

Iowa Department of Natural Resources

Draft Title V Operating Permit Fact Sheet

This document has been prepared to fulfill the public participation requirements of 40 CFR Part 70 and 567 Iowa Administrative Code (IAC) 24.107(6). 40 CFR Part 70 contains operating permit regulations pursuant to Title V of the Clean Air Act.

The Iowa Department of Natural Resources (DNR) finds that:

1. Vermeer Corporation, located at 1210 Vermeer Rd East, Pella, IA 50219 has applied to renew their Title V Operating Permit. The designated responsible official of this facility is Robert Smith.
2. Vermeer Corporation is a Construction Machinery Manufacturing facility. This facility consists of 41 emission units with potential emissions of:

Pollutant	Abbreviation	Potential Emissions (Tons per Year)
Particulate Matter ($\leq 2.5 \mu\text{m}$)	PM _{2.5}	101.95
Particulate Matter ($\leq 10 \mu\text{m}$)	PM ₁₀	103.93
Particulate Matter	PM	147.20
Sulfur Dioxide	SO ₂	5.58
Nitrogen Oxides	NO _x	37.86
Volatile Organic Compounds	VOC	249.31
Carbon Monoxide	CO	22.97
Lead	Lead	0.00
Hazardous Air Pollutants ⁽¹⁾	HAP	24.38

⁽¹⁾ May include the following: Benzene, Chromium Compounds, Cumene, 1,4 Dichlorobenzene, Ethyl Benzene, Formaldehyde, Glycol Ethers, Hexane, Manganese Compounds, Methyl Isobutyl Ketone, Naphthalene, Nickel, Toluene, and Xylenes. Single HAP limit of 8.95 tpy

3. Vermeer Corporation submitted a Title V Operating Permit renewal application on January 8, 2024. Based on the information provided in these documents, DNR has made an initial determination that the facility meets all the applicable criteria for the issuance of an operating permit specified in 567 IAC 24.107.
 4. DNR has complied with the procedures set forth in 567 IAC 24.107, including those regarding public notice, opportunity for public hearing, and notification of EPA and surrounding state and local air pollution programs.
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DNR procedures for reaching a final decision on the draft permit:

1. The public comment period for the draft permit will run from June 5, 2025 through July 5, 2025. During the public comment period, anyone may submit written comments on the permit. Mail signed comments to Derek Wedemeier at the DNR address shown below. The beginning date of this public comment period also serves as the beginning of the U.S. Environmental Protection Agency's (EPA) 45-day review period, provided the EPA does not seek a separate review period.
2. Written requests for a public hearing concerning the permit may also be submitted during the comment period. Any hearing request must state the person's interest in the subject matter, and the nature of the issues proposed to be raised at the hearing. DNR will hold a public hearing upon finding, on the basis of requests, a significant degree of relevant public interest in a draft permit. Mail hearing requests to Derek Wedemeier at the DNR address shown below.
3. DNR will keep a record of the issues raised during the public participation process, and will prepare written responses to all comments received. The comments and responses will be compiled into a responsiveness summary document. After the close of the public comment period, DNR will make a final decision on the renewal application. The responsiveness summary and the final permit will be available to the public upon request.

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DNR concludes that:

1. DNR has authority under 455B.133 Code of Iowa to promulgate rules contained in 567 IAC Chapters 21-33, including, but not limited to, rules containing emission limits, providing for compliance schedules, compliance determination methods and issuance of permits.
2. DNR has the authority to issue operating permits for air contaminant sources and to include conditions in such permits under 455B.134 Code of Iowa.
3. The emission limits included in this permit are authorized by 455B.133 Code of Iowa and 567 IAC Chapters 21-33.
4. DNR is required to comply with 567 IAC Chapter 22 in conjunction with issuing a Title V Operating Permit.
5. The issuance of this permit does not preclude the DNR from pursuing enforcement action for any violation.

Title V Renewal Review Notes

Facility Name:	Vermeer Manufacturing Company
City	Pella
County	Marion
Facility Number:	63-02-004
EIQ:	92-5246
Permit Number:	99-TV-052-R4
Reviewer:	Derek Wedemeier
Date:	**DATE**

Facility Identification

Facility Name:	Vermeer Manufacturing Company
Facility Location:	1210 Vermeer Road East, Pella, IA 50219
Responsible Official:	Mr. Dan Huitink
Phone:	641-621-3141

Vermeer Manufacturing Company of Pella, Iowa has applied for a Part 70 Title V Permit renewal. The renewal application was submitted on January 8, 2024. Additional information was submitted on 3/28/2024 and 4/28/2025. The facility manufactures various types of heavy equipment.

Potential Emissions (PTE)

Pollutant	Potential Emissions (TPY)
PM _{2.5}	101.94
PM ₁₀	103.92
PM	147.19
SO ₂	5.53
NO _x	37.76
VOC	249.30
CO	22.89
Lead	0.00
Total HAP ⁽¹⁾	24.38

⁽¹⁾HAPs may include Benzene, Chromium Compounds, Cumene, 1,4 Dichlorobenzene, Ethyl Benzene, Formaldehyde, Glycol Ethers, Hexane, Manganese Compounds, Methyl Isobutyl Ketone, Naphthalene, Nickel, Toluene, and Xylenes.

Program Applicability:

- PSD: NO
- NSPS: There are two diesel fired generators that are subject to 40 CFR 60 Subpart IIII Standards of Performance for Stationary Compression Ignition Internal Combustion Engines.
- NESHAP: The facility has units subject to:
 - o 40 CFR 63 Subpart XXXXXX, National Emission Standards for Hazardous Air Pollutants: Area Source Standards for Nine Metal Fabrication and Finishing Source Categories,

- 40 CFR 63 Subpart ZZZZ, National Emission Standards for Hazardous Air Pollutants for Stationary Reciprocating Internal Combustion Engines (RICE)
- 40 CFR 63 Subpart CCCCCC, National Emission Standards for Hazardous Air Pollutants for Source Categories: Gasoline Distribution Bulk Terminals, Bulk Plants, and Pipeline Facilities; and Gasoline Dispensing Facilities.
- Acid Rain and CSAPR: NO
- Stratospheric Ozone Protection: NO
- Prevention of Accidental Release: NO

General Facility Updates from R3 Renewal

Removed Units

Emission Point	Emission Unit	Description	Construction Permit	Rescission Date
Paint Booths				
EP 4.FA	EU 4.FA	Plant 4 Parts Paint Booth	07-A-1261-S4	8/2/2023
EP 4.FB	EU 4.FB	Plant 4 Parts Paint Booth	98-A-032-S7	8/2/2023
EP 4.G1	EU 4.G	Plant 4 Paint Finish Booth	98-A-033-S6	8/2/2023
EP 4.G2			98-A-034-S6	8/2/2023
EP 6.S	EU 6.S	Plant 7 Parts Paint Booth	96-A-1216-S8	8/2/2023
EP 7.PB1	EU 7.PB1	Plant 7 Primer Booth	17-A-246-S1	8/2/2023
EP 7.PB2	EU 7.PB2	Plant 7 Topcoat Booth	17-A-247-S1	8/2/2023
Paint Ovens				
EP 4.E	EU 4.E	Plant 4 Paint Oven	98-A-031-S2	8/2/2023
EP 6.W	EU 6.W	Plant 7 Paint Oven	97-A-298-S5	8/2/2023
Paint Kitchens				
EP 4.CD	EU 4.CD	Plant 4 Paint Kitchen	98-A-029-S2	8/2/2023
EP 4.CE	EU 4.CE	Plant 4 Paint Kitchen	98-A-030-S2	8/2/2023
EP 5.BB	EU 5.BB	Plant 7 Paint Kitchen	97-A-1028-S2	8/2/2023
Other Units				
EP 4.DD	EU 4.DD	Plant 4 Stage 1 Washer	99-A-1014-S2	8/2/2023
EP 3ENG.GEN	EU 3ENG.GEN	Plant 3 Engineering Generator	NA	NA
EP W.F.	EU W.F.	Solvent Still	99-A-691-S2* 99-A-340-S1	TBD* 8/2/2023

*Email correspondence from 5/30/2025 confirmed this equipment no longer exists. The facility was advised to submit a construction permit rescission.

Emission Estimations

The potential emissions calculations were based off of construction permit limits, AP-42 emission factors, stack test data, mass balance and engineering estimates provided by the facility. The 500ppmv allowable SO₂ SIP limit overestimates the potential emissions. The AP-42 emission factors for SO₂, if available, were used instead and provide a more realistic potential value when compared to the previous year's emissions inventory.

Emission Values

PM	PM ₁₀	PM _{2.5}	SO ₂	NO _x	VOC	CO	Lead	Total HAPs
Potential Emissions								
147.20	103.93	101.95	5.58	37.86	249.31	22.97	0.00	24.38
Actual Emissions 2024								
14.50	14.05	10.76	0.22	13.15	146.83	10.32	0.00	2.80

The facility has 247.6 ton per year limit on VOC emissions and 8.95 tons single and 23.27 tons total yearly HAP emissions limits for the surface coating operations set by construction permit.

Emission Sources

The facility has a variety of emission sources, with most of the emissions coming from paint booths, flame, laser, plasma and torch cutting of metal, welding, and various natural gas heaters, both production heaters and building heaters.

- **Paint Booths** All the paint booths are covered by construction permits. They all have panel filters for particulate control and have an hourly PM emission limit, the default 0.01 gr/dscf PM and 40% opacity limits. Construction Project 23-146 included replacing numerous pieces of equipment throughout the paint lines. During the engineering review it was determined the Total HAP PTE exceeded the synthetic minor limit of 24.4 tpy. The new lowered paint operations THAP emission limit of 23.27 tpy brought Facility-Wide THAP PTE to the synthetic minor limit of 24.4 tpy. Similarly, the VOC limit was lowered to bring Facility-Wide VOC PTE below the synthetic minor limit of 249.4 Project 23-361 again amended existing permits to include correct limits for PM emissions and adjust VOC, SHAP, and THAP emissions. PM, PM₁₀, and PM_{2.5} have been set to the same hourly emission limitation and are represented as a single PM emission limit. Project 24-283 added a new touch-up booth for Plant 4. There are no paint throughput limits. Total paint usage for all paint booths in 2024 was would result in approximately 113.8tpy of uncontrol PM emission based on material balance, exceeding the major threshold assuming all paint was applied in one paint booth. However, on a per unit basis PM emission do not exceed the major threshold, so CAM is not required and an Agency Approved O&M Plan has been required. The facility submitted an Agency O&M plan for all the paint booths which includes daily manometer observations and recordkeeping when in use. The construction permits require fairly stringent recordkeeping to ensure the facility stays within its facility-wide VOC limit. The paint booths are not subject to 40 CFR 63 Subpart XXXXXX because the facility is limited to only using paints that do not contain cadmium, chromium, lead, manganese, or nickel.

- **Paint Kitchens** These are paint and solvent storage rooms, and all emissions from here are accounted for in the paint booths. All units have construction permits and have been included in the most recent version of the Paint Booth CAP associated with project 23-361. The 0.01gr/dscf limit listed in the CAP does not apply to these units.
- **Paint Ovens** These are natural gas fired cure ovens for the painting operations. All emission from here are accounted for in the paint booths. The Facility is limited to combusting no more than 500 million cubic feet of natural gas per 12-month rolling period. W.OVEN was originally included in the insignificant activities section of the application. This unit is subject to the natural gas usage limitation and has been included in the permit body.
- **Emergency Engines** Five emergency engines and one fire pump engine exist at the facility. These engines are Subject to NESHAP ZZZZ and NSPS IIII. There are no construction permits for these units and are SUE units. 500 hours of operation have been used when calculating PTE similarly to PTE calculations in construction projects 23-146 and 23-361.
- **Welding** operations were recently permitted under project 23-361 (25-A-052) for facility-wide welding operations and establish limits to maintain NESHAP minor source status. Facility-wide usage of weld wire is limited to 2,500,000lb per year. These operations are subject to NESHAP XXXXXX. Emissions are vented inside the facility.
- **SB.3 & 7.SB1 Shot Blasting** These units were placed in a CAP during the recent permit modification under project 23.361. Updates to the construction permits included stack characteristic changes to SB.DUST1 and SB.DUST2 and an emission limits increase for 7.SB1. These unit are subject to NESHAP XXXXXX. Daily, weekly, and monthly visible emissions observations and record keeping are required for these pieces of equipment. Facility provided CAM spreadsheet indicates SB.3 does not exceed the major source threshold for PM or PM₁₀. Based on this information and DNR periodic monitoring guidance testing is not required for this unit during this renewal. Monitoring requirements listed in the permit satisfy the Facility O&M requirement. CAM not apply for SB.3.

According to DNR's Periodic Monitoring Guidance, this source qualifies for a Facility O&M plan and 1 PM stack test. Testing for PM₁₀ was last completed on 10/26/2021 that showed a large compliance margin. No stack test will be required during this renewal. Precontrol PTE exceeds the major threshold. CAM applies to this unit for PM and PM₁₀.

- **4.SB1 Shot Blasting** According to DNR's Periodic Monitoring Guidance, this source does qualify for a Facility O&M plan and 1 PM stack test. However, the facility completed a PM₁₀ stack test on 11/13/2018 that showed a large compliance margin. No additional stack test will be required during this renewal. CAM applies when using the emission limit for PM and PM₁₀.
- **7.WA1 Wash Booth** This is a parts wash booth to clean parts before painting.

- **Gasoline Storage Tank** Vermeer has a 998 gallon gasoline storage tank, unit 5.GASTANKS. The tank is subject to 40 CFR 63 Subpart CCCCCC as well as the facility-wide VOC and HAP limits.
- **Eco Center Grinder** The facility is required to maintain Small Unit Exemption (SUE) justification document for inspection by DNR for this unit.
 - This unit is operated by a portable engine and is not subject to NESHAP ZZZZ or NSPS IIII. PTE for this unit does not exceed the insignificant activities unit threshold and has been included in the insignificant activities equipment list.
- **Safety Kleen Parts Washers** These are two cold solvent parts washers. They are covered by a construction permit that only lists the facility-wide VOC emission limit, so the facility-wide HAP limit was also added.
- **NGEXEMPT** These are the natural gas heaters and unpermitted paint ovens. They have all the default emission limits and requirements of the other gas burning units at the facility, and the facility will maintain a list on-site that lists the units that make up this source. These units are subject to the 500 million cubic feet of natural gas facility-wide requirement.

Insignificant Units

- **Cutting Operations** These are various controlled and uncontrolled flame, plasma and laser cutting tables around the facility. They are considered Insignificant Units with Small Unit Exemptions.