

# Iowa Department of Natural Resources Construction Permit For Air Emission Source

## Permit Holder

Firm: Monsanto Co.

Responsible Party:

J.C. Fowler  
Env. Specialist

319-262-7218

Box 473  
Muscatine, IA 52761

Contact:

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## Source

Source: Boiler #6

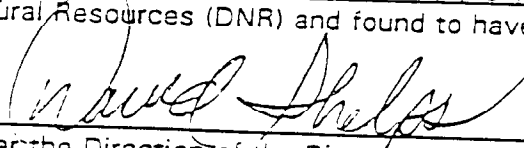
Control Equipment: None

Location: 2500 Wiggins Rd. Muscatine, IA 52761

Plant Number: 70-01-008

Project Number: 96-219

This equipment has been evaluated for conformance with rule(s) 567 Iowa Administrative Code (IAC) 22.3(1), 567 IAC 23.3(2)"b", and 567 IAC 23.3(3)"b" of the Department of Natural Resources (DNR) and found to have the potential to comply.

  
Under the Direction of the Director of  
the Department of Natural Resources.

July 18, 1996  
Date

76-A-265  
Original Permit Number

Modification	Description	Date	Permit Number
1	Changes in operating conditions.	March 9, 1992	76-A-265S1
2	Changes to operating conditions.	Aug. 30, 1995	76-A-265S2
3	Changed back-up fuel.	July 18, 1996	76-A-265S3

## PERMIT CONDITIONS

The owner or operator of the facility shall assure that the installation, operation, and maintenance of this facility is in compliance with all of the following conditions.

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### 1. Departmental Review

This permit is issued based on information submitted by the applicant. Any misinformation, false statements or misrepresentations by the applicant shall cause this permit to be void. In addition, the applicant may be subject to criminal penalties according to the Iowa Code Section 455B.146A.

This permit is issued under the authority of 567 Iowa Administrative Code (IAC) 22.3. The proposed equipment has been evaluated for conformance with Iowa Code Chapter 455B; 567 IAC Chapters 20-30; and 40 C.F.R. Part 60 and has the potential to comply.

No review has been undertaken on the engineering aspects of the equipment or control equipment other than the potential of that equipment for reducing air contaminant emissions. The DNR assumes no liability, directly or indirectly, for any loss due to damage to persons or property caused by, resulting from, or arising out of the design, installation, maintenance or operation of the proposed equipment.

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### 2. Construction

This permit shall become void if construction of the proposed project has not been initiated within eighteen (18) months after the date of the issuance of this permit and completed within thirty-six (36) months after issuance of this permit.

It is the owner's responsibility to ensure that construction conforms to the plans and specifications and that adequate operation and maintenance is provided to ensure that no condition of air pollution is created. If changes in the final plans and specifications are proposed by the owner after a construction permit has been issued, a supplemental permit shall be obtained.

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### 3. Transferability

As required by 567 IAC 22.3(3)f, this permit is not transferable from the source or control equipment specified on Page 1, or from one location to another, unless the equipment is portable. When portable equipment for which a permit has been issued is to be transferred from one location to another, the DNR shall be notified in writing at least thirty (30) days prior to transferring to the new location. The owner will be notified at least ten (10) days prior to the scheduled relocation if the relocation will cause a violation of the National Ambient Air Quality Standards. In such case, a supplemental permit shall be required prior to the initiation of construction of additional control equipment or equipment modifications needed to meet the standards.

### 3. Transferability (continued)

This permit is for the construction and operation of the specific source, equipment or control equipment described in this permit and in the application for this permit. Any owner or operator of the specified source or control equipment, including any person who becomes an owner or operator subsequent to the date on which this permit is issued, is responsible to comply with the provisions of this permit. No person shall construct, install, reconstruct or alter this equipment or control equipment without the required revisions to this permit.

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### 4. Owner Responsibility

Issuance of this permit shall not relieve the owner or operator of the responsibility to comply fully with applicable provisions of the State Implementation Plan (SIP) and any other requirements of local, state, and federal law.

The owner or operator of any air emission source or control equipment shall maintain and operate the equipment and control equipment at all times in a manner consistent with good practice for minimizing emissions.

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### 5. Disposal of Contaminants

The disposal of materials collected by the control equipment shall meet all applicable rules.

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### 6. Excess Emissions

Excess emissions during a period of startup, shutdown, or cleaning of control equipment is not a violation of the emission standard if it is accomplished expeditiously and in a manner consistent with good practice for minimizing emissions. Cleaning of control equipment which does not require the shutdown of the process equipment shall be limited to one six-minute period per one-hour period. An incident of excess emissions other than the above is a violation and may be subject to criminal penalties according to Iowa Code 455B.146A. If excess emissions are occurring, either the control equipment causing the excess shall be repaired in an expeditious manner or the process generating the emissions shall be shutdown within a reasonable period of time as specified in 567 IAC 24.1.

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### 7. Notification, Reporting and Record keeping

A. The owner shall furnish the DNR the following written notifications:

- (1) The date construction, installation, or alteration is initiated postmarked within seven (7) days following initiation of construction, installation, or alteration.
- (2) The date of intended startup at least ten (10) days before the equipment or control equipment involved is placed into operation.

7. Notification, Reporting and Record keeping (continued)

- (3) The actual date of startup postmarked within fifteen (15) days following the start of operation.
- (4) The date of each compliance test required by Permit Condition 10 at least thirty (30) days before the anticipated compliance test date.
- (5) The date of each pretest meeting at least fifteen (15) days before the proposed meeting date. The owner shall request a proposed test plan protocol questionnaire at least sixty (60) days prior to each compliance test date. The completed questionnaire shall be received by the DNR at least fifteen (15) days before the pretest meeting date.
- (6) Transfer of equipment ownership within 30 days of the occurrence.
- (7) Portable equipment relocation at least thirty (30) days before equipment relocation.

B. The owner shall furnish the DNR with the following reports:

- (1) Oral excess emissions in accordance with 567 IAC 24.1.
- (2) Written
  - a. A written compliance demonstration report for each compliance testing event, whether successful or not, postmarked not later than forty-five (45) days after the completion of the test period.
  - b. Operation of this source outside of those limits specified in Permit Conditions 9 and 12, and according to the time limits set forth in 567 IAC 24.1.

C. The owner shall send all notifications, reports and correspondence to:

Mr. Peter Hamlin, Chief  
Air Quality Bureau  
Iowa Department of Natural Resources  
Wallace State Office Building  
Des Moines, IA 50319-0034

D. The owner shall send correspondence concerning stack testing to:

Mr. Mark Stone Telephone: (515) 242-6001  
Air Quality Bureau  
Iowa Department of Natural Resources  
Wallace State Office Building  
Des Moines, IA 50319-0034

7. Notification, Reporting and Record keeping (continued)

- E. All data, records, reports, documentation, construction plans, and calculations required under this permit shall be available at the plant during normal business hours for inspection and copying by federal, state, or local air pollution regulatory agencies and their authorized representatives for a minimum of three (3) years from the date of recording.

8. Permit Violations

Knowingly committing a violation of this permit may carry a criminal penalty of up to \$10,000 per day fine and 2 years in jail according to Iowa Code Section 455B.146A.

9. Emission Limits

<u>Pollutant</u>	<u>lb/hr</u>	<u>tons/vr</u>	<u>Concentration</u>
Total Particulate (TSP)			0.8 lb/MMBTU <sup>1</sup>
PM <sub>10</sub> *	5.0 <sup>2</sup>		
Opacity	N/A		
Sulfur Dioxide (SO <sub>2</sub> )	36.5 <sup>3</sup>		
Nitrogen Oxides (NOx)	N/A		
Volatile Organic Compounds (VOCs)	N/A		
Carbon Monoxide (CO)	N/A		
Lead (Pb)	N/A		

<sup>1</sup> Reference 23.3(2)"b".

<sup>2</sup> Limit that modeling will allow.

<sup>3</sup> Limit that modeling will allow.

\*particulate matter having an aerodynamic diameter of ten (10) microns or less.

N/A = Not applicable

10. Compliance Testing Requirements

<u>Pollutant</u>	<u>Testing Required</u>	<u>Test Method</u>
Total Particulate (TSP)	No	N/A
PM <sub>10</sub>	No	N/A
Opacity	No	N/A
Sulfur Dioxide (SO <sub>2</sub> )	No	N/A
Nitrogen Oxides (NOx)	No	N/A
VOCs	No	N/A
Carbon Monoxide (CO)	No	N/A
Lead (Pb)	No	N/A

N/A = Not applicable

#### 10. Compliance Testing Requirements (continued)

If specified above, the owner shall verify compliance with the emission limitations contained in Permit Condition 9 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.

The tests shall be conducted with the equipment operating in a manner representative of full rated capacity. Failure to test at this maximum may be cause to limit the source to operating at the level at which the compliance tests were conducted.

The following shall apply to all compliance tests:

- A. Each test to be conducted shall be approved by the DNR.
- B. Unless otherwise specified by the DNR, each test shall consist of three (3) separate runs. The duration shall be established by the DNR at the pretest meeting. The arithmetic mean of the three acceptable test runs shall apply for compliance, unless otherwise approved by the DNR.

A pretest meeting shall be held at a mutually agreeable site no less than fifteen (15) days prior to the date of each test. Each meeting shall be attended by representatives of the DNR, the owner, and the testing firm, if any. It is the responsibility of the owner to coordinate and schedule each meeting.

The DNR reserves the right to impose additional, different, or more detailed testing requirements. It shall be the responsibility of the owner to install test ports.

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#### 11. Source Emission Characteristics

<u>Stack Height</u>	<u>Size</u>	<u>Temperature</u>	<u>Flowrate</u>
82 ft	3.54 ft	385 °F	15500 scfm

NOTE: Stack is unobstructed and vertical.

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#### 12. Operating Limits

Operating limits for this source shall be:

- A. The fuel oil firing rate for the B-6 boiler shall not exceed an average of:
    - 1.) 390 gal/hr for any calendar day during which the B-7 boiler is burning fuel oil
    - or 2.) 515 gal/hr during any calendar day during which the B-7 boiler is not burning fuel oil.
  - B. The maximum sulfur content of the fuel oil burned shall not exceed 0.5%.
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### 13. Operating Condition Monitoring

All records, as required below, shall be satisfactory for demonstrating compliance with all applicable operating limits.

Records shall be maintained on site for three (3) years and available for inspection upon request by representatives of the Department of Natural Resources. These records shall show the following:

- A. The amount of fuel oil burned each calendar day in the B-6 boiler.
  - B. Hours of operation for the B-6 and B-7 boilers when burning fuel oil.
  - C. The sulfur content and the type of fuel burned in the B-6 boiler.
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### 14. Continuous Emission Monitoring

Continuous emission monitoring shall not be required at this time.

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END OF PERMIT CONDITIONS