

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. Cargill – Vitamin E, located at 1194 720th Avenue has applied to renew their Title V Operating Permit. The designated responsible official of this facility is Jonathan Razink, Facility Manager, AVP.
2. Cargill – Vitamin E is a medicinal chemical and botanical product manufacturer. This facility consists of nine significant emission units with potential emissions of:

Pollutant	Abbreviation	Potential Emissions (Tons per Year)
Particulate Matter ($\leq 2.5 \mu\text{m}$)	PM _{2.5}	1.04
Particulate Matter ($\leq 10 \mu\text{m}$)	PM ₁₀	1.04
Particulate Matter	PM	1.04
Sulfur Dioxide	SO ₂	0.04
Nitrogen Oxides	NO _x	7.03
Volatile Organic Compounds	VOC	30.15
Carbon Monoxide	CO	5.90
Lead	Lead	0.00
Ammonia	Ammonia	0.22
Hazardous Air Pollutants ⁽¹⁾	HAP	16.02

⁽¹⁾ May include the following: Formaldehyde, Hexane, Methanol and Methyl tert-butyl ether (MTBE).

3. Cargill – Vitamin E submitted a Title V Operating Permit renewal application on June 24, 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 January 8, 2026 through February 7, 2026. 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 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 Writer's Notes

Facility Name:	Cargill—Vitamin E
City:	Eddyville
County:	Monroe
Facility #:	68-09-005
EQ #:	92-6901
Application Received:	6/24/2025
Permit #:	04-TV-004R4
Reviewer:	Derek Wedemeier

Background

With the proximity of this plant to the Cargill Inc. Eddyville and Eddyville Chlor – Alkali, LLC facilities, the Vitamin E facility was determined to be a major single source for the purposes of the NESHAP program as the three facilities share a common control under Cargill and are located within a contiguous area. The Iowa DNR has not made a formal single source determination on PSD/ Title V applicability for these three facilities. The only units included in this permit are NESHAP affected units, as this is the only basis for having a Title V permit under 567 IAC 24.101(2). There are other emission units, including insignificant units, at the facility not included in this permit.

Facility Identification:

Facility Name: Cargill—Vitamin E

Facility Location: 1194 720th Avenue, Eddyville, IA 52553

Responsible Official: Jonathan Razink, Facility Manager, AVP

Title V Major Source Status by Pollutant:

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

Process Description:

SIC Code; Medical Chemical and Botanical Products (SIC 2833)

Cargill—Vitamin E specializes in the manufacture of bulk pharmaceutical grade vitamins and other food/supplements. The majority of emissions from this facility come from various storage tanks.

Program Applicability

- PSD: No
- Part 61 NESHAP: No
- Major Source of HAPs: Yes
- Part 60 NSPS: No

Kb Requirements - Some of the tanks at this facility are of the source category for Subpart Kb [*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*; 40 CFR §60.110b – 40 CFR §60.117b] of the New Source Performance Standards (NSPS). However, none of the tanks are subject as the capacity of each tank is less than 75 m³ (19,812.9 gal).

- Part 63 NESHAP: Yes
 - 40 CFR 63 Subpart A – General Provisions
 - 40 CFR 63 Subpart GGG - National Emissions Standards for Hazardous Air Pollutants for Pharmaceuticals Production, 40 CFR §63.1250- 40 CFR §63.1261. Per the applicability criteria and the definition of sources in Sec. §63.1250, these are existing sources subject to 40 CFR Subpart GGG.
 - 40 CFR 63 Subpart DDDDD - National Emission Standards for Hazardous Air Pollutants for Major Sources: Industrial, Commercial, and Institutional Boilers and Process Heaters.
- Acid Rain: No.
- Stratospheric Ozone Protection: Yes.
- Prevention of Accidental Releases: No.

Emission Estimations

Potential Emissions:

The facility reported potential emissions based on construction permit limits. Default limits, AP-42 factors, and engineering estimates were used to calculate the potential emissions.

Below is a summary of potential emissions included in the application.

Summary of Criteria Pollutant Potential Emissions								
PM _{2.5} (tpy)	PM ₁₀ (tpy)	PM (tpy)	NOx (tpy)	SOx (tpy)	VOC (tpy)	CO (tpy)	Lead (tpy)	Total HAPs (tpy)
1.04	1.04	1.04	7.03	0.04	30.15	5.90	0.00	16.02
2024 Reported Emissions								
PM _{2.5} (tpy)	PM ₁₀ (tpy)	PM (tpy)	NOx (tpy)	SOx (tpy)	VOC (tpy)	CO (tpy)	Lead (tpy)	Total HAPs (tpy)
0.92	0.92	0.92	1.60	0.01	4.20	1.61	0.00	4.05

Significant Activities:

Emission Point Number	Emission Unit Number	Emission Unit Description	Construction Permit Number
EP-2	EU-2	Step 7	94-A-498-S4
EP-4	EU-4	Packaging	94-A-493-S5
EP-6.1	EU-6.1	Tank Farm	99-A-517-S5
EP-8	EU-8	Catalyst Dump	98-A-263-S1
EP-9	EU-9	Flare and Associated Processes	02-A-786-S5
EP-10	EU-10	Fugitive HAPs	NA
EP-11, EP-12, EP-13	EU-11, EU-12, EU-13	Three (3) Process Heaters	NA

General Changes

- Responsible Official changed to Jonathan Razink, Facility Manager, AVP.
- Permit contact changed to Crystal Humphrey
- Updated the General Conditions

Emission Point Specific Comments

- EP-2: This unit does not incorporate any use of HAPs and is not subject to NESHAP Subpart GGG. VOC emissions are controlled by CE-2, wet scrubber and has a reported control efficiency of 70%. Precontrol emissions for VOC do not exceed the major source threshold. CAM does not apply. This emission point has a facility O&M and a daily average scrubber water pH on the Step 7 scrubber.
- EP-4: No changes for this emission point.
- EP-6.1: No changes for this emission point.
- EP-8: No changes for this emission point. A facility O&M plan is not required because precontrol emission do not exceed the significant source threshold for PM or PM10 based on the control efficiency of the fabric filter, CE-8. CAM does not apply. Visible emissions monitoring is required. More details are listed below.
- Construction permit 02-A-786-S5 was issued for EP-9 in 2024. This was the only construction permit issued/modified since the previous renewal. Changes to the equipment list were made in the S5 version, incorporating several emission units not previously listed. There were no changes to emission limits. Weekly visible emissions monitoring is required for EP-9.
- EP-10: No changes for this emission point.
- EP-11, EP-12 & EP-13: No changes for this emission point.

Periodic Monitoring

1. Stack Testing

Stack testing was not required as part of the construction permit modification for EP-9. Periodic monitoring guidance does not recommend any additional stack testing for the emission points in this permit at this time.

2. Additional Periodic Monitoring Requirements Added to the Title V Permit

A No Visible Emissions Monitoring requirement was added for EP 8 Catalyst Dump. The opacity limit in construction permit 98-A-263-S1 is 20%. The typical Department policy is to require a visible emissions monitoring requirement for any sources subject to a limit less than 40%. After the facility review, Cargill wanted to take a no visible emission monitoring requirement instead of the standard opacity monitoring (to avoid weekly Method 9). Also, since this unit runs very rarely (usually under 20 hours/yr) the weekly monitoring language was changed to 'every time the unit is in operation.'

Per 40 CFR § 63.11(b)(4) and 567 IAC 23.1(4)"a" the flare associated with emission point 9 (EP-9) shall be designed for and operated with no viable emissions, except for periods not to exceed a total of 5 minutes during any two consecutive hours.

3. CAM Applicability

Application documents provided CAM applicability justification. These were reviewed and determined to be accurate. The following was provided in the renewal letter.

Under 40 CFR 64, Compliance Assurance Monitoring (CAM), major source facilities are required to prepare and submit monitoring plans for certain emission units with the initial or renewal Title V operating permit application. CAM Plans provide an on-going and reasonable

assurance of compliance with emission limits for Title V major sources. Under the general applicability criteria, this regulation applies only to emission units that use a control device to achieve compliance with an emission limit and whose pre-controlled emission levels exceed the major source thresholds under the Title V permitting program unless such units meet as specified exemption. Such exemptions include NSPS and NESHAP emission limits proposed by U.S. EPA after November 15, 1990 and emission limits that already specify a continuous compliance demonstration method in a Title V permit. The rule also clarifies the control devices, as defined for 40 CFR 64 purposes, do not include inherent process equipment or “passive control measures that act to prevent pollution from forming, such as the use of seals, lids, or roofs to prevent the release of pollutants, use of low-polluting fuel or feedstocks, or the use of combustion or other process design features or characteristics.”

Vitamin E evaluated CAM applicability as part of the Title V renewal using IDNR’s CAM worksheet. All units using control devices either do not have pre-controlled emissions exceeding major source thresholds or are subject to NESHAP GGG emission limits (which were proposed by U.S. EPA after November 15, 1990).