Sent to TS
5.17.05

Attachment 14.

Agrium

Agrium Conda Phosphate Operations*
3010 Conda Road
Soda Springs, ID 83276
Tel: 208-547-4381
Fax: 208-547-2550

May 13, 2005

File No.: EN-04-064

FedEx Tracking # 792922272195

RECEIVED
MAY 16 2005
IDAHO DEPARTMENT OF
ENVIRONMENTAL QUALITY

Air Quality Permit Compliance
Department of Environmental Quality
Pocatello Regional Office
444 Hospital Way #300
Pocatello, Idaho 83201

Attn: Richard Elkins

RE: Compliance Test Reports

Dear Mr. Elkins,

Please find enclosed two (2) copies of our annual compliance report for a source test conducted at our facility April 15, 2005 by Antec Environmental Services. Attached to the report is Supplements 1, which contains an emission summary and monitored data.

In accordance with IDAPA 58.01.01.123, and "based on information and belief formed after reasonable inquiry, the statements and information in the document are true, accurate, and complete."

Sincerely,

for

Charles H. Ross
General Manager

CHR:mj
Enc. (2) copies of test report + (2) copies of Supplements 1

* A Registered Name of Nu-West Industries, Inc.

Agrium

Agrium Conda Phosphate Operations*
3010 Conda Road
Soda Springs, ID 83276
Tel: 208-547-4381
Fax: 208-547-2550

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Air Quality Permit Compliance
Department of Environmental Quality
Pocatello Regional Office
444 Hospital Way #300
Pocatello, Idaho 83201

Attn: Richard Elkins

RE: Compliance Test Reports

Dear Mr. Elkins,

Please find enclosed two (2) copies of reports for annual source testing conducted at our facility April 15, 2005 by Antec Environmental Services, a Northbend, Washington testing company. The stack test was conducted at worst-case normal conditions, as described at IDAPA 58.01.01.157.02.a. The report includes test data for the following source at our Conda facility, listed with applicable Tier I Operating Permit 029-00003 sections limiting emissions:

Phosphate Fertilizer Production Process ("Granulation Plant") - Section 2.10

In addition to the reports produced by Antec, I have included operational monitored data and calculations demonstrating compliance/non-compliance for each test. This information is included with this letter as Supplement 1 to Antec's report. A summary of data and emission calculations appear below:

Phosphate Fertilizer Production Process ("Granulation Plant") - Section 2.10

Test date: April 15, 2005

Permitted fluoride emissions:	0.058 lb/Ton P_2O_5 feed
Fluoride emissions during test:	0.049 lb/Ton P_2O_5 feed [In compliance]
P_2O_5 feed to process during test:	44.36 tons/hr
Pressure drop across granulator scrubber:	18.6 inches H_2O
Pressure drop across dryer scrubber:	16.6 inches H_2O
Granulator scrubber flow rate:	375 gpm
Dryer scrubber flow rate:	725 gpm

* A Registered Name of Nu-West Industries, Inc.

As indicated by the sampling data provided by Antec and the summary above, the source test and calculations demonstrated compliance to permit limitations.

Opacity readings were performed during the test and observations are included.

It is our pleasure and opportunity to provide you with this source test information. We appreciate DEQ's assistance in helping us maintain compliance with state and federal air quality regulations.

If you have any questions concerning this letter or the enclosed Compliance Report by Antec, please call me at (208) 547-4381 extension 263.

Sincerely,

Monty Johnson
Environmental Manager

Attachments: Supplement 1 to Antec Report
Enclosures: two (2) copies of Antec report for April 15, 2005

Supplement 1 to Antec Source Test Report
Phosphate Fertilizer Production Plant
Test date: April 15, 2005

Nu-west Industries, Inc.
d.b.a. Agrium Conda Phosphate Operations
3010 Conda Road
Soda Springs, Idaho 83276

Fluoride Emission Calculation (40 CFR 63.606(c)(1):

$$E = \left(\sum_{i=1}^{N} C_{si} Q_{sdi} \right) / (PK)$$

Where:
E = emission rate of total fluorides, (lb/ton) of equivalent P_2O_5 feed
C_{si} = concentration of total fluorides from emission point "i", (mg/dscf)
Q_{sdi} = volumetric flow rate of effluent gas from emission point "i", (dscf/hr)
N = number of emission points associated with the affected facility.
P = equivalent P_2O_5 feed rate, (ton/hr)
K = conversion factor, (453,600 mg/lb)

Run #1 **Granulation 04/15/05**

Csi =	11.6 mg F/	33.991 DSCF	
Qsdi =	44776 DSCFM	2686560 DSCFH	
N =	1		
P =	242 gpm	1.59 SPG	0.2503 gpm-tph
	46 % P2O5	P=	44.30 tons P2O5/hr
K = conversion factor	453600 mg/lb		
E =	0.045623 lbs F/ton P2O5	Emission limit =	0.058 lbs F/ton P2O5
		% of Standard =	**78.7**

Run #2 **Granulation 04/15/05**

Csi =	6.43 mg F/	35.661 DSCF	
Qsdi =	48239 DSCFM	2894340 DSCFH	
N =	1		
P =	243 gpm	1.59 SPG	0.2503 gpm-tph
	46 % P2O5	P=	44.49 tons P2O5/hr
K = conversion factor	453600 mg/lb		
E =	0.025863 lbs F/ton P2O5	Emission limit =	0.058 lbs F/ton P2O5
		% of Standard =	**44.6**

Run #3 **Granulation 04/15/05**

Csi =	19.4 mg F/	35.268 DSCF	
Qsdi =	46305 DSCFM	2778300 DSCFH	
N =	1		
P =	242 gpm	1.59 SPG	0.2503 gpm-tph
	46 % P2O5	P=	44.30 tons P2O5/hr
K = conversion factor	453600 mg/lb		
E =	0.076049 lbs F/ton P2O5	Emission limit =	0.058 lbs F/ton P2O5
		% of Standard =	**131.1**
		% of Std. Ave. =	**84.8**

Prepared by: Monty Johnson

Granulator EPA 1-4

Client: Agrium
Location: Soda Springs, ID
Source: Granulator
Date: April 15, 2005
Project No.: AES5041

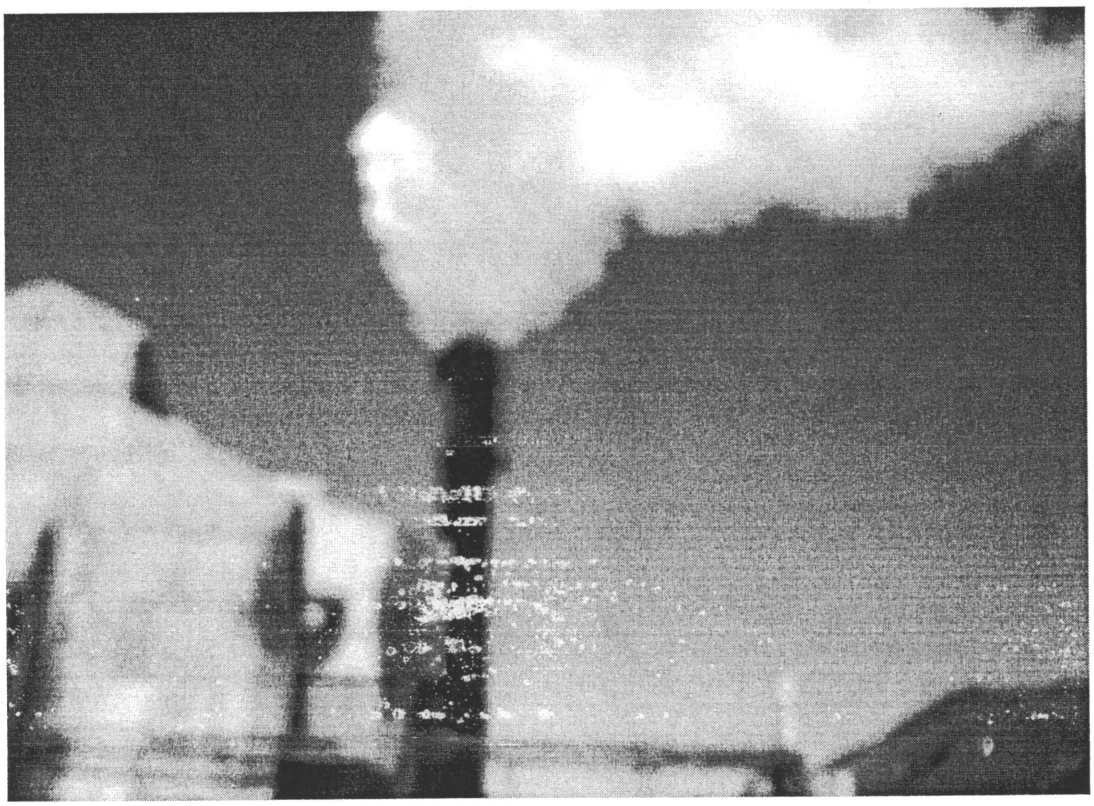
		Run #1	Run #2	Run #3	
		4/15/2005	4/15/2005	4/15/2005	
		754	1018	1220	
		913	1131	1334	Averages
Q:	Total sample time[1]:	72	72	72	**72**
Vm:	(Volume,dry gas meter,cf)	39.510	41.975	41.599	**41.028**
Y:	(Dry gas meter calibration factor)	0.995	0.995	0.995	**0.995**
Pbar:	(Barometric pressure,in.Hg)	24.50	24.50	24.50	**24.50**
ΔH:	(Avg. differential pressure,in.H2O)	1.04	1.14	1.11	**1.10**
Tm:	(Avg. meter temperature,°F)	41.4	48.6	48.9	**46.3**
Vm(std.):	(Std.* sample gas volume, DSCF)	33.991	35.611	35.268	**34.957**
Vlc:	(Liquid volume collected,ml)	279.8	232.3	323.3	**278.5**
Vw(std):	(Std.* water vapor volume,scf)	13.170	10.934	15.218	**13.107**
SVP:	(Saturated H_2O vapor pressure, in. Hg	6.92	6.95	6.97	**6.945**
Bwsat:	(Saturated Moisture @ Ts)	0.282	0.283	0.284	**0.283**
Bwsvol	(Volumemetric Moisture content)	0.279	0.235	0.301	**0.272**
Bws:	(SCF H_2O / SCF Total)[2]	0.279	0.235	0.284	**0.266**
%CO_2:	(Carbon Dioxide,% by volume,dry)	0.53	0.54	0.52	**0.53**
%O_2:	(Oxygen,% by volume,dry)	20.12	20.09	19.99	**20.07**
%N_2:	(Nitrogen,% by volume,dry)	79.35	79.37	79.49	**79.40**
Md:	(Molecular Weight,lb/lb-mole,dry)	28.89	28.89	28.88	**28.89**
Mw:	(Molecular Weight,lb/lb-mole,wet)	25.85	26.33	25.79	**25.99**
D:	(Duct diameter, in.)	118.00	118.00	118.00	**118.00**
A:	(Duct area, sq. ft.)	75.95	75.95	75.95	**75.95**
Ts:	(Stack temperature, °F)	146.2	146.4	146.5	**146.4**
Dn:	(Nozzle diameter, in.)	0.380	0.380	0.380	***0.380***
An:	(Nozzle area, ft2)	7.88E-04	7.88E-04	7.88E-04	***7.88E-04***
Pg:	(Static pressure of flue gas, in. H_2O)	0.2	0.2	0.2	**0.20**
Ps:	(Absolute stack gas pressure, in. Hg)	24.51	24.51	24.51	**24.51**
Cp:	(Pitot tube coefficient)	0.84	0.84	0.84	**0.84**
ΔP:	(Average velocity head, in. H_2O)	0.0740	0.078	0.080	**0.077**
Vs:	(Gas velocity, ft./second)	19.1	19.4	19.9	**19.5**
ACFM:	(Actual cubic feet/min., wet)	87039	88406	90684	**88710**
SCFM	(Std. cubic ft/min., wet)	62149	63104	64720	**63324**
SDCFM:	(Std.* cubic feet/min., dry)	44776	48239	46305	**46440**
% Iso:	(Isokinetic variation)	101.7	98.9	102.1	***100.9***

Generic Any Materials
Default Subreport 1

			GRAVIMETRIC P2O5	SP.G. OP	TJA ACID+PROJ		
			Grav P2O5	Specific Gravity	Averaged P2O5	P2O5	P2O5v
			wt.%	none	wt.%	wt.%	wt.%
Sample Date/Time	User Sample ID	Sample ID	(AVG)	(AVG)	(AVG)	(AVG)	(AVG)
4/14/2005 23:50	PHOSFEED	200108269		1.59	46	46.5	45.4

Sources & Emission Parameters

Table 1 Source	Date Tested	Test Method	Emission Parameters
Phosphate Fertilizer Production Plant	April 15, 2005	EPA 1-4, 5,13b	Particulate Matter, Volumetric Flow, Fluorides



Summary of Results

Phosphate Fertilizer Production Plant Fluoride

April 15, 2005	Run 1	Run 2	Run 3	Three Run Average
Start Time	754	1018	1220	
End Time	913	1131	1334	
Actual Cubic ft./min(ACFM)	87,039	88,406	90,684	**88,710**
Dry Standard Cubic ft./min(DSCFM)	44,776	48,239	46,305	**46,440**
% Oxygen	20.12	20.09	19.99	**20.07**
% Opacity	0	0	0	**0.0**
Fluoride mg/dscf	0.3413	0.1806	0.5501	**0.3573**
Fluoride lbs/hr	2.02	1.15	3.37	**2.18**

Phosphate Fertilizer Production Plant

Calculation of Average Emissions

Test Performed For:
Agrium
Soda Springs
Granulator
O2, CO2
Date:4/15/05

Test Performed By:
AES
Field Test
Trailer #1

Run 1

Calibration Gas Value	Initial Calibration	Final Calibration	Average
0.00 percent O2	0.00 %	0.01 %	0.01
22.50 percent O2	22.46 %	22.48 %	22.47
0.00 percent CO2	0.04 %	0.02 %	0.03
19.00 percent CO2	19.05 %	19.03 %	19.04

Mean Reference Values:	**Corrected Results:**	**Basis:**
20.10 percent O2	**20.12** percent O2	DRY
0.53 percent CO2	**0.53** percent CO2	DRY

Date:4/15/05

Run 2

Calibration Gas Value	Initial Calibration	Final Calibration	Average
0.00 percent O2	0.01 %	0.06 %	0.03
22.50 percent O2	22.48 %	22.55 %	22.52
0.00 percent CO2	0.02 %	0.02 %	0.02
19.00 percent CO2	19.03 %	19.13 %	19.08

Mean Reference Values:	**Corrected Results:**	**Basis:**
20.11 percent O2	**20.09** percent O2	DRY
0.54 percent CO2	**0.54** percent CO2	DRY

Date:4/15/05

Run 3

Calibration Gas Value	Initial Calibration	Final Calibration	Average
0.00 percent O2	0.06 %	0.03 %	0.04
22.50 percent O2	22.55 %	22.50 %	22.53
0.00 percent CO2	0.02 %	0.01 %	0.01
19.00 percent CO2	19.13 %	18.99 %	19.06

Mean Reference Values:	**Corrected Results:**	**Basis:**
20.02 percent O2	**19.99** percent O2	DRY
0.52 percent CO2	**0.52** percent CO2	DRY

Granulator EPA 1-4

Client: Agrium
Location: Soda Springs, ID
Source: Granulator
Date: April 15, 2005
Project No.: AES5041

		Run #1	Run #2	Run #3	
		4/15/2005	4/15/2005	4/15/2005	
		754	1018	1220	
		913	1131	1334	**Averages**
Q:	Total sample time[1]:	72	72	72	**72**
Vm:	(Volume,dry gas meter,cf)	39.510	41.975	41.599	**41.028**
Y:	(Dry gas meter calibration factor)	0.995	0.995	0.995	**0.995**
Pbar:	(Barometric pressure,in.Hg)	24.50	24.50	24.50	**24.50**
ΔH:	(Avg. differential pressure,in.H2O)	1.04	1.14	1.11	**1.10**
Tm:	(Avg. meter temperature,°F)	41.4	48.6	48.9	**46.3**
Vm(std.):	(Std.* sample gas volume, DSCF)	33.991	35.611	35.268	**34.957**
Vlc:	(Liquid volume collected,ml)	279.8	232.3	323.3	**278.5**
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SVP:	(Saturated H_2O vapor pressure, in. Hg	6.92	6.95	6.97	**6.945**
Bwsat:	(Saturated Moisture @ Ts)	0.282	0.283	0.284	**0.283**
Bwsvol	(Volumemetric Moisture content)	0.279	0.235	0.301	**0.272**
Bws:	(SCF H_2O / SCF Total)[2]	0.279	0.235	0.284	**0.266**
%CO_2:	(Carbon Dioxide,% by volume,dry)	0.53	0.54	0.52	**0.53**
%O_2:	(Oxygen,% by volume,dry)	20.12	20.09	19.99	**20.07**
%N_2:	(Nitrogen,% by volume,dry)	79.35	79.37	79.49	**79.40**
Md:	(Molecular Weight,lb/lb-mole,dry)	28.89	28.89	28.88	**28.89**
Mw:	(Molecular Weight,lb/lb-mole,wet)	25.85	26.33	25.79	**25.99**
D:	(Duct diameter, in.)	118.00	118.00	118.00	**118.00**
A:	(Duct area, sq. ft.)	75.95	75.95	75.95	**75.95**
Ts:	(Stack temperature, °F)	146.2	146.4	146.5	**146.4**
Dn:	(Nozzle diameter, in.)	0.380	0.380	0.380	***0.380***
An:	(Nozzle area, ft2)	7.88E-04	7.88E-04	7.88E-04	***7.88E-04***
Pg:	(Static pressure of flue gas, in. H_2O)	0.2	0.2	0.2	**0.20**
Ps:	(Absolute stack gas pressure, in. Hg)	24.51	24.51	24.51	**24.51**
Cp:	(Pitot tube coefficient)	0.84	0.84	0.84	**0.84**
ΔP:	(Average velocity head, in. H_2O)	0.0740	0.078	0.080	**0.077**
Vs:	(Gas velocity, ft./second)	19.1	19.4	19.9	**19.5**
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SCFM	(Std. cubic ft/min., wet)	62149	63104	64720	**63324**
SDCFM:	(Std.* cubic feet/min., dry)	44776	48239	46305	**46440**
% Iso:	(Isokinetic variation)	101.7	98.9	102.1	***100.9***

FLUORIDE RESULTS

Client: Agrium
Location: Soda Springs, ID
Source: Granulator
Date: April 15, 2005
Project No.: AES5041

RUN #1

	net mg	blank	mg/dscf	mg/dscf @ 8% O2	lbs/hr
Total F	11.600	0.00	0.3413	5.6003	2.02

RUN #2

	net mg	blank	mg/dscf	mg/dscf @ 8% O2	lbs/hr
Total F	6.430	0.00	0.1806	2.8533	1.15

RUN #3

	net mg	blank	mg/dscf	mg/dscf @ 8% O2	lbs/hr
Total F	19.400	0.00	0.5501	8.6925	3.37

	Mg./dscf	mg/dscf @ 8% O2	lbs/hr
Test Average:	**0.3573**	**5.7154**	**2.18**

Additional Data:

Run	Time start	Time finish	%O2	%CO2	Bws	Vm(std)	sdcfm
1	754	913	20.12	0.53	0.279	33.991	44776
2	1018	1131	20.09	0.54	0.235	35.611	48239
3	1220	1334	19.99	0.52	0.284	35.268	46305