REGION 5
CHICAGO, IL 60604

VIA ELECTRONIC MAIL
DELIVERY RECEIPT REQUESTED

Matthew McCoy, Director of Operations
Gage Products Company
mmccoy@gageproducts.com

Re: Notice and Finding of Violation
Gage Products Company
Ferndale, Michigan

Dear Matthew McCoy:

The U.S. Environmental Protection Agency ("EPA") is issuing the enclosed Notice and Finding of Violation ("NOV/FOV") to Gage Products Company ("Gage Products" or "you") under Section 113(a) of the Clean Air Act, 42 U.S.C. § 7413(a). We find that you are violating the Standards of Performance for Volatile Organic Liquid Storage Vessels (Including Petroleum Liquid Storage Vessels) for Which Construction, Reconstruction, or Modification Commenced After July 23, 1984 ("NSPS Subpart Kb"); the Standards of Performance for Equipment Leaks of Volatile Organic Compounds ("VOC") in the Synthetic Organic Chemicals Manufacturing Industry for which Construction, Reconstruction, or Modification Commenced After January 5, 1981, and on or Before November 7, 2006 ("NSPS Subpart VV"); the Standards of Performance for VOC Emissions From SOCMI Distillation Operations ("NSPS Subpart NNN"); and your Air Installation Permit No. 64-18B at your Ferndale, Michigan facility (the "Facility").

Section 113 of the Clean Air Act gives us several enforcement options. These options include issuing an administrative compliance order, issuing an administrative penalty order, and bringing a judicial civil or criminal action.

We are offering you an opportunity to confer with us about the violations alleged in the NOV/FOV. The conference will give you an opportunity to present information on the specific findings of violation, any efforts you have taken to comply, and the steps you will take to prevent future violations. In addition, in order to make the conference more productive, we encourage you to submit to us information responsive to the NOV/FOV prior to the conference date.

Please plan for your Facility's technical and management personnel to attend the conference to discuss compliance measures and commitments. You may have an attorney represent you at this conference. The EPA contact in this matter is Laura Neudorf. You may call her at (312) 886-0794 or email her at neudorf.laura@epa.gov to request a conference. You should make the request **within 10 calendar**

days following receipt of this letter. We should hold any conference within 30 calendar days following receipt of this letter.

Sincerely,

SARAH MARSHALL

Digitally signed by SARAH MARSHALL
Date: 2024.03.20 14:30:05 -05'00'

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

Enclosure

1. EPA Small Business Resource Information Sheet

cc: Jenine Camilleri, Enforcement Unit Supervisor
Air Quality Division
Michigan Department of Environment Great Lakes and Energy (EGLE)
CamilleriJ@michigan.gov

Joyce Zhu, District Supervisor
Southeast Michigan, Air Quality Division
Michigan EGLE
Zhuj@michigan.gov

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
REGION 5

In the Matter of:	)	
	)	
Gage Products Company	)	**NOTICE AND FINDING OF VIOLATION**
Ferndale, Michigan	)	
	)	**EPA-5-24-MI-05**
Proceedings Pursuant to	)	
the Clean Air Act,	)	
42 U.S.C. §§ 7401, *et seq*.	)	

NOTICE AND FINDING OF VIOLATION

The U.S. Environmental Protection Agency ("EPA") finds that Gage Products Company ("Gage Products") is violating Sections 111(e) and 113 of the Clean Air Act, 42 U.S.C. §§ 7411(e) and 7413. Specifically, Gage Products is violating NSPS Subpart Kb, NSPS Subpart VV, NSPS Subpart NNN, and its Air Installation Permit No. 64-18B, as follows:

Regulatory Authority

NSPS General Provisions

1. Section 111(b)(1)(B) of the CAA, 42 U.S.C. § 7411(b)(1)(B), requires EPA to promulgate regulations establishing New Source Performance Standards ("NSPS").

2. Section 111(e) of the CAA, 42 U.S.C. § 7411(e), makes it unlawful for any owner or operator of any new source to operate such source in violation of any standard of performance applicable to such source after the effective date of standards of performance promulgated under this section.

NSPS Subpart Kb

3. 40 C.F.R. § 60.110b(a) applies the Standards of Performance for Volatile Organic Liquid Storage Vessels (Including Petroleum Liquid Storage Vessels) for Which Construction, Reconstruction, or Modification Commenced After July 23, 1984 (NSPS Subpart Kb) to storage vessels with a capacity greater than 75 cubic meters ("m^3") that are used to store volatile organic liquids ("VOL") for which construction, reconstruction, or modification is commenced after July 23, 1984.

4. 40 C.F.R. § 60.110b(b) excludes from NSPS Subpart Kb applicability storage vessels with a capacity greater than or equal to 151 m^3 storing a liquid with a maximum true vapor pressure less than 3.5 kilopascals ("kPa") or with a capacity greater than or equal to 75 m^3 but less than 151 m^3 storing a liquid with a maximum true vapor pressure less than 15.0 kPa.

5. 40 C.F.R. § 60.112b(a) requires the owner or operator of each storage vessel either with a design capacity greater than or equal to 151 m^3 containing a VOL that, as stored, has a maximum true

vapor pressure equal to or greater than 5.2 kPa but less than 76.6 kPa or with a design capacity greater than or equal to 75 m^3 but less than 151 m^3 containing a VOL that, as stored, has a maximum true vapor pressure equal to or greater than 27.6 kPa but less than 76.6 kPa, to equip each storage vessel with one of the following: a fixed roof in combination with an internal floating roof, an external floating roof, or a closed vent system and control device.

6. 40 C.F.R. § 60.112b(a)(3)(i) requires the closed vent system for storage vessels subject to NSPS Subpart Kb equipped with a closed vent system and control device, to be designed to collect all volatile organic compounds ("VOC") vapors and gases discharged from the storage vessel and operated with no detectable emissions as indicated by an instrument reading of less than 500 parts per million ("ppm") above background and visual inspections, as determined in 40 C.F.R. § 60.485(b).

7. 40 C.F.R. § 60.112b(a)(3)(ii) requires the control device for storage vessels subject to NSPS Subpart Kb equipped with a closed vent system and control device, to be designed and operated to reduce inlet VOC emissions by 95 percent or greater.

8. 40 C.F.R. § 60.113b(c)(1) requires the owner or operator of each source that is equipped with a closed vent system and control device to submit for approval by the Administrator an operating plan containing the following information:

a. Documentation demonstrating that the control device will achieve the required control efficiency during maximum loading conditions. This documentation is to include a description of the gas stream which enters the control device, including flow and VOC content under varying liquid level conditions (dynamic and static) and manufacturer's design specifications for the control device. If the control device or the closed vent capture system receives vapors, gases, or liquids other than fuels from sources that are not designated sources under NSPS Subpart Kb, the efficiency demonstration is to include consideration of all vapors, gases, and liquids received by the closed vent capture system and control device; and

b. A description of the parameter or parameters to be monitored to ensure that the control device will be operated in conformance with its design and an explanation of the criteria used for selection of that parameter (or parameters).

<u>NSPS Subpart VV</u>

9. 40 C.F.R. § 60.480(a)(1) applies the Standards of Performance for Equipment Leaks of VOC in the Synthetic Organic Chemicals Manufacturing Industry for which Construction, Reconstruction, or Modification Commenced After January 5, 1981, and on or Before November 7, 2006 (NSPS Subpart VV) to affected facilities in the synthetic organic chemicals manufacturing industry.

10. 40 C.F.R. § 60.480(a)(2) identifies the group of all equipment within a process unit as an affected facility.

11. 40 C.F.R. § 60.480(b) subjects any affected facility under 40 C.F.R. § 60.480(a) that commences construction, reconstruction, or modification after January 5, 1981, and on or before November 7, 2006, to the requirements of NSPS Subpart VV.

12. 40 C.F.R. § 60.481 defines “equipment” as each pump, compressor, pressure relief device, sampling connection system, open-ended valve or line, valve, and flange or other connector in VOC service and any devices or systems required by NSPS Subpart VV.

13. 40 C.F.R. § 60.481 defines “in VOC service” as a piece of equipment that contains or contacts a process fluid that is at least 10 percent VOC by weight.

14. 40 C.F.R. § 60.481 defines “in gas/vapor service” as a piece of equipment that contains process fluid that is in the gaseous state at operating conditions.

15. 40 C.F.R. § 60.481 defines “in light liquid service” as a piece of equipment that contains a liquid that meets the conditions specified in 40 C.F.R. § 60.485(e).

16. 40 C.F.R. § 60.481 defines “process unit” as the components assembled and connected by pipes or ducts to process raw materials and to produce, as intermediate or final products, one or more of the chemicals listed in 40 C.F.R. § 60.489. A process unit can operate independently if supplied with sufficient feed or raw materials and sufficient storage facilities for the product. For the purpose of NSPS Subpart VV, process unit includes any feed, intermediate and final product storage vessels (except as specified in 40 C.F.R. § 60.482–1(g)), product transfer racks, and connected ducts and piping. A process unit includes all equipment as defined in NSPS Subpart VV.

17. 40 C.F.R. § 60.481 defines “synthetic organic chemicals manufacturing industry” as the industry that produces, as intermediates or final products, one or more of the chemicals listed in 40 C.F.R. § 60.489.

18. 40 C.F.R. § 60.482–1(a) requires each owner or operator subject to the provisions of NSPS Subpart VV to demonstrate compliance with the requirements of 40 C.F.R. §§ 60.482–1 through 60.482–10 or 40 C.F.R. § 60.480(e) for all equipment within 180 days of initial startup.

19. 40 C.F.R. § 60.482–2(a)(1) requires each pump in light liquid service to be monitored monthly to detect leaks by the methods specified in 40 C.F.R. § 60.485(b), except as provided in 40 C.F.R. § 60.482–1(c) and (f) and 40 C.F.R. § 60.482–2(d) through (f). 40 C.F.R. § 60.482–2(a)(1) also requires that a pump that begins operation in light liquid service after the initial startup date for the process unit be monitored for the first time within 30 days after the end of its startup period, except for a pump that replaces a leaking pump and except as provided in 40 C.F.R. § 60.482–1(c) and (f) and 40 C.F.R. § 60.482–2(d) through (f).

20. 40 C.F.R. § 60.482–2(a)(2) requires each pump in light liquid service to be checked by visual inspection each calendar week for indications of liquids dripping from the pump seal, except as provided in 40 C.F.R. § 60.482–1(f).

21. 40 C.F.R. § 60.482–4(a) requires each pressure relief device in gas/vapor service to be operated with no detectable emissions, as indicated by an instrument reading of less than 500 ppm above background, as determined by the methods specified in 40 C.F.R. § 60.485(c), except during pressure releases.

22. 40 C.F.R. § 60.482–4(b)(1) requires pressure relief devices in gas/vapor service, after each pressure release, to be returned to a condition of no detectable emissions, as indicated by an instrument reading of less than 500 ppm above background, as soon as practicable, but no later than 5 calendar days after the pressure release, except as provided in 40 C.F.R. § 60.482–9.

23. 40 C.F.R. § 60.482–4(b)(2) requires pressure relief devices in gas/vapor service to be monitored to confirm the conditions of no detectable emissions, as indicated by an instrument reading of less than 500 ppm above background, by the methods specified in 40 C.F.R. § 60.485(c), no later than 5 calendar days after the pressure release.

24. 40 C.F.R. § 60.482–7(a)(1) requires each valve in gas/vapor service and in light liquid service to be monitored monthly to detect leaks by the methods specified in 40 C.F.R. § 60.485(b) and to comply with 40 C.F.R. § 60.482–7(b) through (e), except as provided in 40 C.F.R. § 60.482–7(f) through (h), 40 C.F.R. § 60.482–1(c) and (f), and 40 C.F.R. §§ 60.483–1 and 60.483–2.

25. 40 C.F.R. § 60.482–8(a) requires that if evidence of a potential leak is found by visual, audible, olfactory, or any other detection method at pumps and valves in heavy liquid service, pressure relief devices in light liquid or heavy liquid service, and connectors, the owner or operator shall follow either one of the following procedures:

a. The owner or operator shall monitor the equipment within 5 days by the method specified in 40 C.F.R. § 60.485(b) and shall comply with the requirements of 40 C.F.R. § 60.482-8(b)-(d).

b. The owner or operator shall eliminate the visual, audible, olfactory, or other indication of a potential leak within 5 calendar days of detection.

26. 40 C.F.R. § 60.482–10(f)(1) requires the owner or operator, for each vapor collection system or closed vent system constructed of hard-piping, to:

a. Conduct an initial inspection according to the procedures in 40 C.F.R. § 60.485(b); and

b. Conduct annual visual inspections for visible, audible, or olfactory indications of leaks.

27. 40 C.F.R. § 60.482–10(f)(2) requires the owner or operator, for each vapor collection system or closed vent system constructed of ductwork, to:

a. Conduct an initial inspection according to the procedures in 40 C.F.R. § 60.485(b); and

b. Conduct annual inspections according to the procedures in 40 C.F.R. § 60.485(b).

28. 40 C.F.R. § 60.485(b) requires the owner or operator to determine compliance with the standards in 40 C.F.R. §§ 60.482–1 through 60.482–10, 60.483, and 60.484 using Method 21 to determine the presence of leaking sources. The instrument must be calibrated before use each day of its use by the procedures specified in Method 21. The following calibration gases must be used:

a. Zero air (less than 10 ppm of hydrocarbon in air); and

b. A mixture of methane or n-hexane and air at a concentration of about, but less than, 10,000 ppm methane or n-hexane.

29. 40 C.F.R. § 60.486(c) requires, when each leak is detected as specified in 40 C.F.R. §§ 60.482–2, 60.482–3, 60.482–7, 60.482–8, and 60.483–2, the following information to be recorded in a log and kept for 2 years in a readily accessible location:

a. The instrument and operator identification numbers and the equipment identification number.

b. The date the leak was detected and the dates of each attempt to repair the leak.

c. Repair methods applied in each attempt to repair the leak.

d. "Above 10,000" if the maximum instrument reading measured by the methods specified in 40 C.F.R. § 60.485(a) after each repair attempt is equal to or greater than 10,000 ppm.

e. "Repair delayed" and the reason for the delay if a leak is not repaired within 15 calendar days after discovery of the leak.

f. The signature of the owner or operator (or designate) whose decision it was that repair could not be effected without a process shutdown.

g. The expected date of successful repair of the leak if a leak is not repaired within 15 days.

h. Dates of process unit shutdowns that occur while the equipment is unrepaired.

i. The date of successful repair of the leak.

30. 40 C.F.R. § 60.486(e) requires additional information pertaining to all equipment subject to the requirements in 40 C.F.R. §§ 60.482–1 to 60.482–10 to be recorded in a log that includes, but is not limited to, a list of identification numbers for equipment subject to the requirements of NSPS Subpart VV and pressure relief devices required to comply with 40 C.F.R. § 60.482–4.

31. 40 C.F.R. § 60.487(a) requires each owner or operator subject to the provisions of NSPS Subpart VV to submit semiannual reports to the Administrator beginning six months after the initial startup date.

32. 40 C.F.R. § 60.487(b) requires the initial semiannual report to the Administrator to include the following information:

a. Process unit identification;

b. Number of valves subject to the requirements of 40 C.F.R. § 60.482–7, excluding those valves designated for no detectable emissions under the provisions of 40 C.F.R. § 60.482–7(f);

c. Number of pumps subject to the requirements of 40 C.F.R. § 60.482–2, excluding those pumps designated for no detectable emissions under the provisions of 40 C.F.R. § 60.482–2(e) and those pumps complying with 40 C.F.R. § 60.482–2(f); and

d. Number of compressors subject to the requirements of 40 C.F.R. § 60.482–3, excluding those compressors designated for no detectable emissions under the provisions of 40 C.F.R. § 60.482–3(i) and those compressors complying with 40 C.F.R. § 60.482–3(h).

33. 40 C.F.R. § 60.487(c) requires all semiannual reports to the Administrator to include the following information, summarized from the information in 40 C.F.R. § 60.486:

a. Process unit identification;

b. For each month during the semiannual reporting period;

i. Number of valves for which leaks were detected as described in 40 C.F.R. § 60.482–7(b) or 40 C.F.R. § 60.483–2;

ii. Number of valves for which leaks were not repaired as required in 40 C.F.R. § 60.482–7(d)(1);

iii. Number of pumps for which leaks were detected as described in 40 C.F.R. § 60.482–2(b), (d)(4)(ii)(A) or (B), or (d)(5)(iii);

iv. Number of pumps for which leaks were not repaired as required in 40 C.F.R. § 60.482–2(c)(1) and (d)(6);

v. Number of compressors for which leaks were detected as described in 40 C.F.R. § 60.482–3(f);

vi. Number of compressors for which leaks were not repaired as required in 40 C.F.R. § 60.482–3(g)(1); and

vii. The facts that explain each delay of repair and, where appropriate, why a process unit shutdown was technically infeasible.

c. Dates of process unit shutdowns which occurred within the semiannual reporting period; and

d. Revisions to items reported according 40 C.F.R. § 60.487(b) if changes have occurred since the initial report or subsequent revisions to the initial report.

NSPS Subpart NNN

34. 40 C.F.R. § 60.660(a) applies the Standards of Performance for VOC Emissions From SOCMI Distillation Operations (NSPS Subpart NNN) to each affected facility designated in 40 C.F.R. § 60.660(b) that is part of a process unit that produces any of the chemicals listed in 40 C.F.R. § 60.667 as a product, co-product, by-product, or intermediate, except as provided in 40 C.F.R. § 60.660(c).

35. 40 C.F.R. § 60.660(b) identifies an affected facility as any of the following for which construction, modification, or reconstruction commenced after December 30, 1983:

a. each distillation unit not discharging its vent stream into a recovery system;

b. each combination of a distillation unit and the recovery system into which its vent stream is discharged; or

c. each combination of two or more distillation units and the common recovery system into which their vent streams are discharged.

36. 40 C.F.R. § 60.661 defines "distillation operation" as an operation separating one or more feed stream(s) into two or more exit stream(s), each exit stream having component concentrations different from those in the feed stream(s). The separation is achieved by the redistribution of the components between the liquid and vapor-phase as they approach equilibrium within the distillation unit.

37. 60 C.F.R. § 60.661 defines "distillation unit" as a device or vessel in which distillation operations occur, including all associated internals (such as trays or packing) and accessories (such as reboiler, condenser, vacuum pump, steam jet, etc.), plus any associated recovery system.

38. 40 C.F.R. § 60.661 defines "process unit" as equipment assembled and connected by pipes or ducts to produce, as intermediates or final products, one or more of the chemicals in 40 C.F.R. § 60.667. A process unit can operate independently if supplied with sufficient fuel or raw materials and sufficient product storage facilities.

39. 40 C.F.R. § 60.661 defines "product" as any compound or chemical listed in 40 C.F.R. § 60.667 that is produced for sale as a final product as that chemical, or for use in the production of other chemicals or compounds. By-products, co-products, and intermediates are considered to be products.

40. 40 C.F.R. § 60.661 defines "recovery device" as an individual unit of equipment, such as an absorber, carbon adsorber, or condenser, capable of and used for the purpose of recovering chemicals for use, reuse, or sale.

41. 40 C.F.R. § 60.661 defines "recovery system" as an individual recovery device or series of such devices applied to the same vent stream.

42. 40 C.F.R. § 60.661 defines "vent stream" as any gas stream discharged directly from a distillation facility to the atmosphere or indirectly to the atmosphere after diversion through other

process equipment. The vent stream excludes relief valve discharges and equipment leaks including, but not limited to, pumps, compressors, and valves.

43. 40 C.F.R. § 60.662 requires the owner or operator of any affected facility to comply with one of the following options for each vent stream on and after the date on which the initial performance test required by 40 C.F.R. §§ 60.8 and 60.664 is completed, but not later than 60 days after achieving the maximum production rate at which the affected facility will be operated, or 180 days after the initial start-up, whichever date comes first:

a. Reduce emissions of total organic carbon ("TOC") (less methane and ethane) by 98 weight-percent, or to a TOC (less methane and ethane) concentration of 20 parts per million by volume ("ppmv"), on a dry basis corrected to 3 percent oxygen, whichever is less stringent. If a boiler or process heater is used to comply with this paragraph, then the vent stream must be introduced into the flame zone of the boiler or process heater;

b. Combust the emissions in a flare that meets the requirements of 40 C.F.R. § 60.18; or

c. Maintain a TRE index value greater than 1.0 without use of VOC emission control devices.

2019 Permit to Install

44. 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 into a State Implementation Plan ("SIP") is federally enforceable under CAA Section 113, 42 U.S.C. § 7413.

45. On May 6, 1980, EPA approved Michigan Rule 201, Mich. Admin. Code R 336.1201, Permits to Install as part of the federally enforceable SIP for Michigan. 45 Fed. Reg. 29790, 29800.

46. The SIP requires a person to obtain a permit to install ("PTI") in order to install, construct, reconstruct, relocate, or modify any process or process equipment, or control equipment that may be a source of an air contaminant or air pollutant. R 336.1201.

47. The Michigan Department of Environment, Great Lakes, and Energy issued the Facility Permit to Install No. 64-18B on May 30, 2019 ("2019 PTI") pursuant to Michigan's SIP-approved permit program.

48. The 2019 PTI subjects Tanks 69–71 and 78–81 to NSPS Subpart Kb and requires these tanks to comply with all provisions of NSPS Subpart Kb, as they apply to these tanks. 2019 PTI pages 10, 16–18.

49. The 2019 PTI requires CDREMANCOND[1] to be designed and operated to achieve, in combination with CDREMANFINALCOND,[2] 95 percent or greater recovery, on a weight-basis, of the design amount of TOC, less methane and ethane, contained in FGREMANUFACTURE's[3] vent streams. 2019 PTI page 25.

50. The 2019 PTI requires the permittee to equip the vessels in EU33KTKS[4] with a control device (CDFUELSCOND[5]) designed and operated to reduce inlet VOC emissions by 95 percent or greater. 2019 PTI page 38.

Relevant Factual Background

51. Gage Products owns and operates a chemical manufacturing facility at 625 Wanda Avenue, Ferndale, Michigan 48220 (the "Facility") classified under North American Industry Classification System ("NAICS") codes 325510 (Paint and Coating Manufacturing)[6] and 325998 (All Other Miscellaneous Chemical Product and Preparation Manufacturing).[7]

52. EPA conducted a CAA inspection of the Facility on August 17–18, 2022 ("August 2022 Inspection").

53. EPA conducted a second CAA inspection of the Facility on October 25, 2022 ("October 2022 Inspection").

54. EPA issued a Section 114 Information Request to Gage Products on June 12, 2023 ("June 2023 Information Request").

NSPS Subpart Kb

55. On September 22, 2022, Gage Products submitted to EPA all air permits and air permit applications submitted for the Facility in the last 10 years.

56. The air installation permit application Gage Products submitted to the Michigan Department of Environmental Quality (now the Michigan Department of Environment, Great Lakes, and Energy) on April 15, 2016, for Tanks 203–208 states that these tanks are subject to NSPS Subpart Kb. Application for Permit to Install Larger EU33KTKS page 2, April 15, 2016.

57. On September 22, 2022, Gage Products submitted to EPA a list of all tanks at the Facility and their design capacities, in gallons.

[1] Refers to the two vacuum condensers that exhaust to the Re-Man Condenser, as described in ¶ 101, *infra*. 2019 PTI page 24.
[2] Refers to the Re-Man Final Condenser referenced in ¶ 101, *infra*. 2019 PTI page 24.
[3] Includes Gage Products' two thin-film evaporators and distillation column. 2019 PTI page 24.
[4] Includes Tanks 203–208. 2019 PTI page 8.
[5] Refers to the Tanks Condenser referenced in ¶ 61, *infra*.
[6] This is the NAICS code reported by Gage Products in its November 13, 2018 Permit to Install application.
[7] This is the NAICS code reported by Gage Products in its May 30, 2019 Permit to Install application.

58. On September 22, 2022, Gage Products submitted to EPA records of the date(s) of installation, re-construction, and modification for all tanks at the Facility larger than 19,800 gallons.

59. On September 22, 2022, Gage Products submitted to EPA records of the maximum true vapor pressure of all liquids stored in each tank at the Facility with a design capacity greater than 19,800 gallons for three years prior to August 23, 2022, and the date range that each liquid was stored.

60. According to the records referenced in Paragraphs 56–58 of this NOV/FOV, Tanks 78, 203, and 205–208 at the Facility were constructed after July 23, 1984, have a capacity greater than or equal to 75 m^3 but less than 151 m^3, and stored a liquid with a maximum true vapor pressure greater than 15.0 kPa from January 1, 2020 to September 7, 2022.

61. Due to the information detailed in Paragraphs 47, 55, and 59 of this NOV/FOV, Tanks 69–71, 78–81, and 203–208 are subject to the provisions of NSPS Subpart Kb.

62. During EPA's August 2022 Inspection, Gage Products personnel informed EPA and EPA observed that Tanks 69–71, 78–81, and 203–208, at a minimum, have a fixed roof and are connected to a condenser (Tanks Condenser) using a closed-vent system constructed of hard-piping.

63. During EPA's August 2022 Inspection, Gage Products personnel informed EPA that leak detection and repair using Method 21 has only been performed on hazardous waste tanks, pumps, and valves (Tanks 66, 68, and 72–77).

64. During EPA's August 2022 Inspection, Gage Products personnel informed EPA that visual inspections are performed on the Facility's hazardous waste tanks (Tanks 66, 68, and 72–77) and no visual inspections are performed on other storage tanks at the Facility.

65. During EPA's August 2022 Inspection, EPA used an optical gas imaging ("OGI") camera to screen for emissions. EPA observed emissions escaping from the covers of Tanks 80, 81, 206, and 207.

66. During EPA's August 2022 Inspection, EPA observed a blackened substance on the vents of Tanks 80, 81, 206, and 207, along with severe rusting on the piping associated with the closed vent system on Tanks 80 and 81.

67. During EPA's October 2022 Inspection, EPA performed Method 21 monitoring on tanks subject to NSPS Subpart Kb using two Toxic Vapor Analyzers ("TVAs"). EPA also used an OGI camera to screen for emissions. EPA's Method 21 readings are summarized below, along with whether EPA also observed emissions with the OGI camera:

Tank Number	Component Type	TVA Reading, B37055 (ppm)	TVA Reading, B37056 (ppm)	Additional Notes
68	Mixer	3,700	1,200	Emissions were observed with OGI.
73	Mixer	>10,000	>10,000	
74	Mixer	>10,000	10,000	
75	Mixer	10,000	2,100	
77	Vacuum breaker	7,000	822	Emissions were observed with OGI.

78	PRV	>10,000	840	Emissions were observed with OGI.
79	Mixer	2,800	2,100	
80	PRV	–	>10,000	Emissions were observed with OGI.
81	Mixer	700	1,500	
203	Vacuum breaker	520	580	
204	Vacuum breaker	>10,000	10,000	Emissions were observed with OGI.
206	Valve	>10,000	>10,000	Emissions were observed with OGI. This valve was open.
207	Valve	>10,000	>10,000	Emissions were observed with OGI. This valve was open.
208	Vacuum breaker	2,200	750	

68. During EPA's October 2022 Inspection, Gage Products personnel stated that no repairs were made after EPA's August 2022 Inspection.

69. EPA's June 2023 Information Request asked Gage Products to provide information pertaining to any repairs performed on the tanks connected to the Tanks Condenser after EPA's October 2022 Inspection.

70. In response to the request referenced in Paragraph 68 of this NOV/FOV, Gage Products stated that no repairs were made to any tanks connected to the Tanks Condenser between October 25, 2022 and July 11, 2023.

71. On September 8, 2022, Gage Products provided to EPA a summary results table from the most recent emissions test performed on the Tanks Condenser. This test was performed on August 18, 2015. The summary results table Gage Products provided does not provide calibration data or information regarding the Facility processes occurring while this test was conducted.

72. During EPA's October 2022 Inspection, EPA requested that Gage Products submit to EPA calibration data for the 2015 emissions test performed on the Tanks Condenser.

73. On December 27, 2022, Gage Products provided a response to EPA's request referenced in Paragraph 71 of this NOV/FOV that included an email chain with the third-party that conducted the emissions test. The third-party was unable to locate the calibration data collected during the emissions test. The third-party stated that a thorough and complete search of its archive files from 2015 and 2016 was performed, and the file folders from the emissions test are not available.

74. The records provided by Gage Products referenced in Paragraph 57 of this NOV/FOV state that Tanks 203–208, which are connected to the Tanks Condenser, were constructed in 2016.

<u>NSPS Subpart VV</u>

75. During EPA's October 2022 Inspection, Gage Products personnel informed EPA that two thin-film evaporators and a distillation column are used to manufacture solvents and paint-related products through separation at the Facility for sale.

76. On September 22, 2022, Gage Products submitted to EPA safety data sheets for all evaporator and distillation column products during the year prior to November 7, 2022.

77. According to the safety data sheets referenced in Paragraph 75 of this NOV/FOV, three of the Facility's evaporator and distillation column products are entirely comprised (100%) of chemicals listed in 40 C.F.R. § 60.489 ("NSPS Subpart VV-listed chemicals"). All other evaporator and distillation column products contain high quantities (52–99%)[8] of NSPS Subpart VV-listed chemicals.

78. EPA's June 2023 Information Request asked Gage Products to state whether it believes the Facility qualifies for any exemptions listed in 40 C.F.R. § 60.480(d) or complies with any alternative standards listed in 40 C.F.R. §§ 60.480(e), 60.483–1, or 60.483–2.

79. In response to the request referenced in Paragraph 77 of this NOV/FOV, Gage Products did not indicate that the Facility qualifies for any NSPS Subpart VV exemptions or complies with any alternative standards.

80. In response to EPA's June 2023 Information Request, Gage Products stated that the thin-film evaporator #1 and the distillation column were installed in March 1989, and the thin-film evaporator #2 was installed in 1993.

81. Gage Products' two evaporators and distillation column are process units in the synthetic organic chemicals manufacturing industry, as defined in NSPS Subpart VV, and therefore, the group of equipment associated with these process units is an affected facility under NSPS Subpart VV.

82. In response to EPA's June 2023 Information Request, Gage Products stated there is no equipment at the Facility that is operating in VOC service less than 300 hours per year.

83. In response to EPA's June 2023 Information Request, Gage Products stated that there is no equipment in vacuum service at the Facility.

84. In response to EPA's June 2023 Information Request, Gage Products stated that there are no pumps or valves designated as unsafe-to-monitor.

85. During EPA's August 2022 Inspection, Gage Products personnel informed EPA that leak detection and repair using Method 21 has only been performed on hazardous waste tanks, pumps, and valves (Tanks 66, 68, and 72–77).

86. On September 8, 2022, Gage Products provided logs and reports for inspections performed on any tanks for three years prior to August 23, 2022. The logs and reports for inspections

[8] If the composition of a listed chemical in a given product is displayed as a range on the product's safety data sheet, the midpoint of the range was taken to be this chemical's composition in the product (e.g., for a composition range of 20–50%, a composition of 35% was used).

that Gage Products provided were only for Method 21 inspections on the hazardous waste tanks (Tanks 66, 68, and 72–77).

87. EPA's June 2023 Information Request asked Gage Products to provide leak detection logs, semiannual reports, and Method 21 monitoring records for pumps, pressure relief devices, valves, connectors, closed-vent systems, and any other equipment subject to 40 C.F.R. §§ 60.482–2 through 60.482–10.

88. In response to the request referenced in Paragraph 86 of this NOV/FOV, Gage Products stated that any leak detection logs, reports, or monitoring information would be such information as required by Gage Products' 2019 PTI.

89. Gage Products' 2019 PTI requires monthly sight, sound, and smell inspections for equipment in gasoline service in the specialty manufacturing processes (FGSPECIALTY) [9] and equipment in the fuel and solvent blending process (FGFUELBLEND),[10] as well as weekly visual inspections for the specialty manufacturing processes baghouse (CDBAGHOUSE).[11]

90. During EPA's August 2022 Inspection, Gage Products personnel informed EPA that visual inspections are performed on the Facility's hazardous waste tanks (Tanks 66, 68, and 72–77), and no visual inspections are performed on other storage tanks at the Facility.

91. EPA's June 2023 Information Request asked Gage Products to state whether visual inspections for NSPS Subpart VV or VVa are performed on pumps in light liquid service or closed vent systems and control devices.

92. In response to the request referenced in Paragraph 90 of this NOV/FOV, Gage Products stated that daily visual inspections are performed on pumps in light liquid service associated with the Tanks Condenser and NSPS Kb tanks, and monthly visual inspections are performed on various components of its fuel manufacturing system under 40 C.F.R. Part 63, Subpart BBBBBB.

93. Gage Products is not performing Method 21 inspections on the following equipment within the Facility's process units at the specified frequencies as required by NSPS Subpart VV:

a. all pumps in light liquid service monthly;

b. all valves in gas/vapor and light liquid service monthly;

c. all pressure relief devices in gas/vapor service after each pressure release; and

[9] Specialty manufacturing processes consists of storage totes, dispensers, agitators, mixers, and a baghouse, also including specialty products manufacturing including water-based cleaners, solvent-based cleaners, booth coatings, strippers, and fuel blending located in Fill Houses 3, 4, and 6 and in the laboratory. 2019 PTI page 27.

[10] The fuel and solvent blending process consists of Tanks 25–27, 29–31, and 93 (EU515TKS), Tanks 203–208 (EU33KTKS), Tanks 209–210 (EUHIVPTKS), Tanks 211–222 (EU9600TKS), Tanks 229, 231–235 (EU9600BLEND), Tanks 661–663 (EUNEBLEND), Tanks 92 and 94–96 (EU515BLEND), tote and drum filling of diesel fuel products from FGFUELBLEND (EUTOTE&DRUM), and tanker truck filling (EUTANKER). 2019 PTI page 37.

[11] 2019 PTI page 28; 40 C.F.R. § 63.11089(a).

d. all closed vent systems initially.

94. Gage Products is not performing visual inspections on the following equipment within the Facility's process units at the specified frequencies as required by NSPS Subpart VV:

a. pumps in light liquid service weekly (with the exception of the pumps specified in Paragraph 91 of this NOV/FOV);

b. all closed vent systems annually;

c. pumps and valves in heavy liquid service at any point;

d. pressure relief devices in light liquid or heavy liquid service at any point; and

e. connectors at any point.

NSPS Subpart NNN

95. During EPA's October 2022 Inspection, Gage Products personnel informed EPA that two thin-film evaporators and a distillation column are used to manufacture solvents and paint-related products through separation at the Facility for sale.

96. On September 22, 2022, Gage Products submitted to EPA safety data sheets for all evaporator and distillation column products during the year prior to November 7, 2022.

97. According to the safety data sheets referenced in Paragraph 95 of this NOV/FOV, three of the Facility's evaporator and distillation column products are entirely comprised (100%) of chemicals listed in 40 C.F.R. § 60.667 ("NSPS Subpart NNN-listed chemicals"). All other evaporator and distillation column products contain high quantities (52–99%)[12] of the chemicals listed in 40 C.F.R. § 60.667.

98. In response to EPA's June 2023 Information Request, Gage Products stated that the thin-film evaporator #1 and the distillation column were installed in March 1989, and the thin-film evaporator #2 was installed in 1993.

99. EPA's June 2023 Information Request asked Gage Products to state whether it believes the Facility qualifies for any exemptions listed in 40 C.F.R. § 60.660(c) or complies with any alternative standards listed in 40 C.F.R. § 60.660(d).

100. In response to the request referenced in Paragraph 98 of this NOV/FOV, Gage Products did not indicate that the Facility qualifies for any NSPS Subpart NNN exemptions or complies with any alternative standards.

[12] If the composition of a listed chemical in a given product is displayed as a range on the product's safety data sheet, the midpoint of the range was taken to be this chemical's composition in the product (e.g., for a composition range of 20–50%, a composition of 35% was used).

101. Gage Products' two thin-film evaporators and distillation column, along with the associated recovery system into which their vent streams are discharged, is an affected facility subject to the requirements of NSPS Subpart NNN.

102. According to Gage Product's 2019 PTI, the vent streams from one of Gage Products' evaporators are routed to a condenser, and the vent streams from the distillation column are routed to a separate condenser. The outlet of these two condensers, along with the vent streams from Gage Products' other evaporator, are routed to a final condenser ("Re-Man Condenser").[13]

103. EPA's June 2023 Information Request asked Gage Products to provide the complete test report and protocol for the most recent performance test performed on the two evaporators and distillation column, including all data measured that demonstrates emission control efficiency of any control devices, outlet concentration of TOC from any control device, or the TRE index value of a vent stream from a recovery system.

104. In response to the request referenced in Paragraph 102 of this NOV/FOV, Gage Products provided to EPA a report for a performance test conducted on the Re-Man Condenser vent stream in November 2013. This test does not demonstrate that the vent streams from the evaporators and distillation column are in compliance with the standards in 40 C.F.R. § 60.662.

Violations

NSPS Subpart Kb

105. Gage Products failed to operate the Facility's closed vent system associated with Tanks 69–71, 78–81, and 203–208 with no detectable emissions, as indicated by an instrument reading of less than 500 ppm above background and visual inspections, in violation of 40 C.F.R. § 60.112b(a)(3)(i) and the 2019 PTI.

106. Gage Products failed to perform Method 21 monitoring and visual inspections on the closed vent system associated with Tanks 69–71, 78–81, and 203–208 to ensure operation with no detectable emissions, in violation of 40 C.F.R. § 60.112b(a)(3)(i), 40 C.F.R. § 60.485(b), and the 2019 PTI.

107. Due to the information referenced in Paragraphs 70–73 of this NOV/FOV, Gage Products failed to demonstrate that the Tanks Condenser is designed and operated to reduce inlet VOC emissions by 95 percent or greater during maximum loading conditions, in violation of 40 C.F.R. § 60.112b(a)(3)(ii), 40 C.F.R. § 60.113b(c)(1)(i), and the 2019 PTI.

NSPS Subpart VV

108. Gage Products failed to perform monthly Method 21 inspections on all pumps in light liquid service within the Facility's process units, in violation of 40 C.F.R. § 60.482–2(a)(1).

[13] 2019 PTI page 24.

109. Gage Products failed to perform monthly Method 21 inspections on all valves in gas/vapor and light liquid service within the Facility's process units, in violation of 40 C.F.R. § 60.482–7(a)(1).

110. Gage Products failed to perform Method 21 inspections on all pressure relief devices in gas/vapor service within the Facility's process units after each pressure release, in violation of 40 C.F.R. § 60.482–4(b).

111. Gage Products failed to perform an initial Method 21 inspection of all closed vent systems within the Facility's process units, in violation of 40 C.F.R. § 60.482–10(f)(1)(i).

112. Gage Products failed to perform weekly visual inspections on pumps in light liquid service within the Facility's process units, with the exception of the pumps specified in Paragraph 91 of this NOV/FOV, in violation of 40 C.F.R. § 60.482–2(a)(2).

113. Gage Products failed to perform annual visual inspections on all closed vent systems within the Facility's process units, in violation of 40 C.F.R. § 60.482–10(f)(1)(ii).

114. Gage Products failed to perform any visual, olfactory, or auditory inspections on pumps and valves in heavy liquid service, pressure relief devices in light liquid or heavy liquid service, and connectors within the Facility's process units, in violation of 40 C.F.R. § 60.482–8(a).

115. Gage Products failed to comply with the recordkeeping and reporting provisions associated with the monitoring referenced in Paragraphs 107–113 of this NOV/FOV, in violation of 40 C.F.R. §§ 60.486 and 60.487.

NSPS Subpart NNN

116. Gage Products failed to demonstrate that the vent streams from the Facility's two evaporators and distillation column are in compliance with the emission standards set forth in NSPS Subpart NNN, in violation of 40 C.F.R. § 60.662 and the 2019 PTI.

117. Gage Products failed to perform the testing and calculations required to assess compliance with the emission standards set forth in NSPS Subpart NNN, in violation of 40 C.F.R. § 60.664.

118. Gage Products failed to notify the Administrator of the specific provisions of 40 C.F.R. § 60.662 with which it has elected to comply upon initial start-up, in violation of 40 C.F.R. § 60.665(a).

Environmental Impact of Violations

119. The violations identified in Paragraphs 104–117 have caused excess emissions of VOCs.

120. Excess VOC emissions can cause eye, nose, and throat irritation, headaches, loss of coordination, nausea and damage to the liver, kidneys, and the central nervous system.

121. VOC emissions are a precursor to ground-level ozone. Breathing ozone contributes to a variety of health problems including chest pain, coughing, throat irritation, and congestion. It can

worsen bronchitis, emphysema, and asthma. Ground-level ozone also can reduce lung function and inflame lung tissue.

MICHAEL HARRIS

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Michael D. Harris
Division Director
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