

**UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
REGION 5**

IN THE MATTER OF:

**Pullman Innovations, LLC
Chicago, Illinois**

Proceedings Pursuant to
the Clean Air Act,
42 U.S.C. §§ 7401 *et seq.*

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**NOTICE OF VIOLATION AND
FINDING OF VIOLATION
EPA-5-22-IL-13**

**NOTICE OF VIOLATION OF STATE IMPLEMENTATION PLAN AND FINDING OF
VIOLATION OF CLEAN AIR ACT**

The U.S. Environmental Protection Agency (EPA) finds that A-F Acquisition, LLC, doing business as Pullman Innovations, LLC (Pullman), is violating the Clean Air Act, 42 U.S.C. § 7401 *et seq.* (CAA). Specifically, Pullman is violating Title V of the CAA, 42 U.S.C. § 7661 *et seq.*, (Title V) and the implementing regulations at 40 C.F.R. Part 70. EPA is also issuing this Notice of Violation under Section 113(a)(1) of the CAA, 42 U.S.C. § 7413(a)(1), for violation of the Illinois State Implementation Plan (SIP).

Statutory and Regulatory Authority

1. Section 502(a) of the CAA, 42 U.S.C. § 7661a(a), provides that it is unlawful for any person to operate a major source subject to Title V except in compliance with a permit issued under Title V after the effective date of any permit program approved or promulgated under Title V.
2. Section 302 of the CAA, 42 U.S.C. § 7602(e), defines “person” as an individual, corporation, partnership, association, State, municipality, political subdivision of a State, and any agency, department, or instrumentality of the United States and any officer, agent, or employee thereof.
3. Section 502(d) of the CAA, 42 U.S.C. § 7661a(d), provides that each state must submit to the EPA a permit program meeting the requirements of Title V.
4. Pursuant to Section 502(b) of the CAA, 42 U.S.C. § 7661a(b), EPA promulgated regulations establishing the minimum elements of a Title V permit program to be administered by any air pollution control agency. See 57 Fed. Reg. 32,295 (July 21, 1992). Those regulations are codified at 40 C.F.R. Part 70. On December 4, 2001, EPA granted full approval to Illinois’ CAA Title V permit program, set forth in the Illinois Environmental Protection Act (“Illinois Act”), 415 Illinois Compiled Statutes (ILCS) 5/39.5 (“Clean Air Act Permit Program” or “CAAPP”). See 66 Fed. Reg. 62946.

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5. 40 C.F.R. § 70.2 defines “Part 70 source” as any source subject to the permitting requirements of this part, as provided in §§ 70.3(a) and 70.3(b) of this part.
6. 40 C.F.R. § 70.7(b) provides that no part 70 source may operate after the time that it is required to submit a timely and complete application except in compliance with a part 70 permit issued under an approved permit program.
7. 40 C.F.R. § 70.2 defines "major stationary source" as any stationary source that has the potential to emit 100 tons per year or greater of volatile organic compounds (VOCs) or oxides of nitrogen in areas classified as marginal non-attainment of ozone.
8. 40 C.F.R. § 70.2 defines "potential to emit" as the maximum capacity of a stationary source to emit any air pollutant under its physical and operational design. Any physical or operational limitation on the capacity of a source to emit an air pollutant, including air pollution control equipment and restrictions on hours of operation or on the type or amount of material combusted, stored, or processed, shall be treated as part of its design if the limitation is enforceable by EPA.
9. Section 503 of the CAA, 42 U.S.C. § 7661b, and 40 C.F.R. § 70.5(a) set forth the requirements to submit a timely, accurate, and complete Title V permit application, including information required to be submitted with the application, in accordance with the state permitting authority.
10. Section 39.5(5) of the Illinois Act, 415 ILCS 4/39.5(5), provides that an owner or operator of a CAAPP source shall submit its complete CAAPP application consistent with the Illinois Act and applicable regulations.
11. Section 39.5(1) of the Illinois Act, 415 ILCS 5/39.5(1), defines “CAAPP source” as any source for which the owner or operator is required to obtain a CAAPP permit pursuant to subsection 2 of this Section.
12. Section 39.5(2)(c)(i)(A) of the Illinois Act, 415 ILCS 5/39.5(2)(c)(i)(A), provides that any stationary source that has the potential to emit 100 tons per year or greater of volatile organic compounds (VOCs) or oxides of nitrogen in areas classified as marginal non-attainment of ozone is a major source subject to the CAAPP.
13. Pursuant to its authority under the Act, the Illinois Pollution Control Board (Board) enacted rules applicable to air pollution (Board Air Pollution Regulations) at 35 Illinois Administrative Code (Ill. Adm. Code) 201.101 *et seq.*
14. Section 201.103 of the Board Air Pollution Regulations, 35 Ill. Adm. Code 201.103, provides that no person shall cause or allow the operation of any new emission source or new air pollution control equipment ... without first obtaining an operating permit from the Illinois Environmental Protection Agency (Illinois EPA).
15. Section 110 of the CAA, 42 U.S.C. § 7410, requires each state to adopt and submit a plan which provides for the implementation, maintenance, and enforcement of any national primary or secondary standard established pursuant to Section 109 of the CAA, 42 U.S.C.

§ 7409. These plans are required to include enforceable emissions limitations, control measure, schedules for compliance, emissions monitoring requirements and permit programs for new and modified sources.

16. EPA codified its approval and implementation of the Illinois State Implementation Plan (SIP) at 40 C.F.R. §§ 52.570 through 52.750.
17. 40 C.F.R. § 52.23 provides that failure to comply with any approved regulatory provision of a SIP or with any permit limitation or condition contained within an operating permit issued under an EPA-approved program that is incorporated into the SIP, shall render the person failing to comply in violation of a requirement of an applicable implementation plan.
18. On September 9, 1994, EPA approved 35 Ill. Adm. Code 218.301 as part of the federally enforceable SIP for Illinois. 59 *Fed. Reg.* 46562.
19. Section 218.301 of the Board Air Pollution Regulations, 35 Ill. Adm. Code 218.301, provides, in pertinent part: “[n]o person shall cause or allow the discharge of more than 3.6 kg/hr (8 lb/hr) of organic material into the atmosphere from any emission unit...”
20. Section 211.1950 of the Board Air Pollution Regulations, 35 Ill. Adm. Code 211.1950, defines “emission unit” as any part or activity at a stationary source that emits or has the potential to emit any air pollutant.
21. Section 211.370 of the Board Air Pollution Regulations, 35 Ill. Adm. Code 211.370, defines “air pollutant” as an air pollution agent or combination of such agents, including any physical, chemical, biological, radioactive (including source material, special nuclear material and byproduct material) substance or matter which is emitted into or otherwise enters the atmosphere. Such term includes any precursors to the formation of any air pollutant, to the extent that the relevant statute or rule has identified such precursor or precursors for particular purpose for which the term “air pollutant” is used.
22. Section 211.4970 of the Board Air Pollution Regulations, 35 Ill. Adm. Code 211.4970, defines “potential to emit” as the maximum capacity of a stationary source to emit any air pollutant under its physical and operational design. Any physical or operational limitation on the capacity of a source to emit an air pollutant, including air pollution control equipment and restriction on hours of operation or the type or amount of material combusted, stored, or processed, shall be treated as part of its design if the limitation is federally enforceable.
23. The Board enacted regulations applicable to Organic Material Emission Standards and Limitations for the Chicago Area for emission units not otherwise covered by enumerated categories 35 Ill. Adm. Code Part 218, Subpart TT: Other Emission Units. 35 Ill. Adm. Code 218.980 through 218.988 (Subpart TT).
24. On March 12, 1997, EPA approved 35 Ill. Adm. Code 218.980, as part of the federally enforceable Illinois SIP. 62 *Fed. Reg.* 11327.
25. Section 218.980(b)(1) of the Board Air Pollution Regulations, 35 Ill. Adm. Code 218.980(b)(1), provides, in pertinent part, that a source is subject to Subpart TT if it has the

potential to emit 25 tons or more of VOM per year, in aggregate, from emission units, and is not otherwise regulated by the Subparts identified in 35 Ill. Adm. Code 218.980(b)(1)(A) and not included in the categories listed in 35 Ill. Adm. Code 218.980(b)(1)(B).

26. On October 21, 1996, EPA approved 35 Ill. Adm. Code 218.986 as part of the federally enforceable SIP. 61 Fed. Reg. 54556.
27. Section 218.986(a) of the Board Air Pollution Regulations, 35 Ill. Adm. Code 218.986(a), provides that every owner or operator of an emission unit subject to Subpart TT must operate emission capture and control equipment which achieves an overall reduction in uncontrolled VOM emissions of at least 81 percent from each emission unit.

Findings

28. Pullman, a limited liability company, is a person as that term is defined by Section 302(e) of the CAA, 42 U.S.C. § 7602(e).
29. Pullman owns and operates a soapstock acidulation facility at 2701 E. 100th Street, Chicago, Cook County, Illinois (the Facility).
30. EPA classifies Cook County, Illinois as marginal non-attainment for ozone according to the 2015 8-hour ozone standard from 2018 through 2021.
31. The Facility emits VOCs, which meets the definition of VOM as provided by 35 Ill. Adm. Code 211.7150.
32. VOCs are air pollutants as defined by 35 Ill. Adm. Code 211.370.
33. VOCs are emitted from the Facility's 24 acidulators, final product storage tanks, and wastewater treatment. The acidulators, final product storage tanks, and wastewater treatment vent to a dual caustic scrubber system. The first caustic scrubber was installed prior to May 2011 and the second caustic scrubber was added to the Facility in 2017.
34. On January 2, 2015, Illinois EPA issued to the prior operator of the Facility a Lifetime Operating Permit No. 86050044 (Lifetime Permit") for the operation of 24 15,000-gallon process reactors (acidulators) vented to a single caustic scrubber. Lifetime Permits issued by Illinois EPA are not issued under the CAAPP and do not provide for federally enforceable limitations on emissions in accordance with Title V requirements.
35. Emissions from the Facility's raw material storage and unloading area vent to an acid scrubber installed at the Facility in approximately 2019.
36. Prior to January 21, 2020, EPA became aware of odor complaints received by the City of Chicago from citizens located in the vicinity of the Facility.
37. On January 21, 2020, EPA inspected the Facility (the Inspection).

38. During the Inspection, EPA noted a garbage-type odor outside of the Facility before entering the building.
39. On September 9, 2020, EPA sent a request for information to Pullman pursuant to Section 114 of the CAA, 42 U.S.C. § 7414, which required Pullman to perform stack testing of VOC emissions from the acid scrubber and dual caustic scrubber system at the Facility.
40. On January 20 and 21, 2021, Pullman conducted a VOC emissions stack test on the acid scrubber and the dual caustic scrubber system (2021 Stack Test).
41. On February 18, 2021, Pullman submitted a report of the 2021 Stack Test to EPA (2021 Report).
42. The 2021 Report stated that five of the 24 acidulators were in operation while the dual caustic scrubber system was tested.
43. The 2021 Report provides that VOC emissions entered the dual caustic scrubber system at an average rate of 10.9 lb/hr. This equates to an emission rate without the operation of air pollution controls of 2.18 lb/hr of VOC per acidulator.
44. The 2021 Report provides that VOC emissions from the raw material storage entered the acid scrubber at an average rate of 1.12 lb/hr.
45. The 24 acidulators are capable of operating simultaneously for 24 hours per day, seven days per week, 365 days per year.
46. Since at least April 1, 2017, the Facility has had a potential to emit of approximately 234 tons of VOCs per year from the processes that vent to the dual caustic scrubber and the acid scrubber.
47. The Facility has the potential to emit more than 100 tons of VOCs per year and is therefore a “major source” as defined in 40 C.F.R. § 70.2, and a “Clean Air Act Permit Program (CAAPP) source” as defined in 415 ILCS 5/39.5(1).
48. As of the date of this NOV/POV, Pullman, the operator of a major source and a CAAPP source, has not applied to Illinois EPA for a permit under the CAAPP for the Facility.
49. Since at least April 1, 2017, or on dates better known to Pullman, the Facility has had the potential to emit more than 25 tons of VOM per year. The Facility is therefore subject to the requirements of Subpart TT.
50. The dual caustic scrubber system emits air pollutants and is therefore an “emission unit” as defined by 35 Ill. Adm. Code 211.1950.
51. The 2021 Report provides that the dual caustic scrubber system emitted an average of 5.84 lb/hr of VOCs over three 1-hour test runs. This equates to an emission rate of 1.17 lb/hr of VOCs per acidulator vented through the dual caustic scrubber system.

52. According to the results of the 2021 Stack Test, the dual caustic scrubber system emits more than 8 lb/hr of VOCs at any time that seven or more acidulators are in operation at the Facility.
53. According to information provided by Pullman to EPA, for at least the months of December 2018, July, October, November, and December 2019, and February, March, November, and December 2020, Pullman operated a daily average of seven acidulators or greater, and thereby emitted a daily average of at least 8.19 lb/hr of VOCs through the dual caustic scrubber system.
54. According to the 2021 Report, the removal efficiency of the dual caustic scrubber system is 42.5% calculated from mass rate emissions in the inlet and outlet streams.
55. According to the 2021 Report, that the removal efficiency of the acid scrubber is 18.8% as calculated from concentration of VOCs in the inlet and outlet.

Violations

56. Since at least April 1, 2017, Pullman failed to timely submit a Title V permit application to Illinois EPA, in violation of Section 503 of the CAA, 42 U.S.C. § 7661b, and 40 C.F.R. § 70.5(a).
57. From at least April 1, 2017 to the present, Pullman has operated and continues to operate a major source of VOC without a permit issued pursuant to the requirements of Title V of the CAA, in violation Section 502(a) of the CAA, 42 U.S.C. § 7661a(a), and 40 C.F.R. § 70.7(b).
58. For at least the months of December 2018, July, October, November, and December 2019, and February, March, November, and December 2020, Pullman emitted over 8 lb/hr of VOC from an emission unit in violation of 35 Ill. Adm. Code 218.301 and 40 C.F.R. § 52.23.
59. From at least April 1, 2017 to the present, Pullman has operated and continues to operate two emission capture and control equipment devices that have each failed to achieve an overall reduction in uncontrolled VOM emissions of at least 81 percent, in violation of Subpart TT requirements, 35 Ill. Adm. Code 218.986(a) and 40 C.F.R. § 52.23.

Environmental Impacts of Violations

60. By failing to achieve 81% control at the emission units and by exceeding 8 lb/hr of VOC emissions at the dual caustic scrubber system, Pullman has caused excess emissions of VOC, which contribute to ground level ozone in an EPA-designated marginal ozone non-attainment area.
61. Breathing ground-level ozone can cause a variety of health concerns 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. Repeated exposure may permanently scar lung tissue.

62. Some VOC emissions may have malodorous characteristics and may be irritating and burdensome to the surrounding community.
63. A 1-mile radius report from EPA's EJSCREEN: Environmental Justice Screening and Mapping tool indicates that 11 of the 12 EJ Indices exceed the 80% environmental Justice criteria threshold near the facility.

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