

BEFORE THE DEPARTMENT OF NATURAL RESOURCES  
ADMINISTRATIVE CONSENT ORDER

IN THE MATTER OF:

CONSENT ORDER  
NO. 90-AQ-10

Archer-Daniels Midland Co.

TO: Archer-Daniels-Midland Company  
1251 Beaver Channel Parkway  
Clinton, IA 52732

I. SUMMARY

The consent order is entered into by the Archer-Daniels Midland Company (hereinafter "ADM") and the Department of Natural Resources (hereinafter the "Department"). The Department withdraws in its entirety, Administrative Order No. 86-AQ-09 issued to ADM on May 12, 1986. This consent order pertains to the reduction of sulfur dioxide (SO<sub>2</sub>) emissions from ADM's facility located in Clinton, Iowa, to a level at which the National Ambient Air Quality Standards (NAAQS) will not be exceeded.

II. JURISDICTION

This order is issued pursuant to Iowa Code section 455B.134(9) and 455B.138(1) which authorize the director to issue any order necessary to prevent, abate or control air pollution.

III. STATEMENT OF FACTS

1. Archer-Daniels-Midland Company (hereinafter "ADM") is engaged in the business of producing agricultural commodities including corn derivatives. ADM has an office located on Beaver Channel Parkway in Clinton, Iowa 52732. It is a Delaware Corporation qualified to do business in Iowa and its registered agent is C.T. Corporation Systems.

2. The Clinton area, in which the subject ADM plant is located, has been declared by the Environmental Protection Agency to be one of a list of unclassified areas for particulate matter and as an attainment area for sulfur dioxide (SO<sub>2</sub>).

3. The ADM facility consists of approximately one hundred buildings and constitutes a "major source" as is defined by Iowa Code section 455B.131(8). Included at the facility are 9 boilers, Boilers #1-9. Boilers, #1, #2, #8 and #9 are currently natural gas/oil fired. Boilers #3 through #7 are coal fired. Boilers #6 and #7 are fitted with continuous opacity monitors. In addition, the facility consists of a number of dryers.

4. The Department alleges that it has documented the existence of 125 air contaminant sources at the facility as defined by Iowa Code section 455B.131(2) and stationary sources as defined by rule 567--20.2 (455B) Iowa Administrative Code (IAC).

5. The Department alleges that it has installed two ambient air quality monitors in the Clinton area in proximity to the ADM facility. These are located in the parking lot and tennis court areas of Chancey Park. The parking lot monitor was installed in April, 1985. The tennis court monitor has been in place since June, 1987.

6. The Department alleges that it has monitored twenty-three exceedances of the primary SO<sub>2</sub> ambient air quality standard and two SO<sub>2</sub> alert levels at the parking lot monitor since April, 1985. The Department alleges that it has monitored eleven primary SO<sub>2</sub> ambient air quality standard exceedances and one SO<sub>2</sub> alert level at the tennis court monitor since November 16, 1987.

7. The Department alleges that it has determined, based upon modeling and the monitoring data, that the SO<sub>2</sub> emissions from the ADM facility are a contributing source of the SO<sub>2</sub>, which caused the SO<sub>2</sub> exceedances and alert levels described in paragraph 6 above.

8. In addition, the Department alleges that it determined that the currently allowed SO<sub>2</sub> emissions from the ADM facility will not assure the attainment and maintenance of the SO<sub>2</sub> ambient air quality standard in the area of the facility.

#### IV. CONCLUSIONS OF LAW

1. The Clinton area, in which ADM is located, has been designated as an attainment area for SO<sub>2</sub>.

2. The boilers, dryers and other equipment operated by ADM are "air contaminant sources" as defined by Iowa Code section 455B.131(2) and "stationary sources" as defined by rule 567--20.2 (455B) Iowa Administrative Code (IAC).

3. Pursuant to rule 567--28.1 (455B), the state of Iowa ambient air quality standards are the National Primary and Secondary Ambient Air Quality Standards (NAAQS), 40 C.F.R. Part 50 as amended through July 1, 1987.

4. An exceedance of the primary or secondary NAAQS for SO<sub>2</sub> constitutes "air pollution" as defined by Iowa Code section 455B.131(3).

5. In accordance with Iowa Code section 455B.134(9), the director shall issue orders consistent with the rules to cause the abatement or control of air pollution.

6. The director has considered the facts and circumstances bearing upon the reasonableness of ADM's SO<sub>2</sub> emissions including the character and degree of injury to, or interference with, the protection of health and the physical property of the public and the practicability of reducing or limiting those SO<sub>2</sub> emissions.

7. Based upon these facts and circumstances, the director has determined that the reduction of these SO<sub>2</sub> emissions to a level at which the SO<sub>2</sub> NAAQS will not be exceeded is practicable.

8. Paragraph 567--22.1(1)"b" and subrule 567--22.1(3)(IAC) provides that the owner or operator of a modified stationary source shall obtain a permit to install or alter equipment or control equipment. The Department asserts that the modifications of the boilers, dryers and other equipment described above including the agreed upon emission reductions are subject to the Department's permitting requirements.

#### V. ORDER

THEREFORE, the Department ORDERS AND ADM AGREES to do the following:

#### BOILER EMISSIONS

1. ADM shall immediately limit boiler emissions to not exceed the standards set forth in applicable permits and incorporated herein as Table 1 below except that Boilers #1 and #2 shall not be used to combust coal until after emissions from these boilers are relocated to emit from the new stack described in paragraph 3 below.

Table 1. Emission limits for boilers at ADM's, Clinton, Iowa facility.

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<u>BOILER #</u>	<u>EMISSION LIMIT (lb/mmBTU)*</u>	
		Permit No.
1	2.00	85-A-048-S90
2	2.00	85-A-048-S90
3	2.00	85-A-048-S90
4	2.00	82-A-095-S90
5	2.00	82-A-095-S90
6	3.00	72-A-111-S90
7	3.00	72-A-112-S90

8	**	90-A-067
9	**	86-A-031-S90

\* Maximum emissions to be determined by means of a 24 hour rolling average of continuous emission monitoring results.

\*\* Boilers 8 and 9 shall only be operated on natural gas unless and until ADM provides a demonstration assuring continued maintenance of the ambient air quality standard while firing these boilers with fuel oil.

2. Immediately upon completion of upgrading and duct construction of each boiler, as described in paragraph 3 below, ADM shall cease emissions from the existing stack for that boiler.

3. ADM shall construct a new stack not less than 300 feet in height located approximately at UTM coordinate 731,706 meters easterly by 4,633,416 meters northerly and shall relocate all emissions from Boilers #1 through #7 to this stack pursuant to the following schedule:

<u>ITEM</u>	<u>TO BE COMPLETED NO LATER THAN:</u>
Submit final design drawings	Sept. 1, 1990
Start stack construction	Nov. 1, 1990
Complete stack construction	May 1, 1991
Start boiler upgrade and duct construction	May 1, 1991
Complete boiler upgrade and duct construction	July 1, 1991
Submit report demonstrating compliance with emission limits	Sept. 1, 1991

During this construction period, ADM shall report the status of construction to DNR in writing by the 1st of each month.

4. ADM shall install and operate a continuous emission monitor to measure emissions from Boilers #6 and #7. ADM shall install and operate a continuous emission monitor to measure emissions from Boilers #1 through #5 prior to any commingling of emissions from these boilers with emissions from Boiler #6 or Boiler #7. These continuous emission monitors shall be installed and operated as specified in the appropriate permits. Installation shall be completed pursuant to the following schedule:

<u>ITEM</u>	<u>DATE</u>
Complete equipment installation	July 1, 1991
Submit certification Report	Sept. 1, 1991

5. ADM shall immediately limit emissions from non-traditional sources of sulfur dioxide in accordance with Tables 2 and 3 and with applicable permits which are incorporated herein in their entirety. ADM shall immediately limit sulfur dioxide emissions from all other sources so as not to exceed 0.0 pounds per hour.

Table 2. Emission limits for monitored non-traditional SO<sub>2</sub> sources at ADM, Clinton.

Number	Source Description	Emission Limit (lb/hr)	Permit No.
9	Sulphur Tower	12.0	90-A-078
25	#1 Intensa	8.0	74-A-044-S90
65	#2 Intensa	8.0	75-A-182-S90
66	#3 Intensa	8.0	75-A-183-S90
67	#4 Intensa	8.0	85-A-072-S90
68	#5 Intensa	8.0	85-A-073-S90
69	#6 Intensa	8.0	85-A-074-S90
45	Vetter Dryer	1.5	81-A-048-S90
46	Vetter Dryer	1.5	81-A-049-S90
47	Vetter Dryer	1.5	81-A-050-S90
48	Vetter Dryer	1.5	81-A-051-S90
49	Vetter Dryer	1.5	81-A-052-S90
51	No. 1 and No. 2 Leader Germ Dryer Rotoclone	3.0	90-A-079
52	No. 3 Leader Germ Dryer Rotoclone Exhaust	3.0	73-A-181
53	No. 4 Leader Germ Dryer Rotoclone Exhaust	3.0	73-A-182
58A	#1 Fluid Bed Germ Dryer	8.0	90-A-082
58B	#1 Stearn-Rogers	8.0	90-A-083

Table 3. Emission limits for non-traditional SO<sub>2</sub> sources without special emission monitoring requirements.

Source Number	Bldg No.	Description	UTM X (m)	UTM Y (m)	EXH Height (m)	Diam (m)	Emission Limit (lb/hr)	Permit No.
	7	Wet Milling						90-A-068
10		Corn Surge Tnk Vn	731480	4633270	23.8	0.51	0.2	

11	2nd Flr Exh Vent	731520	4633250	25.3	0.91	0.005
12	3rd Flr Exh Fans	731501	4633260	10.4	0.91	0.1
13	3rd Flr Exh Fans	731497	4633260	10.4	0.91	0.1
14	2nd Grind Tnk Vnt	731473	4633270	6.7	0.91	0.008
15	1st Fiber Wsh Tnk	731497	4633260	8.2	0.36	0.85
16	1st Fiber Wsh Tnk	731493	4633270	9.1	0.41	0.009
17	2nd Flr Exhaust	731497	4633260	6.4	1.22	0.006
18	2nd Flr Exh Vent	731500	4633250	6.4	0.91	0.005

9 Starch Separations

90-A-069

19	Roof Vents	731513	4633270	25.9	1.22	0.00625
20	"	731521	4633280	25.9	1.22	"
21	"	731525	4633280	25.9	1.22	"
22	"	731517	4633270	25.9	1.22	"
23	"	731518	4633270	25.9	1.22	"
24	"	731524	4633270	25.9	1.22	"
25	"	731528	4633280	25.9	1.22	"
26	"	731535	4633290	25.9	1.22	"

10 Steep House

90-A-070

27	Roof Vents	731525	4633300	23.5	0.91	0.0142
28	"	731540	4633320	23.5	0.91	"
29	"	731556	4633330	23.5	0.91	"
30	"	731523	4633290	23.5	0.91	"
31	"	731537	4633310	23.5	0.91	"
32	"	731553	4633320	23.5	0.91	"

14 Feed Manufacturing

90-A-071

36	Roof Vent Fans	731568	4633340	19.5	0.46	0.007
37	Fiber Spinners	731587	4633350	13.4	0.25	0.012

92 Gluten Filters

90-A-072

41	Roof Vent Fans	731557	4633370	14.9	0.91	0.012
42	"	731560	4633370	14.9	0.91	0.012
43	"	731564	4633380	14.0	0.61	0.008
44	"	731567	4633380	14.0	0.61	"
45	"	731571	4633390	14.0	0.61	"
46	"	731573	4633380	14.0	0.61	"
47	"	731578	4633390	14.0	0.61	"
48	"	731580	4633390	14.0	0.61	"
49	Wall Vent	731568	4633390	14.0	0.46	0.003
50	Wall Fan	731555	4633380	4.3	0.76	0.012

81 Gluten Filters

90-A-073

51	Roof Vent Fans	731585	4633400	14.3	0.46	0.006
52	"	731586	4633370	14.3	0.46	0.006
53	Wall Vent Fan	731587	4633390	4.3	0.46	0.006
54	"	731582	4633400	4.3	0.46	0.006

55		Vac Pump Exhaust	731588	4633400	8.5	0.15	0.007	
56		"	731593	4633410	8.5	0.15	"	
57		"	731594	4633410	8.5	0.15	"	
58		"	731596	4633410	8.5	0.15	"	
59		"	731598	4633410	7.3	0.15	"	
60		"	731600	4633410	7.3	0.15	"	
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66	73	MR#1 Vapor Vent	731925	4633580	20.1	0.15	0.85	90-A-075
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67	78	MR Evaporator	731892	4633520	22.0	0.15	0.85	90-A-076
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70	98	Rotoclone Scrub Leader Dryer (3rd Pass)	731716	4633284	11.3	0.38	0.467	90-A-077
71		Rotoclone Scrub Leader Dryer (3rd Pass)	731716	4633284	11.3	0.38	0.467	
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6. ADM shall demonstrate compliance with the permit emission limits for the sources specified in Table 2 by means of stack tests as provided in paragraph 7 and 8 below.

7. Stack test shall be performed in conformance with the Air Quality Compliance Sampling Manual within 120 days of the effective date of this order and every 15 months thereafter for the next five years for a total of five tests for each emission point listed in paragraph 6. ADM shall submit stack test reports within 60 days of each test.

8. With Department approval, stack tests of one source may be applied to each source with substantially similar equipment processing substantially similar input material to an substantially similar output at an substantially similar rate. Within sixty days of the effective date of this order, ADM shall notify the Department in writing whether or not ADM intends to utilize this exemption, those sources which ADM also proposes qualify for the exemption, and, an explanation detailing the equipment, process layout, product, product handling and such other information necessary to justify the exemption.

9. ADM shall comply with permits identified in Tables 1, 2 and 3 which are attached to this order and are incorporated herein as a part of this order.

10. It is a condition that ADM has voluntarily undertaken these actions at the direction of the State of Iowa as represented by the Department and its predecessors, and that ADM intends to continue such voluntary cooperation with the Department for compliance with the terms of this Consent Order. The Department reserves the right to pursue any enforcement action which it deems necessary to fulfil its obligations under Iowa Code chapter 455B based on any additional information which may come to the

Department's attention subsequent to the entry of this Consent Order. ADM reserves the right to resist any such action. The Department and ADM expressly reserve all other rights and defenses that each may have.

#### VI. WAIVER OF APPEAL RIGHTS

This order is entered into knowingly and with the consent of ADM. For this reason, ADM waives its right to appeal this order. By entering into this order, Administrative Order No. 86-AQ-09 is withdrawn and the appeal of Order No 86-AQ-09 is moot.

#### VII. NONCOMPLIANCE

This order is binding upon ADM and is enforceable as an order of the Department in accordance with Iowa Code section 455B.146. Failure to comply may result in the imposition of administrative penalties or referral to the Attorney General to obtain injunctive relief and civil penalties. The Department acknowledges that ADM expressly reserves and retains the right to assert any and all available defenses including, but not limited to, impossibility, impracticability, and frustration, if the Department asserts ADM's noncompliance with the Order. The Department does not waive its right to contest the availability of any defense raised by ADM.

#### VIII. DENIAL OF LIABILITY

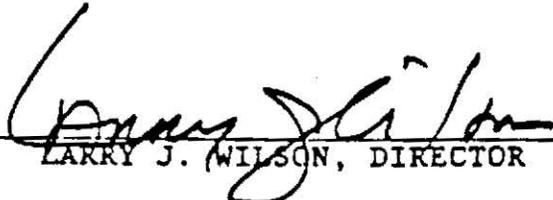
Nothing in this Consent Order nor any action taken by ADM hereunder shall be construed to constitute any admission by ADM including any legal or factual liability or responsibility in connection with any matter.

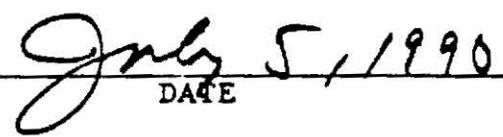
#### IX. FORCE MAJEURE

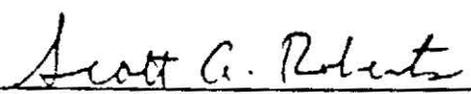
To the extent that ADM is unable to combust coal at an SO<sup>2</sup> emission limit of 2.00 in Boilers 1-5 as a result of Acts of God, war, insurrection, strikes, lock-outs or other labor difficulties, freight embargoes, poor river conditions, derailments, equipment failure or malfunction, unusually severe weather, floods, hurricanes, fires, explosions, safety hazards, or any other like causes beyond the reasonable control of ADM, then, during such period of force majeure, ADM may upon sound demonstration to the Department (or a designated third party competent to hear such matters) that combusting coal at an SO<sup>2</sup> emission limit of 3.00 will allow for the maintenance of the National Primary and Secondary Ambient Air Quality Standards, combust coal at such new limit in Boilers 1-5.

Any questions regarding this order may be directed to:

Mark Landa  
Legal Services  
Iowa Department of Natural Resources  
Henry A. Wallace Building  
900 East Grand Avenue  
Des Moines, IA 50319  
515/281-6243

  
LARRY J. WILSON, DIRECTOR

  
DATE

  
FOR ARCHER-DANIELS MIDLAND CO.  
BY ONE OF ITS ATTORNEYS

  
DATE

BEFORE THE IOWA DEPARTMENT OF NATURAL RESOURCES  
ADMINISTRATIVE CONSENT ORDER

IN THE MATTER OF:

Archer-Daniels Midland Co.

AMENDED CONSENT ORDER

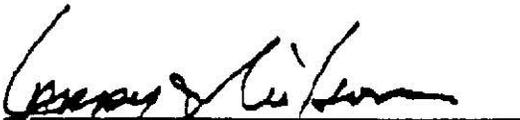
NO: 90-AQ-10

Administrative Consent Order No. 90-AQ-10 is hereby amended as follows:

1. Table 2. Emission limits for monitored non-traditional SO<sub>2</sub> sources at ADM, Clinton.

Number	Description	Emission Limit (lb/hr)	Permit No.
52	No. 3 Leader Germ Dryer Rotoclone Exhaust	3.0	73-A-S181
53	No. 4 Leader Germ Dryer Rotoclone Exhaust	3.0	73-A-S181
58A	#1 Fluid Bed Germ Dryer	8.0	90-A-080
58B	#1 Stearn-Rogers	8.0	90-A-081

The remaining portions of Administrative Consent Order No. 90-AQ-10 remain in full force and effect.

  
LARRY J. WILSON, DIRECTOR  
IOWA DEPARTMENT OF NATURAL  
RESOURCES

3/25/91  
DATE

  
FOR ARCHER-DANIELS MIDLAND CO.  
BY ONE OF ITS ATTORNEY'S

3/5/91  
DATE



TERRY E. BRANSTAD, GOVERNOR

DEPARTMENT OF NATURAL RESOURCES

LARRY J. WILSON, DIRECTOR

June 20, 1990

Mr. James Woll  
 Archer - Daniels Midland Company  
 P.O. Box 340  
 Clinton, IA 52732

Dear Mr. Woll:

In accordance with provisions specified in the rules of the Environmental Quality Commission this letter identifies permit numbers and specifies sulfur dioxide emission limits for each of the sources listed below.

Building 7 - Wet Milling  
 Permit 90-A-068

Large Grid	Description	UTM Coordinates		Exhaust Height (m)	Diameter (m)	Emission Limit (lb/hr)
		X (m)	Y (m)			
10	Corn Surge Tank Vent	731400	4633270	23.8	0.51	0.2
11	2nd Floor Exhaust Vent	731520	4633250	25.3	0.91	0.005
12	3rd Floor Exhaust Fan	731501	4633260	10.4	0.91	0.1
13	3rd Floor Exhaust Fan	731497	4633260	10.4	0.91	0.1
14	2nd Grind Tank Vent	731473	4633270	4.7	0.91	0.1
15	1st Fiber Wash Tank	731497	4633260	8.2	0.34	0.85
16	1st Fiber Wash Tank	731493	4633270	9.1	0.41	0.009
17	2nd Floor Exhaust	731497	4633260	6.4	1.22	0.006
18	2nd Floor Exhaust Vent	731500	4633250	6.4	0.91	0.005

Building 9 - Starch Separations  
 Permit 90-A-069

Large Grid	Description	UTM Coordinates		Exhaust Height (m)	Diameter (m)	Emission Limit (lb/hr)
		X (m)	Y (m)			
19	Roof Vent	731513	4633270	25.9	1.22	0.00625
20	Roof Vent	731521	4633280	25.9	1.22	0.00625
21	Roof Vent	731525	4633280	25.9	1.22	0.00625
22	Roof Vent	731517	4633270	25.9	1.22	0.00625
23	Roof Vent	731518	4633270	25.9	1.22	0.00625
24	Roof Vent	731524	4633270	25.9	1.22	0.00625
25	Roof Vent	731528	4633280	25.9	1.22	0.00625
26	Roof Vent	731535	4633290	25.9	1.22	0.00625

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Building 10 - Steep House  
 Permit 90-A-070

Large Grid	Description	UTM Coordinates		Exhaust Height (m)	Diameter (m)	Emission Limit (lb/hr)
		X (m)	Y (m)			
27	Roof Vent	731525	4633300	23.5	0.91	0.0142
28	Roof Vent	731540	4633320	23.5	0.91	0.0142
29	Roof Vent	731556	4633330	23.5	0.91	0.0142
30	Roof Vent	731523	4633290	23.5	0.91	0.0142
31	Roof Vent	731537	4633310	23.5	0.91	0.0142
32	Roof Vent	731553	4633320	23.5	0.91	0.0142

Building 14 - Starch Separations  
 Permit 90-A-071

Large Grid	Description	UTM Coordinates		Exhaust Height (m)	Diameter (m)	Emission Limit (lb/hr)
		X (m)	Y (m)			
36	Roof Vent Fan	731568	4633340	19.5	0.46	0.007
37	Fiber Spinners	731587	4633350	13.5	0.25	0.012

Building 92 - Gluten Filters  
 Permit 90-A-072

Large Grid	Description	UTM Coordinates		Exhaust Height (m)	Diameter (m)	Emission Limit (lb/hr)
		X (m)	Y (m)			
41	Roof Vent Fan	731557	4633370	14.9	0.91	0.012
42	Roof Vent Fan	731540	4633370	14.9	0.91	0.012
43	Roof Vent Fan	731564	4633300	14.0	0.61	0.008
44	Roof Vent Fan	731567	4633200	14.0	0.61	0.008
45	Roof Vent Fan	731571	4633390	14.0	0.61	0.008
46	Roof Vent Fan	731573	4633300	14.0	0.61	0.008
47	Roof Vent Fan	731578	4633290	14.0	0.61	0.008
48	Roof Vent Fan	731580	4633390	14.0	0.61	0.008
49	Wall Vent	731568	4633390	14.0	0.46	0.003
50	Wall Fan	731555	4633380	4.3	0.76	0.012

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Building 81 - Gluten Filters  
 Permit 90-A-073

Large Grid	Description	UTM Coordinates		Exhaust Height (m)	Diameter (m)	Emission Limit (lb/hr)
		X (m)	Y (m)			
51	Roof Vent Fan	731585	4633400	14.3	0.46	0.006
52	Roof Vent Fan	731584	4633370	14.3	0.46	0.006
53	Roof Vent Fan	731507	4633390	4.3	0.46	0.006
54	Roof Vent Fan	731582	4633400	4.3	0.46	0.006

Building 5 - Stillage  
 Permit 90-A-074

Large Grid	Description	UTM Coordinates		Exhaust Height (m)	Diameter (m)	Emission Limit (lb/hr)
		X (m)	Y (m)			
55	Vacuum Pump Exhaust	731580	4633400	8.5	0.15	0.007
56	Vacuum Pump Exhaust	731593	4633410	8.5	0.15	0.007
57	Vacuum Pump Exhaust	731594	4633410	8.5	0.15	0.007
58	Vacuum Pump Exhaust	731596	4633410	8.5	0.15	0.007
59	Vacuum Pump Exhaust	731598	4633410	7.3	0.15	0.007
60	Vacuum Pump Exhaust	731600	4633410	7.3	0.15	0.007

Building 73 - MR 1  
 Permit 90-A-075

Large Grid	Description	UTM Coordinates		Exhaust Height (m)	Diameter (m)	Emission Limit (lb/hr)
		X (m)	Y (m)			
66	MR 1 Vapor Vent	731925	9633580	20.1	0.15	0.85

Building 78 - MR  
 Permit 90-A-076

Large Grid	Description	UTM Coordinates		Exhaust Height (m)	Diameter (m)	Emission Limit (lb/hr)
		X (m)	Y (m)			
67	MR Evaporator	731892	4633520	22.0	0.15	0.85

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Building 98  
Permit 90-A-077

Large Grid	Description	UTM Coordinates		Exhaust Height (m)	Diameter (m)	Emission Limit (lb/hr)
		X (m)	Y (m)			
70	Leader Dryer (3rd pass) Rotoclone Scrubber	731716	4633284	11.3	0.38	0.467
71	Leader Dryer (3rd pass) Rotoclone Scrubber	731716	4633284	11.3	0.38	0.467

Sincerely,

*Michael Hayward*

MICHAEL HAYWARD  
AIR QUALITY SECTION

A:MH:COMM/dkr

cc: Field Office 6



TERRY E. BRANSTAD, GOVERNOR

DEPARTMENT OF NATURAL RESOURCES

LARRY J. WILSON, DIRECTOR

June 20, 1990

Mr. James Woll  
Archer-Daniels Midland Company  
PO Box 340  
Clinton, IA 52732

SUBJECT:	<u>Boiler No.</u>	<u>Permit No.</u>
	1	85-A-048-S90
	2	85-A-048-S90
	3	85-A-048-S90
	4	82-A-095-S90
	5	82-A-095-S90
	6	72-A-111-S90
	7	72-A-112-S90
	8	90-A-067
	9	86-A-031-S90

Dear Mr. Woll:

In accordance with provisions specified in subrule 567--22.3(5) of the Iowa Administrative Code this letter represents supplements to permits 72-A-111, 72-A-112, 82-A-095 and 85-A-048. These permits are in regard to steam generation units 1 through 9 at the Clinton operations of Archer-Daniels Midland Company.

Condition 1 -- Allowable Emission Rates

Boilers 1, 2, 3, 4 and 5

The maximum emission rate as determined by means of a twenty-four hour rolling average of continuous monitoring results shall not exceed 2.00 pounds of sulfur dioxide per million Btu of heat input.

Boiler 6 and 7

The average maximum emission rate as determined by means of a twenty-four hour rolling average of continuous monitoring results shall not exceed 3.00 pounds of sulfur dioxide per million Btu of heat input.

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Archer-Daniels Midland Company  
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Boilers 8 and 9

These boilers shall only be operated on natural gas unless and until ADM provides a demonstration assuring continued maintenance of the ambient air quality standard while firing these boilers with fuel oil.

Condition 2 -- Continuous Emissions Monitoring Equipment

The permittee shall install, calibrate, maintain, and operate a continuous emission monitoring (CEM) system to measure emissions of SO<sub>2</sub> from Boilers 6 and 7. The permittee shall install, calibrate operate and maintain a continuous emission monitoring system to measure emissions of sulfur dioxide from boiler #1 through #5 prior to any commingling of emissions from these boilers with the emissions from boilers #6 or #7. Each continuous sulfur dioxide emission monitoring system shall include an oxygen (or carbon dioxide) emission monitor.

Installation shall be completed by July 1, 1991, with a certification report submitted to the Department no later than September 1, 1991.

Compliance with the sulfur dioxide emission limit of this permit shall be continuously demonstrated by the permittee through the use of the CEM system.

Condition 3 -- Installation, Evaluation and Operation of the Continuous Emission Monitoring Systems

Each procedure under 40 C.F.R. 60.13 shall be followed for installation, evaluation and operation of the CEM systems.

- a. Each continuous monitoring system shall be certified in accordance with procedures under Performance Specifications 2 and 3 of 40 C.F.R. Part 60, Appendix B.
- b. Quarterly accuracy determinations and daily calibration drift tests shall be performed in accordance with Procedure 1 of 40 C.F.R. Part 60, Appendix F.
- c. The span value of the CEM shall be 200 percent of the maximum estimated hourly potential sulfur dioxide emissions from the fuel combusted.

Condition 4 -- Record Keeping

The permittee shall maintain the following records in a manner suitable for inspection at the Clinton facility for a period of at least two years from the date of record. The permittee shall make such records available to the Department upon request:

- a. The one-hour average sulfur dioxide emission rates measured by the CEM required by this permit.
- b. Identification of the operating days for which sulfur dioxide emission data have not been obtained, including reasons for not obtaining sufficient data and a description of corrective actions taken.
- c. Identification of the times when emission data have been excluded from the calculation of average emission rates and the reasons for excluding the data.
- d. Identification of the times when the sulfur dioxide concentration exceeded the full span of the continuous monitoring system.
- e. Description of any modifications or maintenance made to the continuous monitoring system that could affect the ability of the CEM to comply with 40 C.F.R. Part 60, Appendix B, Performance Specifications 2 and 3.
- f. Results of the daily continuous monitoring system drift tests and quarterly accuracy assessments conducted in accordance with 40 C.F.R. Part 60, Appendix F.

Condition 5 -- Excess Emissions

An incident of excess emissions of sulfur dioxide shall be reported to the Department of Natural Resources in accordance with Chapter 24 of the rules. An incident of excess emission is defined as a period during which the average emission rate for sulfur dioxide, as measured by the CEM, exceeds the maximum twenty-four hour allowable emission rate.

Condition 6 -- Reporting Requirements

The following operation, emissions and control reporting requirements of this condition shall begin the calendar quarter in which the CEM becomes operational, covering the entire quarter or portion thereof. This information shall be reported on the forms supplied by the Department.

- a. The magnitude of excess emissions computed in accordance with Condition 4a, any conversion factor(s) used, and the date and time of commencement and completion of each time period of excess emission.

- b. Specific identification of each period of excess emissions that occurs during startups and shutdowns of the affected facility. The nature and cause of any excess emission and the corrective action taken shall be reported.
- c. The date and time identifying each period during which the CEM was inoperative except for zero and span checks and the nature of the system repairs or adjustments.
- d. When no excess emissions have occurred or the CEM has not been inoperative, repaired, or adjusted, such information shall be stated in the report.
- e. The results of the quarterly accuracy assessments as required by 40 C.F.R. Part 60, Appendix F.

Condition 7 -- Notification Requirements

Notification of the schedule for the relative accuracy determination required in Performance Specification 2 shall be provided to the Department in writing not later than fifteen (15) days before the test is performed. Such notice shall include, at a minimum, the time, the place and the name of the person who will conduct the test. Unless specifically waived by the Department, a pretest meeting shall be held no later than fifteen (15) days prior to conducting the compliance demonstration. A representative of the Department shall be permitted to witness the tests.

Condition 8 -- Construction of New Stack

ADM shall construct a new stack not less than 300 feet in height located approximately at UTM coordinate 731,706 meters Easterly by 4,633,416 meters Northerly and shall relocate all emissions from Boilers #1 through #7 to this stack pursuant to the schedule noted below:

Item	To be completed no later than:
Submit final design drawings	September 1, 1990
Start stack construction	November 1, 1990
Complete stack construction	May 1, 1991
Start boiler upgrade and duct construction	May 1, 1991
Complete boiler upgrade and duct construction	July 1, 1991
Submit report Demonstrating Compliance with emission limits	September 1, 1991

Immediately upon completion of upgrading and duct construction of each boiler ADM shall cease emissions from the existing stacks for boilers 1 through 7.

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During this construction period, ADM shall report the status of construction to DNR in writing by the first of each month.

All other conditions of these permits shall remain the same.

Sincerely,

*Michael Hayward*

MICHAEL HAYWARD  
AIR QUALITY SECTION  
AIR QUALITY AND SOLID WASTE PROTECTION BUREAU

MH:dkr  
A:HAYWARD.26

cc: Field Office 6



TERRY E. BRANSTAD, GOVERNOR

DEPARTMENT OF NATURAL RESOURCES  
LARRY J. WILSON, DIRECTOR

June 20, 1990

Mr. James Woll  
Archer-Daniels Midland Company  
PO Box 340  
Clinton, IA 52732

Dear Mr. Woll:

In accordance with provisions specified in subrule 567--22.3(5) of the Iowa Administrative Code this letter represents supplements to permits listed below.

Condition 1 -- Allowable Emission Rates

ADM shall immediately limit emissions from non-traditional sources of sulfur dioxide to the values listed below for the respective sources.

Source Number	Permit Number	Description	Sulfur Dioxide Allowable Emission Rate (lb/hr)
9	90-A-070	Sulfur Tower	12.0
25	74-A-044-S90	No. 1 Intensa Dryer	8.0
65	75-A-182-S90	No. 2 Intensa Dryer	8.0
66	75-A-183-S90	No. 3 Intensa Dryer	8.0
67	85-A-072-S90	No. 4 Intensa Dryer	8.0
68	85-A-073-S90	No. 5 Intensa Dryer	8.0
69	85-A-074-S90	No. 6 Intensa Dryer	8.0
45	81-A-048-S90	No. 1 Vetter Dryer	1.5
46	81-A-049-S90	No. 2 Vetter Dryer	1.5
47	81-A-050-S90	No. 3 Vetter Dryer	1.5
48	81-A-051-S90	No. 4 Vetter Dryer	1.5
49	81-A-052-S90	No. 5 Vetter Dryer	1.5
51	90-A-079	No. 1 & 2 Leader Germ Dryers Rotoclone Exhaust	3.0
52	90-A-080	No. 3 Leader Germ Dryer Rotoclone Exhaust	3.0
53	90-A-081	No. 4 Leader Germ Dryer Rotoclone Exhaust	3.0
58A	90-A-080	No. 1 Fluid Bed Germ Dryer	8.0
58B	90-A-081	No. 1 Stearns-Rogers Dryer	8.0

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Condition 2

ADM shall demonstrate compliance with the emission limits specified in the listing of Condition 1 by means of stack tests, as described under Condition 3.

With Departmental approval, stack tests of one source may be applied to each source with identical equipment processing identical input material to an identical output at an identical rate. Within sixty days of the effective date of this order ADM shall notify the Department in writing: whether or not ADM intends to utilize this exemption; those sources which ADM proposes qualify for the exemption, and, an explanation detailing the equipment, process layout, product, product handling and such other information necessary to justify the exemption.

Condition 3 -- Stack Tests

Stack tests shall be performed in conformance with the Air Quality Compliance Sampling Manual within 120 days of the effective date of this order and every 15 months thereafter for the next five years for a total of five tests for each emission point listed. ADM shall submit stack test reports within 60 days of each test.

Condition 4 -- Notification Requirements

Notification of the schedule for the stack tests performed pursuant to Condition 3 (above) shall be provided to the Department in writing not later than fifteen (15) days before the test is performed. Such notice shall include, at a minimum, the time, the place and the name of the person who will conduct the test. Unless specifically waived by the Department, a pretest meeting shall be held no later than fifteen (15) days prior to conducting the compliance demonstration. A representative of the Department shall be permitted to witness the tests.

All other conditions of these permits shall remain the same.

Sincerely,

*Michael Hayward*

MICHAEL HAYWARD  
AIR QUALITY SECTION  
AIR QUALITY AND SOLID WASTE PROTECTION BUREAU

MH:dkr

A:HAYWARD.01

cc: Field Office 6



TERRY E. BRANSTAD, GOVERNOR

DEPARTMENT OF NATURAL RESOURCES  
LARRY J. WILSON, DIRECTOR

February 26, 1991

Mr. James Woll  
Acher-Daniels Midland Company  
PO Box 340  
Clinton, Iowa 52732

Subject: Correction to permits issued June 20, 1990.

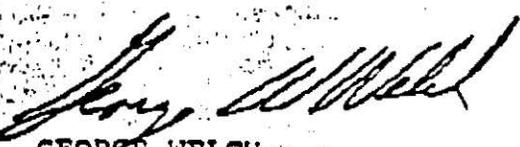
Dear Mr. Woll:

In accordance with provisions specified in subrule 567-22.3(5) of the Iowa Administrative Code this letter corrects the following permits issued June 20, 1990.

Permit 90-A-068 listed an emission limit of 0.1 lb/hr for large grid source number 14 described as the "2nd Grind Tank Vent". The correct emission limit for this source is 0.008 lb/hr.

In a separate permit letter sources number 52 and 53, described as "No. 3 Leader Germ Dryer Rotoclone Exhaust" and "No. 4 Leader Germ Dryer Rotoclone Exhaust" respectively, were assigned incorrect permit numbers. The correct permit number for both of these sources is 73-A-S181.

Sincerely,

  
GEORGE WELCH  
AIR QUALITY SECTION  
AIR QUALITY AND SOLID WASTE PROTECTION BUREAU

cc: Field Office 6