 U.S.C. § 7411, and 40 C.F.R. § 60.11(d).

#### **Environmental Impact of Violations**

93. These violations have caused or can cause excess emissions of VOCs and/or HAPs. VOC cause ground level ozone, which can irritate the human respiratory system and reduce lung function. Violation of the NESHAP standards can result in excess HAP emissions that may cause serious health effects, such as birth defects and cancer, and harmful environmental and ecological effects.

12/4/09  
Date

  
Cheryl L. Newton  
Director  
Air and Radiation Division

**CERTIFICATE OF MAILING**

I, Tracy Jamison, certify that I sent a Notice and Finding of Violation, No. EPA-5-10-OH-01, by Certified Mail, Return Receipt Requested, to:

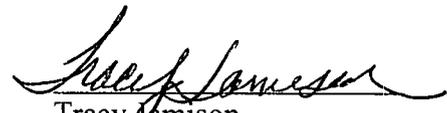
Patrick M. Conrath, Site Director  
INEOS USA, LLC  
1900 Fort Amanda Road  
Lima, Ohio 45804

I also certify that I sent copies of the Notice of Violation by first class mail to:

Mark Budge, Unit Manager  
Ohio EPA  
Northwest District Office  
347 N. Dunbridge Road  
Bowling Green, Ohio 43402

Vincent Atriano  
Squire, Sanders & Dempsey L.L.P.  
2000 Huntington Center  
41 South High Street  
Columbus, Ohio 43215

on the 10<sup>th</sup> day of December, 2009.

  
Tracy Jamison,  
Office Automation Clerk  
AECAS, (MI/WI)

CERTIFIED MAIL RECEIPT NUMBER: 7009 1680 0000 76673433