



# STATE OF IOWA

CHESTER J. CULVER, GOVERNOR  
 PATTY JUDGE, LT. GOVERNOR

DEPARTMENT OF NATURAL RESOURCES  
 RICHARD A. LEOPOLD, DIRECTOR  
*Project 07-092*

## PERMIT ISSUANCE

April 13, 2007

**CERTIFIED MAIL**

Bernie Punt  
 General Manager  
 Siouxland Energy & Livestock Cooperative  
 3890 Garfield Avenue  
 Sioux Center, IA 51250

Re: IDNR Project: 07-092; Plant Number: 84-03-020; Siouxland Energy & Livestock Cooperative – Sioux Center  
 Issuance of Permit(s) 01-A-001-S3, 01-A-004-S1, 01-A-010-S2, 01-A-011-S2, 01-A-012-S2, 01-A-015-S2, 03-A-727-S1,  
 03-A-728-S1, 03-A-1298-S1, and 07-A-458 through 07-A-483

Dear Mr. Punt:

This letter transmits the attached construction permit(s) for the above referenced project consisting of the following air contaminant source(s) described in the permit application received March 1, 2007. It is the Department's understanding that the application reflects accurate and complete information.

Source Description	Control	Testing	Permit #	Misc.
1. Boiler #1, S10A	None	PM, NO <sub>x</sub> , CO	03-A-727-S1	NSPS Subpart Dc
2. Boiler #2, S10B	None	PM, NO <sub>x</sub> , CO	03-A-728-S1	NSPS Subpart Dc
3. Boiler #3, S11A	None	PM, NO <sub>x</sub> , CO	07-A-458	NSPS Subpart Dc
4. Boiler #4, S11B	None	PM, NO <sub>x</sub> , CO	07-A-459	NSPS Subpart Dc
5. Grain Receiving, S20	Baghouse	PM	07-A-460	
6. Hammermill #1, S30A	Baghouse	PM	07-A-461	
7. Hammermill #2, S30B	Baghouse	PM	07-A-462	
8. Hammermill #3, S30C	Baghouse	PM	07-A-463	
9. Process Scrubber Units, S40a-S40g	Process Scrubber	VOCs, HAPs	01-A-001-S3	NSPS Subpart VV
10. Fermentation Process, S41a-S41e	CO2 Scrubber	VOCs, HAPs	07-A-464	NSPS Subpart VV
11. Pro duct Loadout, S50	Flare	None	07-A-465	NSPS Subpart VV
12. Coolin g Tower, S80A	None	Yes	07-A-466	
13. Coolin g Tower, S80B	None	Yes	07-A-467	
14. Coolin g Tower, S80C	None	Yes	07-A-468	
15. Coolin g Tower, S80D	None	Yes	07-A-469	
16. Coolin g Tower, S80E	None	Yes	07-A-470	
17. Coolin g Tower, S81	None	Yes	07-A-471	
18. Fire Pu mp (190 BHP), S110	None	None	07-A-472	NSPS IIII
19. Corn Bin Ve nt, BVF1 & BVF2	Fabric Filters	None	03-A-1298-S1	
20. Grain Bin Po wered Vent, PBV1	Fabric Filters	PM	07-A-473	
21. Grain Bin Po wered Vent, PBV2	Fabric Filters	PM	07-A-474	
22. Grain Bin Po wered Vent, PBV3	Fabric Filters	PM	07-A-475	
23. Grain Bin Po wered Vent, PBV4	Fabric Filters	PM	07-A-476	
24. Grain Bin Po wered Vent, PBV5	Fabric Filters	PM	07-A-477	
25. WDGs Storage & Loadout, F90	None	None	07-A-478	
26. VOC E missions from Equipment Leaks, F95	LDAR	None	01-A-015-S2	NSPS Subpart VV
27. Truck T raffic (Paved), F100	Yes	Yes	07-A-479	
28. E85 Storage Tank, TK-1001	None	None	01-A-004-S1	NSPS Subpart Kb

29. 190 Proof Ethanol Storage Tank, TK-1005	None	None	01-A-010-S2	NSPS Subpart Kb
30. E85 Storage Tank, TK-1006	None	None	01-A-011-S2	NSPS Subpart Kb
31. 200 Proof Storage Tank, TK-1003	Internal Floating Roof	None	01-A-012-S2	NSPS Subpart Kb
32. Denaturated Ethanol Storage Tank #1, TK-1007	Internal Floating Roof	None	07-A-480	NSPS Subpart Kb
33. Denaturated Ethanol Storage Tank #2 TK-1008	Internal Floating Roof	None	07-A-481	NSPS Subpart Kb
34. Denaturated Storage Tank, TK-1009	Internal Floating Roof	None	07-A-482	NSPS Subpart Kb
34. Corrosion Inhibitor Tank, TK-1010	None	None	07-A-483	

Your attention is directed toward the specified permit conditions contained within the permit. Based on the information submitted in your application, the Department has made the following determinations:

1. This project involves the permitting of a 40 million gallon expansion at an existing 25 million gallon ethanol plant. Air dispersion modeling has been reviewed and it has been determined that there are no predicted exceedences of a National Ambient Air Quality Standard (NAAQS).
2. Boilers 1 through 4 (S10A, S10B, S11A, S11B) are required to install a CEMs for NOx or perform periodic testing so as to verify compliance with the emission limits for the associated permit and the overall limits of the plant as they relate to Title V and PSD applicability.
3. This facility is considered a synthetic minor source for Title V.
4. This facility is considered a synthetic minor source for Prevention of Significant Deterioration (PSD).
5. This project makes the facility subject to the following subparts:
  - 5.1. NSPS Subpart Kb – Standards of Performance for Volatile Organic Liquid Storage Vessels.
  - 5.2. NSPS Subpart Db – Standards of Performance for Industrial-Commercial-Institutional Steam Generating Units.
  - 5.3. NSPS Subpart VV – Standards of Performance for Equipment Leaks of VOC in the Synthetic Organic Chemicals Manufacturing Industry.
  - 5.4. NSPS Subpart IIII – Standards of Performance for Stationary Compression Ignition Internal Combustion Engines.
6. Stack testing is required (as noted in the table) to ensure compliance the emission limits established in the permits. It should be noted that even with the emission limits the facility is very close to exceeding the thresholds for Title V, PSD and 112(g). In order to ensure that the facility remains in continual compliance with the permit limits and programs like Title V, PSD and 112(g) some emission sources are required to complete testing on a periodic basis. Acetaldehyde is required to be tested quarterly. Testing frequency may be reduced after one year provided there is adequate justification. Please review the testing requirements for each permit so that you are aware of your future requirements. Additionally, it should be noted that for sources that do not require testing (or additional ongoing testing), the Department maintains the right to require testing in the future if needed. If you have any questions concerning stack testing please contact Mark Stone at (515) 242-6001.

In the future, a status report of the construction permit application(s) submitted to the Department is available at the State Permitting and Air Reporting System (SPARS). The website is located at the following address: <http://www.dnraq.state.ia.us/>. The contact person for SPARS is Ms. Robin Horkey at (515) 281-8568 or [robin.horkey@dnr.state.ia.us](mailto:robin.horkey@dnr.state.ia.us). When requesting modifications to the permit, use the permit number and your plant number for identification. Should you have any questions, please contact Shawn Corbin at (515) 242-5272.

Sincerely,



Gary Smith, Senior Environmental Engineer  
Air Construction Permitting  
Air Quality Bureau, IDNR

Enclosures – Air Construction Permit(s) 01-A-001-S2, 01-A-004-S1, 01-A-010-S2, 01-A-011-S2, 01-A-012-S2, 01-A-015-S2, 03-A-727-S1, 03-A-728-S1, 03-A-1298-S1, and 07-A-458 through 07-A-483

cc: Field Office 3 w/ enclosures  
File: 84-03-020 w/ enclosures

# Air Quality Equipment Notification Form

## Facility and Equipment Information:

Company	
Equipment Location	Check (✓) here if equipment is portable <input type="checkbox"/>
Facility Number (Not EIQ Number)	
Emission Unit	
Emission Point #	
Construction Permit #	

## Notification Type (check the appropriate box or boxes):

**Date Construction, Installation, or Alteration Started:** \_\_\_\_\_

*Notification must be postmarked within 30 days after construction starts.*

**Date of Actual Equipment Start Up:** \_\_\_\_\_

*Notification must be postmarked within 15 days after equipment is placed into operation.*

## Signature of Company Official:

Signature \_\_\_\_\_ Date \_\_\_\_\_

Name (please print) \_\_\_\_\_

Title \_\_\_\_\_

Phone Number \_\_\_\_\_

This form is also available on the Internet at  
<http://www.state.ia.us/epd/airconst/conaps/aqcnap.htm>

**Please mail form to (no faxes please):**

Compliance Unit Supervisor  
Air Quality Bureau  
Department of Natural Resources  
7900 Hickman Road, Suite 1  
Urbandale, IA 50322



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