

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) 22.107(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. Ag Processing Inc. – Sergeant Bluff, located at 2753 Port Neal Circle, Sergeant Bluff, IA 51054, has applied to renew their Title V Operating Permit. The designated responsible official of this facility is Lou Rickers.
2. Ag Processing Inc. – Sergeant Bluff is a soybean extraction facility. This facility consists of 83 emission units with potential emissions of:

Pollutant	Abbreviation	Potential Emissions (Tons per Year)
Particulate Matter ($\leq 2.5 \mu\text{m}$)	PM _{2.5}	61.52
Particulate Matter ($\leq 10 \mu\text{m}$)	PM ₁₀	115.14
Particulate Matter	PM	177.66
Sulfur Dioxide	SO ₂	2.64
Nitrogen Oxides	NO _x	156.23
Volatile Organic Compounds	VOC	512.82
Carbon Monoxide	CO	116.38
Lead	Lead	0
Hazardous Air Pollutants ⁽¹⁾	HAP	432.68

⁽¹⁾ May include the following: Formaldehyde, hexane, methanol.

3. Ag Processing Inc. – Sergeant Bluff submitted a Title V Operating Permit renewal application on April 19, 2022 and any additional information describing the facility on December 27, 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 22.107.
4. DNR has complied with the procedures set forth in 567 IAC 22.107, 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 7, 2024 through April 6, 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 20-35, 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 20-35.
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.

Facility Name:	Ag Processing, Inc.
City:	Sergeant Bluff
County:	Woodbury
Facility #:	97-04-005
EIQ #:	92-0053
Permit #:	99-TV-004R3
Reviewer:	Zane Peters

A. Facility Identification:

Facility Name: Ag Processing, Inc.

Facility Location: 2753 Port Neal Circle, Sergeant Bluff, IA

51054 Responsible Official: Lou Rickers, Chief Operations Officer

B. Process Description:

SIC Code(s) Major - 2075 (Soy Oil Processing)

C. Regulatory Status:

1. Title V Major Source: Yes. PM₁₀, SO₂, and VOC > 100 tpy,
Individual HAP > 10 tpy, and Total HAP > 25 tpy
2. PSD: Yes. PM, PM₁₀, SO₂, and VOC > 250 tpy
3. NSPS:
 - a. Emission Point EP 56 (Emission Units EU 69, EU 70, EU 71, EU 308, and EU 309) is subject to Subpart VV - Standards of Performance for Equipment Leaks of VOC in the Synthetic Organic Manufacturing Industry due to the fact that glycerol is produced in the reactions. AGP has chosen to demonstrate compliance with this Subpart by complying with NESHAP Subpart UU (through Subpart FFFF, see 63.2535(k), 63.2480 and Table 6).
 - b. Emission Units 101 and 102 are subject to 40 CFR 60 Subpart A – General Provisions and 40 CFR 60 Subpart DD - Standards of Performance for Grain Elevators.
 - c. Emission Units 205 and 207 are subject to 40 CFR 60 Subpart Dc Standards of Performance for Small Industrial-Commercial-Institutional Steam Generating Units
 - d. Emission unit 309 is subject to 40 CFR 60 Subpart Kb - Standards of Performance for Volatile Organic Liquid Storage Vessels (subject only to the recordkeeping requirements).
 - e. Emission Unit 100 is subject to 40 CFR 60 Subpart A – General Provisions and 40 CFR 60 Db – Standards of Performance for Industrial-Commercial-Institutional Steam Generating Units
4. Part 61 NESHAP: None applicable.
6. Part 63 NESHAPs:
 - a. Emission Units 60, 100, 205, 207, and 307 are subject to Subpart DDDDD, the

- Industrial, Commercial and Institutional Boilers and Process Heaters NESHAP.
- b. Emission Point EP 56 (Emission Units EU 69, EU 70, EU 71, EU 308, and EU 309) is subject to Subpart FFFF - Miscellaneous Organic Chemical Manufacturing.
 - c. The vegetable oil production process of this facility is subject to Subpart GGGG – Solvent Extraction for Vegetable Oil Production.
 - d. The Fire Pump (EP 50) is subject to Subpart ZZZZ – National Emissions Standards for Hazardous Pollutants for Stationary Reciprocating Internal Combustion Engines.
7. Acid Rain: Not Applicable
 8. Stratospheric Ozone Protection: No
 9. Prevention of Accidental Releases: No

D. Emission Point Specifics Changes

General Changes

- Responsible Official and Supervisor of Air Operating Permits updated
- Relevant permitting dates and numbers updated
- General Conditions updated

Emission Point Specific Changes

- EP 2 removed from the permit in accordance with the rescission of DNR Construction Permit 96-A-007-S2.
- EP 15 – Rated capacity, emission limits, and the operating limits with associated monitoring and recordkeeping sections updated in accordance with DNR Construction Permit 88-A-087-S6 (pp. 21-23)
- EP 43 – BACT emission limits and operating limits with associated monitoring and recordkeeping section in accordance with DNR Construction Permit 03-A-080-P3 (pp.38-40)
- EP 44 removed from the permit in accordance with the rescission of DNR Construction Permit 74-A-111.
- EP 59 removed from the permit in accordance with the rescission of DNR Construction Permit 95-A-854.
- EP 60 removed from the permit in accordance with the rescission of DNR Construction Permit 95-A-855.
- EP 61 removed from the permit in accordance with the rescission of DNR Construction Permit 95-A-856.
- EP 62 removed from the permit in accordance with the rescission of DNR Construction Permit 95-A-857.
- EP 78 – Updated operating limits with associated monitoring and recordkeeping section in accordance with DNR Construction Permit 06-A-785-S3 (pp. 60-61)
- EP 79 – Updated operating limits with associated monitoring and recordkeeping section in accordance with DNR Construction Permit 07-A-624-S2 (pp. 62-63)
- EP 80 – Updated operating limits with associated monitoring and recordkeeping section in accordance with DNR Construction Permit 07-A-625-S2 (pp. 64-65)
- EP 85 – Updated emission limits, equipment, and operating requirements with

associated monitoring and recordkeeping section in accordance with DNR Construction Permit 11-A-497-S1 (pp. 72-74)

- EP 87 - Updated emission limits and operating requirements with associated monitoring and recordkeeping section in accordance with DNR Construction Permit 11-A-499-S1 (pp. 77-79)
- EP 88 Soy Plant Boiler added to the permit in accordance with DNR Construction Permit 18-A-076 (pp. 80-85).
- EP 100A – EP 100E – New bean dryer emission points added to the permit according to DNR Construction Permits 22-A-041, 22-A-042, 22-A-043, 22-A-044, and 22-A-045 (pp. 86-88)
- EP 101 – New grain cleaning aspiration emission point added to the permit according to DNR Construction Permit 22-A-046 (pp. 89-91)
- EP 102 - New flaker unit emission point added to the permit according to DNR Construction Permit 22-A-047 (pp. 92-94)
- EP 103 – New drying deck emission points added to the permit according to DNR Construction Permit 22-A-048-S1 (pp. 95-97)

E. Periodic Monitoring CAM

All periodic monitoring requirements are in accordance with the Department's Periodic Monitoring Guidance Document.

1. The following emission points would be subject to CAM requirements based on potential uncontrolled emissions. The facility has designated the associated baghouses and cyclones as inherent process equipment which are not subject to CAM requirements.
 - EP 40
 - EP 78
2. The facility submitted the following information to support these designations.
3. Agency O&M Plans are required for each of these pieces of equipment. The O&M plans are found in Appendix B of the permit.

Facility O&M

The following Emission Points and Control Equipment are required to have Facility Operation & Maintenance (O&M) Plans

- EP 1, CE 1 – Baghouse⁽¹⁾
- EP 2, CE 4 – Baghouse⁽¹⁾
- EP 15, CE 10 – Baghouse⁽¹⁾
- EP 17, CE 23 – High Efficiency Cyclone⁽¹⁾
- EP 28, CE 57 – Bin Vent Filter⁽¹⁾
- EP 29, CE 49 – Bin Vent Filter⁽¹⁾
- EP 30, CE 50 – Bin Vent Filter⁽¹⁾
- EP 31, CE 51 – Bin Vent Filter⁽¹⁾

- EP 32, CE 52 – Bin Vent Filter⁽¹⁾
- EP 33, CE 53 – Bin Vent Filter⁽¹⁾
- EP 34, CE 54 – Bin Vent Filter⁽¹⁾
- EP 35, CE 55 – Bin Vent Filter⁽¹⁾
- EP 37, CE 57 – Bin Vent Filter⁽¹⁾
- EP 58, CE 38 – Bin Vent Filter⁽¹⁾
- EP 68, CE 46 – Baghouse⁽¹⁾
- EP 70, CE 58 – Baghouse⁽¹⁾
- EP 71, CE 59 – High Efficiency Cyclone⁽¹⁾
- EP 74, CE 62 – Baghouse
- EP 75, CE 63 – Baghouse
- EP 76, CE 64 – Baghouse
- EP 77, CE 65 – Baghouse
- EP 81, CE 93 – Scrubber⁽¹⁾
- EP 82, CE 94 – Bin Vent Filter
- EP 83, CE 95 – Bin Vent Filter
- EP 84, CE 96 – Bin Vent Filter
- EP 85, CE 97 – Baghouse⁽¹⁾
- EP 86, CE 98 – Baghouse⁽¹⁾
- EP 87, CE 99 – Baghouse⁽¹⁾
- EP 101, CE 101 – Baghouse⁽¹⁾
- EP 102, CE 103 – Cyclone⁽¹⁾
- EP 103, CE 104A – Cyclone, CE 105 – Venturi⁽¹⁾
- EP 200, CE 200 – Bin Vent Filter⁽¹⁾
- EP 201, CE 201 – Bin Vent Filter⁽¹⁾
- EP 202, CE's 202, 203, 204 – Baghouses ⁽¹⁾
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⁽¹⁾ The control equipment monitoring required by the construction permit for this source will be considered to meet the requirement a Facility O&M Plan.

F. Stack Testing

- EP 103

Pollutant – Particulate Matter (PM)

Stack Test to be Completed by (date) – ⁽¹⁾

Test Method - 40 CFR 60, Appendix A, Method 5

40 CFR 51, Appendix M, Method 202

Authority for Requirement - DNR Construction Permit 22-A-048-S1

⁽¹⁾ Within 60 days after achieving the maximum production rate but not later than 180 days after the initial startup date of the proposed equipment for the addition of new equipment or the physical modification of existing equipment or control equipment.

- EP 205

Pollutant – Particulate Matter⁽²⁾

Stack Test to be Completed by (date) - within sixty (60) days after achieving maximum production rate and no later than one hundred eighty (180) days after the initial startup date of the proposed equipment.

Test Method - 40 CFR 60, Appendix A, Method 5 w/ 40 CFR 51 Appendix M Method

Pollutant - NO_x⁽²⁾

Stack Test to be Completed by (date) - within sixty (60) days after achieving maximum production rate and no later than one hundred eighty (180) days after the initial startup date of the proposed equipment.

Test Method - 40 CFR 60, Appendix A, Method 7E

Authority for Requirement – DNR Construction Permit 15-A-052

⁽²⁾ To be tested while burning fuel oil if boiler changes status to a liquid fuel boiler per 40 CFR 63 Subpart DDDDD. Hours of fuel oil combustion allowed under 40 CFR 63 Subpart DDDDD for natural gas boilers do not allow for stack testing.

G. Notes

EP 70 - Construction permit 03-A-423 for EP 70 contains the old VOC emission limit of 356.6 tons/yr. This permit was overlooked when the project for 03-A-080-P1 was issued. The Title V permit has placed the current facility-wide solvent loss emission limits in the Plant-Wide Emission Limits section of the permit. The VOC limits are not reiterated in the EP 70 conditions.

EP 81 - Construction permit 03-A-080-P1 was issued to the facility on July 24, 2012 to increase the VOC emission limits for the vegetable oil extraction process. Construction permit 07-A-626-S1 for EP 81 contains the old VOC emission limit of 356.6 tons/yr. This permit was overlooked when the project for 03-A-080-P1 was issued. The Title V permit has placed the current facility-wide solvent loss emission limits in the Plant-Wide Emission Limits section of the permit. The VOC limits are not reiterated in the EP 81 conditions.

EP 205 Boiler has stack testing requirements. However, the testing is only required when the boiler is using fuel oil to operate. At this time, the facility has not elected to use fuel oil, so no testing has been done to date.