

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. Eddyville Chlor-Alkali, LLC, located at 1194 720th Ave, Eddyville, IA 52553, has applied to renew their Title V Operating Permit. The designated responsible official of this facility is Jonathan Raznik.
2. Eddyville Chlor-Alkali, LLC is a Alkalies and Chlorine Manufacturing facility. This facility consists of 4 emission units with potential emissions of:

Pollutant	Abbreviation	Potential Emissions (Tons per Year)
Particulate Matter ($\leq 2.5 \mu\text{m}$)	PM _{2.5}	1.61
Particulate Matter ($\leq 10 \mu\text{m}$)	PM ₁₀	1.61
Particulate Matter	PM	1.61
Sulfur Dioxide	SO ₂	0.12
Nitrogen Oxides	NO _x	22.61
Volatile Organic Compounds	VOC	1.44
Carbon Monoxide	CO	18.42
Lead	Lead	0
Hazardous Air Pollutants ⁽¹⁾	HAP	0.38

⁽¹⁾ May include the following: Formaldehyde and hexane.

3. Eddyville Chlor-Alkali, LLC submitted a Title V Operating Permit renewal application on January 12, 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.

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

1. The public comment period for the draft permit will run from June 20, 2024 through July 20, 2024. During the public comment period, anyone may submit written comments on the permit. Mail signed comments to Zane Peters 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 Zane Peters 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 Application Review Notes

Applicant:	Eddyville Chlor-Alkali, LLC
SIC Code:	2812 (Alkalies and Chlorine)
City:	Eddyville
County:	Monroe (FO #5)
EIQ#:	92-6997
Facility#:	68-09-008
Permit #:	19-TV-004R1
Reviewer:	Zane Peters
Date:	4/10/2024

Facility Identification

Facility Name:	Eddyville Chlor-Alkali, LLC
Facility Location:	1194 720th Ave, Eddyville, IA 52553
Responsible Official:	Jonathan Raznik
Phone:	(641) 969-3768

Background

Eddyville Chlor-Alkali, LLC (originally HF Chlor-Alkali) is a salt conversion plant that manufactures chlorine, sodium hydroxide, sodium hypochlorite, and sodium chlorate. The facility contains reactor tanks, loading/unloading units, haul roads, boilers, an emergency generator, and a fire pump. The facility was originally owned, operated, and permitted by Harris & Ford, but was purchased by Cargill in May 2018.

With the proximity of the plant to the Cargill Inc. – Eddyville, IA plant and the Cargill – Vitamin E plant, the facility was determined to be a single-source major source for HAPs for the purposes of the NESHAP program as the three facilities share 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. Therefore, without a formal single source determination, this permit is being written as a NESHAP-only Title V source. The only units that are included in this Title V permit are NESHAP affected units, as that would be the only basis for having a Title V permit under 567 IAC 22.101(2). There are other emission units, including insignificant units, in the facility that are not included in this permit.

Eddyville Chlor-Alkali, LLC applied for their initial Part 70 Title V Operating Permit. The facility consists of 4 significant emission units. The initial Title V application for Eddyville Chlor-Alkali, LLC was received on May 8, 2019, which was within the 12 months of purchase by Cargill and becoming a Title V facility. This is the first renewal, with the application being received January 12, 2024.

Regulatory Status

Eddyville Chlor-Alkali, LLC is a minor source for Title V. The facility is considered to be a Title V source for the NESHAP program and includes only major source NESHAP subject units.

HAPs emitted from the facility include: Formaldehyde, Hexane, and other trace HAPs from natural gas and diesel combustion (Hydrochloric Acid is emitted by the HCl Storage Tanks, but these are not considered subject to Title V since they are not subject to any NESHAPs).

Program Applicability

- PSD: NO
- Part 60 NSPS: YES, see Table 1.
- Part 61 NESHAP: NO
- Part 63 NESHAP: YES, see Table 1.
- Major Source of HAPs: YES, due to NESHAP single source determination with Cargill Inc. – Eddyville, IA plant and the Cargill – Vitamin E plant.
- CSAPR: NO
- Acid Rain: NO. The facility does not generate electricity for wholesale or retail sale and does not own or operate one of the Phase I or Phase II units listed in 40 CFR 73.10.
- Stratospheric Ozone Protection: YES
- Prevention of Accidental Releases: YES
- CAM: NO

**Table 1
NSPS and NESHAP Applicability**

EP	EU	Description	Permit#	NSPS and NESHAP Applicability
3	3	Natural Gas Boiler #1	13-A-450-S2	NSPS Dc, NESHAP DDDDD
7	4	Natural Gas Boiler #2	14-A-504-S1	NSPS Dc, NESHAP DDDDD
5	5	500 kW Kohler Emergency Generator		NSPS IIII, NESHAP ZZZZ
7FP	7	Fire Pump Engine		NSPS IIII, NESHAP ZZZZ

- Emission units at this facility are not subject to 40 CFR Subpart IIIII - National Emission Standards for Hazardous Air Pollutants: Mercury Emissions From Mercury Cell Chlor-Alkali Plants because the subpart only applies to processes using mercury cells for production.
- Emission units at this facility are not subject to 40 CFR Subpart FFFF - National Emission Standards for Hazardous Air Pollutants: Miscellaneous Organic Chemical

Manufacturing because the NAICS code for this facility is specifically exempted at 40 CFR § 63.2435(c)(5).

- Emission units at this facility are not subject to 40 CFR Subpart NNNNN - National Emission Standards for Hazardous Air Pollutants: Hydrochloric Acid Production because it is specifically exempted at 40 CFR § 63.8985(d).

Periodic Monitoring/CAM

Periodic monitoring requirements were evaluated based on the Department's Periodic Monitoring Guidance (PMG) document. Additional monitoring beyond NSPS/NESHAP requirements are not needed for this initial Title V operating permit.

Compliance Assurance Monitoring (CAM) requirements were evaluated based on the Department's CAM Spreadsheet. CAM requirements are not applicable for this initial Title V operating permit because none of the Title V sources are controlled sources.

Stack Testing

No stack testing is required at this time.

Changes Since the Last Issuance

General Changes

- Permit dates and numbers updated throughout the permit
- Responsible Official updated (pp. 1)
- Supervisor of Air Operating Permits Section updated (pp. 1)

Emission Point Specific Changes

- EP 3 & EP 7 – Carbon monoxide limit added, Operating Requirements section updated, and Emission point Characteristics section updated in accordance with DNR Construction Permits 13-A-450-S2 and 14-A-504-S1 (pp. 8-10)