

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. Valero Renewable Fuels Company, LLC dba Valero Charles City Plant, located at 1787 Quarry Rd, Charles City, IA 50616 has applied to renew their Title V Operating Permit. The designated responsible official of this facility is Chad Buffington.
2. Valero Charles City Plant is a fuel-grade ethanol production facility. This facility consists of 74 emission units with potential emissions of:

Pollutant	Abbreviation	Potential Emissions (Tons per Year)
Particulate Matter ($\leq 2.5 \mu\text{m}$)	PM _{2.5}	139.26
Particulate Matter ($\leq 10 \mu\text{m}$)	PM ₁₀	143.30
Particulate Matter	PM	167.28
Sulfur Dioxide	SO ₂	99.30
Nitrogen Oxides	NO _x	107.80
Volatile Organic Compounds	VOC	232.05
Carbon Monoxide	CO	119.85
Lead	Lead	0
Hazardous Air Pollutants ⁽¹⁾	HAP	24.47

⁽¹⁾ May include the following: Acetaldehyde, Acrolein, Formaldehyde, Methanol.

3. Valero Renewable Fuels Company, LLC dba Valero Charles City Plant submitted a Title V Operating Permit renewal application on October 31, 2024 and any additional information describing the facility on June 12, 2025. 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.

DNR procedures for reaching a final decision on the draft permit:

1. The public comment period for the draft permit will run from July 31, 2025 through August 30, 2025. During the public comment period, anyone may submit written comments on the permit. Mail signed comments to Jason Dowie 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 Jason Dowie 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 24 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 Permit Renewal 2 Review Notes

Facility Name:	Valero Renewable Fuels Company, LLC dba Valero Charles City Plant
City:	Charles City
County:	Floyd
Facility #:	34-01-040
EIQ #:	92-6933
Renewal Application Received:	10/31/2024
Permit #:	15-TV-009R2
Reviewer:	Jason Dowie

Background:

Valero Renewable Fuels Company, LLC dba Valero Charles City Plant is a fuel-grade ethanol production facility (SIC 2869). The facility consists of 18 emission points, 74 emission units and 16 insignificant units. The Title V application for renewal was received on October 31, 2024.

Title V Applicability

Pollutant	Major for Title V?
PM ₁₀	<input checked="" type="checkbox"/>
SO ₂	<input type="checkbox"/>
NO _x	<input checked="" type="checkbox"/>
VOC	<input checked="" type="checkbox"/>
CO	<input checked="" type="checkbox"/>
Lead	<input type="checkbox"/>
Individual HAP	<input type="checkbox"/>
Total HAPs	<input type="checkbox"/>

Program Applicability

- PSD: No, this facility is a synthetic minor source.
- Title V: Yes
- Part 60 NSPS: Yes
 - 40 CFR 60 Subpart A – General Provisions
 - 40 CFR 60 Subpart Db - Standards of Performance for Industrial-Commercial-Institutional Steam Generating Units
 - 40 CFR 60 Subpart Kb - Standards of Performance for Volatile Organic Liquid Storage Vessels (including Petroleum Liquid Storage Vessels)
 - 40 CFR 60 Subpart VV – 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
- Part 61 NESHAP: No

- Major Source of HAPs: No
- Part 63 NESHAP: Yes
 - 40 CFR 63 Subpart A - National Emission Standards for Hazardous Air Pollutants for Source Categories – General Provisions
 - 40 CFR 63 Subpart ZZZZ - National Emission Standards for Hazardous Air Pollutants for Reciprocating Internal Combustion Engines
 - 40 CFR 63 Subpart CCCCCC – National Emission Standards for Hazardous Air Pollutants for Source Category: Gasoline Dispensing Facilities
- Acid Rain: No.
- Stratospheric Ozone Protection: Yes.
- Prevention of Accidental Releases: Yes.

General Changes since last issuance

- Update Permit Number to 15-TV-009R2
- Corrected Supervisor from Lori Hanson to Marnie Stein
- Update Footer
- Update General Conditions to most recent version
- Update Links to Standards hyperlinks
- Added Appendix B: EO10 Code Change Crosswalk
- Updated applicable construction permit numbers for emission points S10, S20, S30, S40, S70, S75, S80, FS10, TK001, and TK002
- IAC references to chapter 22 were updated to chapter 24
- Previous IAC references to chapter 24 were updated to chapter 21
- Various spelling, typo and punctuation corrections

Emission Point Specific Changes since last issuance

S10 - The rated capacity of EU 58 (DDGS Cooling Drum) which vents through EP S10 and EP S70 was updated from 50 tons DDGS/hr to 65 tons DDGS/hr following the issuance of construction permit 05-A-718-S5.

The rated capacity of the DDGS Dryers (EU 01, EU 02, EU 04, and EU 05) and the Thermal Oxidizers (EU 03 and EU 06) were found by the facility to be incorrect after issuance of construction permit 05-A-718-S5. These values were updated in the TV permit from 42.5 MMBtu/hr to 45.0 MMBtu/hr for each of the DDGS Dryers, and from 165 MMBtu/hr to 210.0 MMBtu/hr for each of the Thermal Oxidizers. The facility shall be required to submit an application to modify the construction permit within 30 days of issuance of TV operating permit 15-TV-009R2.

EU 90 (Distillation Process) equipment list was updated to include three new molecular sieves following the issuance of construction permit 05-A-718-S5.

Note addendums for Particulate Matter (PM₁₀), Sulfur Dioxide (SO₂), Nitrogen Oxides (NO_x), Volatile Organic Compounds (VOC), and Carbon Monoxide (CO) were updated to reflect the text in the updated construction permit 05-A-718-S5.

The emission limit of 0.1 lb/MMBtu was added for NO_x, along with the Authority for Requirement of 40 CFR §60.44b and 567 IAC 23.1(2)“ccc”, per construction permit 05-A-718-S5.

The VOC emission limit of 10.0 lb/hr was changed to 12.0 lb/hr per construction permit 05-A-718-S5.

S20 – Minor verbiage changes. Facility is limited to 68.0 million bushels of corn per 12-month rolling period per construction permit 05-A-719-S4.

S30 – Baghouse identifier was corrected to CE C30A (from CE 30) to match construction permit 05-A-720-S4.

Log requirement text was added to Operating Requirement B to match updated construction permit 05-A-720-S4.

S40 – *Operating Requirements with Associated Monitoring and Recordkeeping* section was reorganized and modified to match the updated construction permit 05-A-721-S8.

The *Compliance Demonstration Table* was modified to remove the single line for Acetaldehyde and the note addendums were updated to reflect construction permit 05-A-721-S8.

The Emission Point Characteristics (stack height and exhaust flow rate) were corrected to match construction permit 05-A-721-S8.

S70 – *Operating Requirements with Associated Monitoring and Recordkeeping* section was modified to include text from updated construction permit 05-A-724-S4.

S75 – The rated capacity of EU 50 (DDGS Topfill Drag (Flat Storage)) was changed from 50 tons/hr to 65 tons/hr to match updated construction permit 05-A-722-S5.

The *Operating Requirements with Associated Monitoring and Recordkeeping* section was updated with additional text to match construction permit 05-A-722-S5.

S80 – The *Operating Requirements with Associated Monitoring and Recordkeeping* section was updated with additional requirement text to reflect the updated construction permit 05-A-725-S2.

The emission limit for VOC was changed from 39.0 tons/yr to 24.22 tons/yr per construction permit 05-A-725-S2.

The emission limit for SHAP was changed from 0.63 tons/yr to 1.08 tons/yr, and the emission limit for THAP was changed from 0.912 tons/yr to 1.13 tons/yr, per construction permit 05-A-725-S2.

The facility maximum production/loadout (by truck and/or rail, combined) was increased from 165 million gallons to 190 million gallons of ethanol or denatured ethanol per 12-month rolling period.

The facility maximum loadout to non-dedicated trucks and rail (combined) was decreased from 100 million gallons to 50 million gallons per 12-month rolling period.

FS10 – The *Operating Requirements with Associated Monitoring and Recordkeeping* section was reorganized and modified to reflect the updated construction permit 05-A-733-S3. This includes the increased PM₁₀ emissions limit (from 3.75 tons to 4.0 tons per 12-month period) as it applies to haul road sweeping.

FS40 – Emission limits for VOC, SHAP, Acetaldehyde, and THAP were changed (to 6.5, 25, 25, and 0.26 tons/yr, respectively) to reflect limits set in construction permit 05-A-735-S2. This was found to be in error as the referenced version of the construction permit was indicated as a draft. The values were corrected to 35.0, 0.70, 0.70, and 1.38 tons/yr, respectively.

TK001 and **TK002** – VOC limits were changed from 0.67 tons/yr (each) to 1.0 tons/yr (each) to reflect updated construction permits 05-A-727-S3 and 05-A-728-S3, respectively.

TK001 through TK005 – The Operating Limits text was modified to match the applicable construction permits.

TK007 – The gasoline tank was added as a significant unit due to the applicability of the 6C NESHAP. There are no emission limits that currently apply as the usage is less than 10,000 gallons per month.