

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. Pinnacle Ethanol, dba POET Biorefining—Corning, located at 1680 Brooks Road, Corning, IA 50841 has applied to modify their Title V Operating Permit. The designated responsible official of this facility is Mr. Scott Sawtelle
2. Pinnacle Ethanol, dba POET Biorefining—Corning is a fuel-grade ethanol production facility (SIC 2869). This facility consists of 46 emission units with potential emissions of:

Pollutant	Abbreviation	Potential Emissions (Tons per Year)
Particulate Matter ($\leq 2.5 \mu\text{m}$)	PM _{2.5}	83.10
Particulate Matter ($\leq 10 \mu\text{m}$)	PM ₁₀	84.80
Particulate Matter	PM	90.90
Sulfur Dioxide	SO ₂	1.23
Nitrogen Oxides	NO _x	111.65
Volatile Organic Compounds	VOC	146.58
Carbon Monoxide	CO	96.81
Lead	Lead	0.00
Hazardous Air Pollutants ⁽¹⁾	HAP	19.26

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

3. Pinnacle Ethanol, dba POET Biorefining—Corning submitted an application for renewal of their Title V permit on September 9, 2023. 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 March 20, 2025 through April 19, 2025. During the public comment period, anyone may submit written comments on the permit. Mail signed comments to Taylor Dailey 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 Taylor Dailey 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.

Permit Writer Review Notes

Applicant:	Pinnacle Ethanol, dba POET Biorefining –Corning
SIC Code:	2869 (Fuel Grade Ethanol Production)
City:	Corning
County:	Adams (FO #4)
EIQ#:	92-6966
Facility#:	02-05-001
Permit #:	14-TV-007R2
Reviewer:	Taylor Dailey
Date:	3/2025

Facility Identification

Facility Name:	Pinnacle Ethanol, dba POET Biorefining – Corning
Facility Location:	1680 Brooks Road, Corning, IA 50841
Responsible Official:	Scott Sawtelle
Phone:	(641) 332-6401

Background

Pinnacle Ethanol, dba POET Biorefining – Corning is a fuel-grade ethanol production facility (SIC 2869). The co-product from the manufacture of ethanol at the facility is DDGS (dried distillers grains with solubles) which is used for animal feed supplement. The facility consists of 30 emission points, 46 emission units, and 3 insignificant units. The Title V application was received on September 9, 2023.

Regulatory Status

Pinnacle Ethanol, dba POET Biorefining – Corning is a major source for Title V. See Table 1 major source by pollutant.

Table 1
Title V major source by pollutant

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

General Conditions

The following amendments have been made to the Title V permit:

1. The permit number for this facility has been changed to 14-TV-007R2.
2. The Equipment List was changed to reflect the current emission units.
3. CAM Plans were added when required.
4. The General Conditions have been updated to reflect the latest version.

Compliance Demonstration

Currently, stack testing is only required of SV9 and SV20.

Stack testing for PM-10, PM, VOCs, single and total HAPs at SV9 is required while the scrubber is operating and while it is bypassed. PM-10 and PM testing is required annually and VOC testing is required once every three years. Acetaldehyde, Methanol, Acrolein and Formaldehyde shall be tested under SHAP.

Stack testing for CO at SV20 is required every three years. The facility is required to conduct subsequent performance tests every 8,760 hours or 3 years (whichever comes first). If the engine is operated less than 100 hours per year, testing frequency is reduced to every 5 years.

To show compliance, monthly water sampling for TDS (Total Dissolved Solids) is required of FS2, Mist Eliminator.

FS3, Plantwide Leak Detection and Repair: Compliance testing is required for VOCs, single HAPs and total HAPs. Frequency: Monthly & as specified in NSPS VVa Leak Detection Program. Frequency varies with component type (weekly, monthly, etc.). Test method: 40 CFR 63, Appendix A, Method 320 or 40 CFR 60, Appendix A, Method 18.

Emission Estimates

The potential emissions for the facility are listed in Table 4, shown below.

Table 4
Potential Emissions (PTE)

Pollutant	Potential Emissions (TPY)
PM _{2.5}	83.10
PM ₁₀	84.80
PM	90.90
SO ₂	1.23
NO _x	111.65
VOC	146.58
CO	96.81
Lead	0.00
Total HAP*	19.26

* HAPs may include Acetaldehyde, Formaldehyde, Acrolein, Methanol, and Hexane.

Emission Point-Specific Comments

EP SV1:

1. Emissions are from EU 1: Grain Receiving, EU 2: Elevator, EU 3: 4 Grain Bins and DDGS Loadout
2. Emission limits have changed.
3. Operating requirements with associated monitoring and recordkeeping have changed.

EP SV23, SV24, and SV25:

1. Emissions are from EU28 and EU29, which are two grain storage bins and a feed conveyor.
2. There are emission limits for opacity, PM-10 and PM.
3. It is subject to New Source Performance Standard (NSPS) Subpart DD: Grain Elevators.
4. Operating requirements with associated monitoring and recordkeeping are required.

EP SV2:

1. Operating requirements with associated monitoring and recordkeeping have changed.
2. Emission point characteristics have changed.

EP SV3, SV4, SV5, SV6, SV7:

1. Emission limits have changed.
2. Operating requirements with associated monitoring and recordkeeping have changed.
3. Emission point characteristics have changed.

EP SV8:

1. A fermenter has been added, bringing the total to seven.
2. Emission limits have changed.
3. Operating requirements with associated monitoring and recordkeeping have changed.
4. Emission point characteristics have changed.

EP SV9:

1. EP SV9 is the RTO (regenerative thermal oxidizer) bypass stack (EU18). Emission units for the emission point are 7 batch mash fermenters (one was added), a beer well (EU10), distillation equipment (EU11), distiller's grain dryer 1 (EU12), distiller's grain dryer 2 (EU13), and 4 centrifuge units (EU15 through EU18).
2. Emission limits have changed.
3. Operating limits, reporting, and recordkeeping have changed.
4. Stack testing for PM, PM₁₀, and VOCs are required. Stack testing is required for VOCs and HAPs.

EP SV22:

1. EP SV22 is four centrifuges, EU14 through EU17.
2. Emission limits have changed.
3. Operating limits, reporting, and recordkeeping have changed.
4. Emission point characteristics have changed.

EP SV22:

1. EP SV22 is four centrifuges, EU14 through EU17.
2. Emission limits have changed.
3. Operating limits, reporting, and recordkeeping have changed.
4. Emission point characteristics have changed.

EP SV11, SV12:

1. Emission limits have changed.
2. Operating limits, reporting, and recordkeeping have changed.

EP SV13, SV14:

1. These emission units are two natural gas fired boilers subject to NSPS Db.
2. Emission limits have changed.
3. Operating requirements with associated monitoring and recordkeeping have changed.

EP SV15:

1. This emission unit, EUTK-001 is a 190-Proof Ethanol Storage Tank
2. Operating requirements with associated monitoring and recordkeeping have changed.
3. It is subject to NSPS Subpart Kb.

EP SV16:

1. This emission unit, EUTK-002 is a 200-Proof Ethanol Storage Tank
2. Operating requirements with associated monitoring and recordkeeping have changed.
3. It is subject to NSPS Subpart Kb.

EP SV17, SV18:

1. This emission unit, EUTK-003, EUTK-004, is a 200-Proof Ethanol Storage Tank
2. Operating requirements with associated monitoring and recordkeeping have changed.
3. It is subject to NSPS Subpart Kb.

EP SV19:

1. This emission unit, EUTK-005, EUTK-004, is a denaturant Storage Tank
2. Operating requirements with associated monitoring and recordkeeping have changed.
3. It is subject to NSPS Subpart Kb.

EP SV20:

1. This emission unit, EU24 is a diesel generator
2. Emission limits have changed.
3. It is subject to NESHAP ZZZZ.
4. Operating requirements with associated monitoring and recordkeeping have changed.
5. It is subject to stack testing for CO.

EP SV21:

1. This emission unit, EU25a is the Truck and Rail Loadout
2. Emission limits have changed.
3. Operating requirements with associated monitoring and recordkeeping have changed.

EP FS1:

1. This emission unit, EU FS1 is haul roads
2. Emission limits have changed.
3. Operating requirements with associated monitoring and recordkeeping have changed.

EP FS2:

1. This emission unit, EU FS2 is the 3-cell cooling towers
2. Emission limits have changed.
3. Operating requirements with associated monitoring and recordkeeping have changed.
4. Water sampling is required.

EP FS3:

1. This emission unit, EU FS3 is the plant-wide leak detection system.
2. Emission limits have changed.
3. Operating requirements with associated monitoring and recordkeeping have changed.
4. Stack testing is required for VOCs and HAPs.

EP FS5:

1. Moved FS5 from insignificant to significant source