Golder Associates Inc.

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August 17, 2000

003-7539

Florida Department of Environmental Protection
Twin Towers Office Building
2600 Blairstone Road
Tallahassee, Florida 32399-2400

Attention: John Reynolds, P.E.; Permit Engineer, New Source Review Section

RE: Cargill Fertilizer, Inc. - PSD Permit Application to Modify the Phosphoric Acid Plant at the Bartow Facility, DEP File No. 1050046-013-AC (PSD-FL-295)

Dear Mr. Reynolds:

The information contained in this letter is presented in response to our conversation concerning Cargill Fertilizer, Inc.'s (Cargill) PSD permit application to modify the Phosphoric Acid Plant (PAP) at their facility located in Bartow. Specifically, this letter addresses your request that Cargill estimate actual NO_x and fluoride emission rate increases from downstream emission units resulting from increased P_2O_5 production due to the proposed modification of the PAP. Cargill estimates that the proposed project will result in an annual increase in recovery of 51,100 tons per year (TPY) of P_2O_5, which is equivalent to an additional 140 tons per day (TPD), without increasing the currently permitted P_2O_5 input rate. Attempting to process additional P_2O_5 through the PAP, as modified by the proposed project, would result in lower recovery of P_2O_5 defeating the purpose of the project.

As explained in the application, the only downstream emission units affected by the proposed modification to the PAP are the No. 4 Fertilizer Plant and No. 4 Shipping Plant. The No. 4 Fertilizer Plant is a source of both NO_x and fluoride emissions. The No. 4 Shipping Plant is a source of particulate matter emissions only.

Fluoride emissions from the No. 4 Fertilizer Plant are currently limited by permit to 0.06 lb/ton of P_2O_5 processed. Fluoride emissions from processing an additional 51,100 TPY of P_2O_5 were calculated as follows:

$$\text{F Emissions} = 0.06 \text{ lb F/ton } P_2O_5 \times 51{,}100 \text{ tons} \times 1 \text{ ton}/2{,}000 \text{ lb}$$
$$= 1.53 \text{ TPY}$$

The source of NO_x emissions from the No. 4 Fertilizer Plant is the combustion of natural gas and No. 6 fuel oil to heat the dryer (maximum heat capacity of 40 MMBtu/hr). Natural gas is the primary fuel, but up to 200,000 gallons of No. 6 fuel oil can be fired annually on a emergency basis. As shown in the attached table, maximum annual NO_x emissions of 27.2

TPY result from firing 200,000 gallons of fuel oil with the remainder of the heat input coming from natural gas. The No. 4 Fertilizer Plant is permitted to produce 2,170,212 tons per year of DAP (equivalent to approximately 998,298 tons of 100% P_2O_5). Assuming a maximum of 27.2 tons of NO_x emissions result from processing 998,298 tons of P_2O_5, then only 1.4 tons of NO_x emissions would result from processing the additional 51,100 tons of P_2O_5 potentially available by modifying the PAP.

Cargill would like to proceed with replacing the No. 3 Filter during a scheduled shutdown in October. As such, Cargill wants to expedite processing of this PSD application. Based on our conversation on August 17, 2000, Cargill understands that by providing the above information, it has resolved any outstanding Department issues, and no additional information, with the possible exception of issues associated with the Department's review of the air quality modeling analysis, is necessary to continue processing the PSD application referenced in this letter. If the information in this letter is not sufficient to resolve any outstanding issues, Cargill still wants to meet with you and Mr. Linero on Tuesday, August 22 to resolve these matters. If the information in this letter satisfies your concerns, this meeting is unnecessary.

Please call me at (352) 336-5600 or Dave Jellerson of Cargill at (813) 671-6297 if there is any assistance we can provide that will expedite obtaining this permit.

Sincerely,

Scott A. McCann, P.E.
Senior Project Manager
Florida P.E. No. 54172

8/17/2000

SAM/pac

Enclosures

cc: D. Jellerson - Cargill
D. Waters - Cargill
Dave Buff - Golder
Q. Reynolds
G. Kozlowski
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Q. Spence, Polk Co.
EPA
NPS
SWD

Summary of Annual NO_X Emissions From the No. 4 Fertilizer Plant, Cargill Fertilizer, Inc. - Bartow

Description of Operating Scenario	NO_x Emission Factor[a]		Annual Fuel Usage[b]		Annual NO_x Emissions		
	Natural Gas ($lb/MMft^3$)	No. 6 Fuel Oil ($lb/10^3$ gal)	Natural Gas ($MMft^3$)	No. 6 Fuel Oil (10^3 gal)	Natural Gas (TPY)	No. 6 Fuel Oil (TPY)	Total (TPY
All heat input to the dryer coming from firing natural gas.	140	--	340	0	23.8	0	23.8
Heat input to the dryer coming from firing the maximum permitted amount of No. 6 fuel oil (200,000 gallons) with the remaining heat input coming from firing natural gas.	140	55	310.6	200[c]	21.7	5.5	27.2

Footnotes:

[a] AP-42 Sections 1.3 and 1.4

[b] Based on a maximum permitted heat input of 40 MMBtu/hr, 8,500 hours per year of operation, a heat content of No. 6 fuel oil of 147,000 Btu/gal, and a heat content of natural gas of 1,000 Btu per ft^3.

[c] No. 6 fuel oil usage limited to 200,000 gal/yr pased on current Title V Permit.

CARGILL
FERTILIZER, INC.

RECEIVED
AUG 14 2000
BUREAU OF AIR REGULATION

P.O. Box 9002 • Bartow, Florida 33831 • Telephone 941-534-9610 • FAX 863-534-9680

August 11, 2000

Florida Department of Environmental Protection
Twin Towers Office Building
2600 Blairstone Road
Tallahassee, Florida 32399-2400

Attention: A.A. Linero, P.E., Administrator, New Source Review Section

RE: Cargill Fertilizer, Inc. - PSD Permit Application to Modify the Phosphoric Acid Plant at the Bartow Facility, DEP File No. 1050046-013-AC (PSD-FL-295)

Dear Mr. Linero:

This letter is in response to your letter to Ms. Debra R. Waters, dated July 27, 2000, requesting additional information to continuing processing a PSD permit application to modify the Phosphoric Acid Plant at Cargill Fertilizer, Inc.'s facility located in Bartow, Polk County, Florida. Our responses, presented below, are organized in the same manner as your original letter:

1. Attached is a figure showing Cargill's plant property boundaries and the location of fences, physical barriers, and patrolled areas used to establish the extent of the ambient air exemption. This figure was presented in the original application showing the property boundaries used in the modeling analysis. As shown in the figure public access is restricted from those areas not considered ambient air.

2. Cargill's consultant, Golder Associates Inc. has contacted Cleve Holladay concerning development of an appropriate 24-hour PM_{10} background concentration. Mr. Holladay recommended a PM_{10} background concentration of 50 ug/m^3 based on the highest, second-highest 24-hour average concentration measured at the monitor located at NW 4th Circle in Mulberry during 1999. The modeling analysis has been revised accordingly.

   During subsequent conversations with Mr. Holladay, several inconsistencies in the emissions inventory used for off-site sources were identified. These inconsistencies and their resolutions discussed with Mr. Holladay are summarized below:

- Different sources of information were used to develop the PM emissions inventories used in the AAQS and PSD Class II modeling analyses. The emissions inventory used in the AAQS modeling analysis was based on information supplied by FDEP. Since the FDEP database does not identify increment consuming, increment expanding, or baseline sources, the emissions inventory used in the PSD Class II modeling analysis was based on previous PSD permit applications for facilities in the area. For the Farmland - Greenbay facility the PM_{10} emission rate facility were higher for the PSD analysis than they were for the AAQS analysis. For Farmland - Greenbay, the entire AAQS inventory was conservatively (i.e., assumption resulting in higher expected impacts) assumed to be increment consuming and included in the PSD analysis. This change is reflected in bold in the attached Table A-2.
- The IMC - Norlyn Mine Road facility and the CF-Industries - Uranium Recovery facility were shut down after the PM_{10} baseline date. Each of these facilities was previously modeled as increment expanding. Although these facilities, in all or in part, may actually be increment expanding, no formal documentation of the magnitude of this expansion was available or developed as part of this project. Therefore, each of these facilities were conservatively (i.e., assumption resulting in higher expected impacts) not included in PSD Class I and II modeling analysis. This change is reflected in bold in the attached Table A-1.
- The source data received from FDEP and used in the AAQS modeling analysis included a boiler manufactured by Nebraska Boiler Co. and operated by Mulberry Phosphate. The PM emission rate of 16.3 lb/hr for this boiler presented in FDEP source data was based on firing No. 6 fuel oil with a sulfur content of 2.5% sulfur. This boiler is currently permitted to fire only natural gas and No. 2 fuel oil with a sulfur content of 0.5%. Using an AP-42 emission factor of 2 lb of PM per 1,000 gal., and a maximum permitted fuel oil usage rate of 625 gal/hr (current Title V Air Operating Permit),the PM emissions from the boiler 1.25 lb/hr. Although the PM_{10} emission rate for the boiler would be approximately half of the PM emission rate, and emission rate of 1.25 lb/hr was used in the modeling analysis. This change is reflected in attached Table A-1.
- As per Cleve Holladay's recommendation to Steve Marks on August 9, 2000, the two MAP plants at CF Industries Bartow facility were modeled as increment consuming sources each with a PM emission rate of 40.4 lb/hr. This change is reflected in bold in the attached Table A-2.

The original modeling analysis showed an exceedance of the PSD Class II increment and that Cargill's Bartow facility did not contribute significantly to it. However, modeling analysis incorporating the changes to the emissions inventory described above, results in all predicted impacts below the AAQS and PSD increments for PM_{10}. These corrected modeling results are presented in the attached tables.

3. The modeling analysis was redone with the requested 100-meter or less spacing between receptors along plant property boundaries. The results are presented in the attached tables.

If you have any questions concerning this information, please call Scott McCann, P.E. at (352) 336-5600.

Sincerely,

David Jellerson, P.E. 8/11/00
P.E. No. 38676

Enclosures

cc: Debra Waters - Cargill
Scott A. McCann - Golder (Project No. 0037539)
G. Rupnicki
C. Halladay
G. Spencer, Polk Co.
EPA
NPS
SWD

Document4

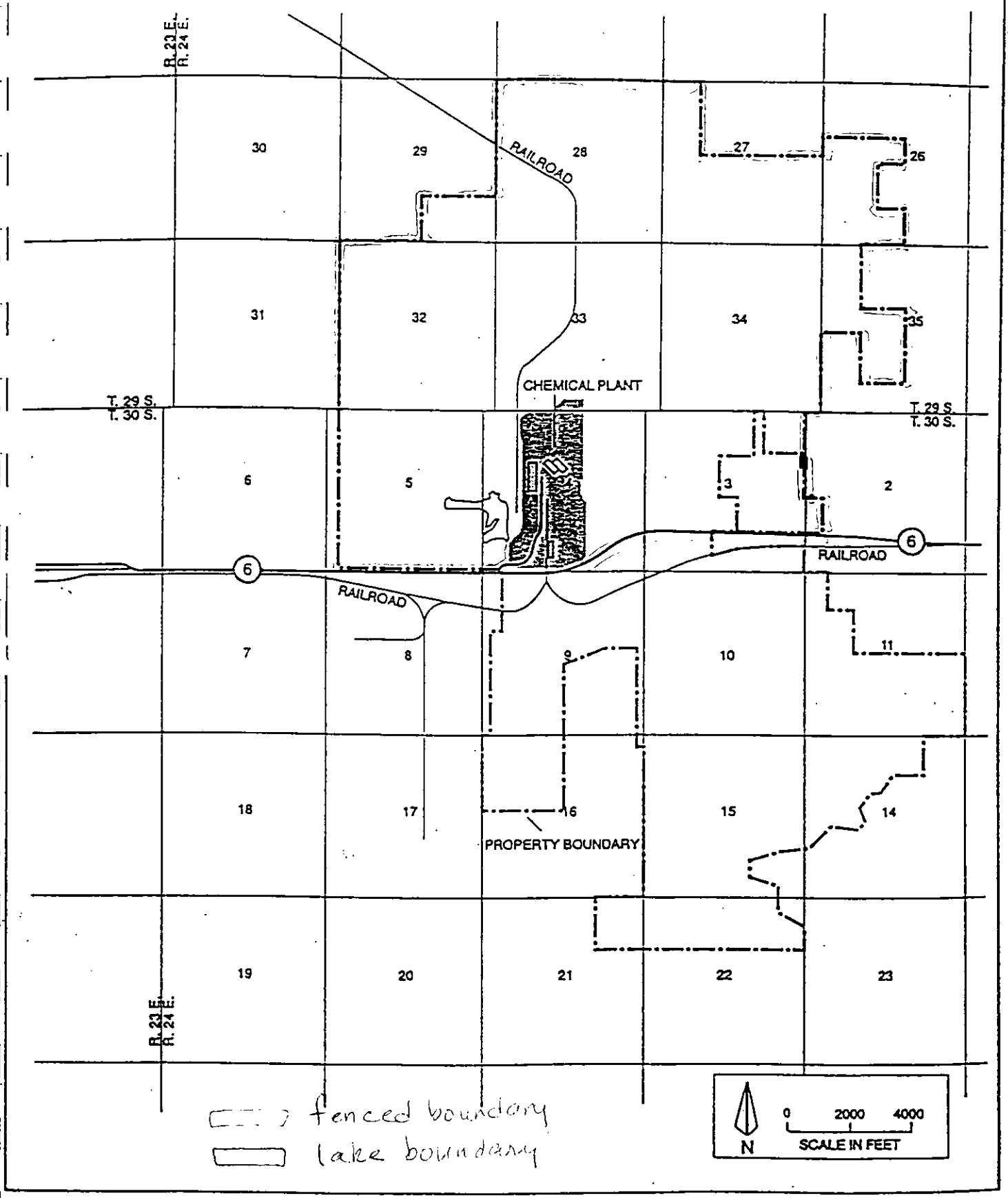

Figure 1-1
Area Map Showing Facility Location

Golder Associates

Table 6-11. Maximum Predicted PM10 AAQS Impacts - Screening Analysis

Averaging Period	Concentration[a] (ug/m^3)	Receptor Location[b]		Time Period (YYMMDDHH)
		Direction (degree)	Distance (m)	
Annual	10.57	200	4000	89123124
H6H 24-Hour	43.4	200	4000	87080424

Footnotes:
[a] Based on 5-year meteorological record, Tampa/Ruskin, 1987-91
[b] Relative to the DAP No. 4 Stack location.

Notes:
YYMMDDHH = Year, Month, Day, Hour Ending

Table 6-12. Maximum Predicted PM10 Impacts Due to All Future Sources For Comparison to AAQS - Refined Analysis

Averaging Period	Concentration (ug/m^3)			Receptor Location[b]		Time Period (YYMMDDHH)	Florida AAQS (ug/m^3)
	Total	Modeled	Background	Direction (degree)	Distance (m)		
Annual	32.7	10.7	22	200	4000	89123124	50
H6H 24-Hour	95	45.0	50	200	3900	88071024	150

Footnotes:
[a] Based on 5-year meteorological record, Tampa/Ruskin, 1987-91
[b] Relative to the DAP No. 4 Stack location.

Notes:
YYMMDDHH = Year, Month, Day, Hour Ending
H6H = 6th-Highest Concentration in 5 years.

Table 6-13. Maximum Predicted PM10 PSD Class II Increment Consumption - Screening Analysis

Averaging Period	Concentration[a] (ug/m^3)	Receptor Location[b]		Time Period (YYMMDDHH)
		Direction (degree)	Distance (m)	
Annual	2.06	190	4000	87123124
	2.07	210	4000	88123124
	3.23	200	4000	89123124
	2.38	190	4000	90123124
	2.12	190	4000	91123124
High 24-Hour	17.4	119	1504	87121124
	19.1	220	4000	88081124
	22.7[c]	177	1144	89103024
	20.3	170	4000	90010624
	17.2	126	1314	91021124
H2H 24-Hour	15.6	200	4000	87061624
	17.7	200	4000	88071324
	21.9[c]	176	1145	89030724
	19.2	170	4000	90010724
	14.4	200	4000	91042824

Footnotes:

[a] Based on 5-year meteorological record, Tampa/Ruskin, 1987-91

[b] Relative to the DAP No. 4 Stack location

[c] The receptor grid was not further refined because the maximum concentration was predicted in an area that already has 100-m or less receptor spacing.

Notes:

YYMMDDHH = Year, Month, Day, Hour Ending

Table 6-14. Maximum Predicted PM10 PSD Class II Increment Consumption - Refined Analysis

Averaging Period	Concentration[a] (ug/m^3)	Receptor Location[b]		Time Period (YYMMDDHH)
		Direction (degree)	Distance (m)	
Annual	10.57	200	4000	89123124
H6H 24-Hour	43.4	200	4000	87080424

Footnotes:
[a] Based on 5-year meteorological record, Tampa/Ruskin, 1987-91
[b] Relative to the DAP No. 4 Stack location.

Notes:
YYMMDDHH = Year, Month, Day, Hour Ending

Table A-1. Inventory of PM Point Sources Included in the AAQS Air Modeling Analysis

Facility ID	Facility	EU ID	Emission Unit Description	Stack Parameters						Emission Rate (lb/hr)
				Height (ft)	Diameter (ft)	Temperature (F)	Flow (ACFM)	Flow (DSCFM)	Velocity (ft/s)	
1050097	CUSTOM CHEMICALS CORPORATION	1	SULFONIC ACID - SULFONATION UNIT WITH WET CAUSTIC SCRUBBER	35	0.70	100	40,000		732	0.350
		2	65 HP BOILER ECLIPSE HI TEMP LIQUID PHASE HEATER	20	1.20	350	18,870		278	0.080
		5	CLARK 300 HP BOILER	20	2.00	400	2,310		12	0.040
1050146	PAVEX CORPORATION - BARTOW	1	200 TPH PORTABLE ASPHALT DRUM MIX PLANT	40	4.00		42,500		56.4	12.000
1050048	MULBERRY PHOSPHATES, INC.	5	DAP MFG PLT SCRUBBER	102	8.80	110	97,700		26	13.570
		9	NEBRASKA MODEL NS-E-65 STEAM BOILER	45	3.70	80	5,400		8	1.250
1050050	U S AGRI-CHEMICALS - BARTOW	38	150 TPH DIAMMONIUM PHOSPHATE PLANT (69.6 TPH P2O5 INPUT)	131	7.00	130	184,000	182,000	79	38.590
		39	DAP/MAP STORAGE AND LOADING	74	2.00	80	30,000		159	22.700
1050052	CF INDUSTRIES, INC. - BARTOW	2	NO. 1 MAP/DAP/GTSP SHIPPING UNIT	140	2.50	77	21,000		71	40.400
		5	SULFURIC ACID PLANT NO.5	206	7.00	150	49,300		21	6.621
		6	SULFURIC ACID PLANT NO.6	206	7.00	140	50,700		21	12.000
		21	BOILER NO. 1	36	2.50	600	13,000		44	10.982
		25	NO. 2 MAP/DAP SHIPPING UNIT	135	5.00	77	30,600		25	40.400
		26	WEST PHOSPHATE ROCK UNLOADING SYSTEM	65	4.00	77	38,000		50	14.000
1050056	IMC-AGRICO CO.(PRAIRIE)	1	LIMESTONE BUCKET ELEVATOR, BAGHOUSE	90	1.00	100	2,000		42	0.300
		2	RAYMOND MILL #1, LIMEROCK GRINDING	75	1.10	130	4,520		79	0.240
		3	RAYMOND MILL NO. 3, LIMEROCK GRINDING	75	1.10	130	7,600		133	0.240
		4	LIMEROCK DRYER WITH CYCLONE AND BAGHOUSE	70	4.40	184	46,596	35,669	51	2.800
		5	#4 RAYMOND MILL AT PRAIRIE PLANT	65	2.00	140	6,300		33	0.190
		6	LIMESTONE BIN & TRUCK LOADOUT	50	0.50	78	900		76	0.150
		7	FEED BIN AREA & ASSOC. EQUIP.	75	1.10	130	10,000	9,240	175	2.400
1050053	FARMLAND - GREEN BAY PLANT	3	SULFURIC ACID PLANT #3 DOUBLE CONTACT/ABSORPTION	100	7.50	170	75,663		28	6.750
		7	SOUTH DAP FERTILIZER PLANT	129	7.50	129	107,895		40	46.800
		16	PHOSPHORIC ACID PLANT NO 1 NORTH TRAIN WITH WET SCRUBBER	100	3.50	98	30,000		51	1.430
		20	DAP,MAP, OR TSP STORAGE & SHIPPING BUILDINGS	131	8.00	77	98,116		32	4.100
		28	THERMINOL HEATER TO CONCENTRATE ORTHOPHOSPHORIC ACID	95	5.50	630	16,725		11	0.200
		29	NORTH MAP/DAP FERTILIZER PLANT	129	7.50	108	114,000	88,000	43	31.800
		30	MOLTEN SULFUR STORAGE TANK 1 - 6000 SHORT TONS, 9 VENTS	40	2.00	200	18		1	0.900
		31	MOLTEN SULFUR STORAGE TANK 2 (EAST)-2500 SHORT TONS, 10 VENT	40	2.00	200	18		1	0.900
		32	MOLTEN SULFUR STORAGE TANK 3 (WEST)-2500 SHORT TONS, 10 VENT	40	2.00	200	18		1	0.900
		33	MOLTEN SULFUR TRUCK PIT - 72 SHORT TONS, 1 VENT	40	0.70	200	18		1	0.100
		34	MOLTEN SULFUR RAIL (AND BACK-UP TRUCK) PIT - 91 SHORT TONS	10	0.80	200	1,650		54	0.500
		35	MOLTEN SULFUR NO. 5 SUPPLY PIT - 31 SHORT TONS,	40	2.00	200	18		1	0.100
		36	MOLTEN SULFUR SUPPLY PIT #3 & #4 - 28 SHORT TONS, ONE VENT	10	0.50	200	18		1	0.100
1050045	PASCO PROCESSING, LLC	6	2 CITRUS PEEL DRYERS W/WASTE HEAT EVAPORATOR	89	3.10	167	17,056		37	31.800
		7	CITRUS PELLET MILL COOLER W/2 CYCLONES	23	1.70	90	4,600		33	10.594
1050047	AGRIFOS, L.L.C. - NICHOLS	1	PHOSPHATE ROCK DRYER NO. 1, DRY CYCLONES, VENTURI, CYCLONIC	80	7.50	160	110,000		41	38.100

Table A-1. Inventory of PM Point Sources Included in the AAQS Air Modeling Analysis

Facility ID	Facility	EU ID	Emission Unit Description	Stack Parameters						Emission Rate (lb/hr)
				Height (ft)	Diameter (ft)	Temperature (F)	Flow (ACFM)	Flow (DSCFM)	Velocity (ft/s)	
		2	PHOSPHATE ROCK DRYER NO. 2, DRY CYCLONES, VENTURI, CYCL SEPA	80	7.50	160	110,000		41	38.100
		10	DRY PHOSPHATE ROCK STORAGE BUILDING	85	5.50	80	68,000		47	40.000
		11	1500 TPH DRY PHOS ROCK RAILCAR LOADOUT SYSTEM	85	5.00	75	75,000		63	33.000
1050145	BARTOW ETHANOL, INC.	1	900 HP CLARK BOILER WITH WOOD BURNER	36	3.00	350	28,000		66	64.240
1050059	IMC-AGRICO CO.(NEW WALES)	2	SULFURIC ACID PLANT #1 W/MIST ELIMINATOR	200	8.50	170	171,257	141,355	50	12.500
		3	SULFURIC ACID PLANT #2 W/BRINKS HV MIST ELIMINATOR	200	8.50	170	171,257	141,355	50	4.800
		4	SULFURIC ACID PLANT #3 W/BRINKS MIST ELIMINATOR	200	8.50	170	171,257	141,355	50	4.800
		5	PHOSPHATE ROCK RAILCAR UNLOADING (80 TPH MAXIMUM RATE)	40	3.00	108	25,000		58	6.400
		6	GROUND ROCK SILO W/PNEUMATIC 80 TPH LOAD RATE	110	1.40	110	4,200		45	1.300
		9	DAP PLANT NO. 1 W/3 TELLER VENTURI SCRUBBERS,	133	7.00	105	115,000		49	28.600
		10	GTSP PLANT (65 TPH) W/TELLER PACKED BED SCRUBBER	133	6.00	125	141,000		83.1	33.750
		11	MAP PRILL TOWER W/VENTURI SCRUBBER AND CYCLONIC DEMISTER	120	4.00	155	43,000		57	15.000
		12	GTSP STORAGE (65 TPH) W/ FUME SCRUBBER	133	6.00	108	105,000		61	28.700
		15	ANIMAL FEED SHIPPING/TRUCK LOADOUT (200 TPH), WITH BAGHOUSE.	65	1.00	105	8,000		169	1.080
		21	GROUND PHOSPHATE ROCK BIN AT GTSP PLANT	82	1.00	105	2,500		53	4.800
		23	ANIMAL FEED STORAGE SILOS (3) -"A"SIDE	114	1.00	105	1,600		33	4.750
		24	ANIMAL FEED STORAGE,SHIPPING/RAILCAR LOADOUT	103	1.00	105	6,600		140	3.600
		25	ANIMAL FEED - (2) LIMESTONE SILOS	119	1.00	105	6,000		127	3.600
		26	ANIMAL FEED - SILICA STORAGE BIN	18	1.00	105	1,500		31	1.600
		27	ANIMAL FEED INGREDIENT GRANULATION PLANT	172	8.00	130	200,000		66.3	36.800
		28	ANIMAL FEED STORAGE SILOS (3) - "B SIDE"	114	1.00	105	1,600		33	4.750
		29	#1 FERTILIZER RAIL/TRUCK SHIPPING	133	3.00	90	18,000		42.4	4.700
		31	MULTIFOS SODA ASH CONVEYING SYSTEM W/BAGHOUSE	108	0.80	80			31	3.600
		32	MULTIFOS "A" KILN COOLER W/BAGHOUSE	86	1.50	220	27,412		258	7.700
		33	MULTIFOS "B" KILN COOLER W/BAGHOUSE	86	1.50	274	23,889		225	7.700
		34	MULTIFOS PLANT MILLING & SIZING SYSTEM WEST BAGHOUSE	71	1.70	125	11,933		87	0.933
		35	MULTIFOS MILLING & SIZING SYSTEM EAST BAGHOUSE	71	1.00	100	11,933		253	0.933
		36	MULTIFOS PRODUCTION 1 DRYER 2 KILNS (A/B) FOR MULTIFOS PLANT	172	4.50	105	50,000		52	29.830
		37	MAP/DAP #2 TRUCK LOADOUT	10	1.80	100	10,500		68	3.600
		38	MULTIFOS MILLING & SIZING SYST SURGE BIN BAGHOUSE	65	1.10	100	4,525		79	7.500
		41	GTSP TRUCK LOADOUT FACILITY W/BAGHOUSE	10	1.50	100	19,000		179	5.000
		43	MAP/DAP NO. 2 RAIL LOADOUT	10	1.60	105	8,500		70	3.600
		45	DAP PLANT II - EAST TRAIN	171	6.00	110	100,000		58	6.400
		46	DAP PLANT II - WEST TRAIN	171	6.00	110	100,000		58	6.400
		47	DAP II WEST PRODUCT COOLER	147	4.30	175	60,000		68.9	4.220
		48	URANIUM RECOVERY ACID CLEANUP SCRUBBER	60	3.50	80	18,000		31.2	1.000
		50	URANIUM REFINERY W/BAGHOUSE	100	1.80	102	5,700		37	1.500
		51	URANIUM RECOVERY - CLAY STORAGE BIN	86	0.70	80	1,250		54	1.500
		52	ANIMAL FEED - LIMESTONE FEED BIN	114	1.00	105	1,600		33	4.750
		54	DAP PLANT #1 PRODUCT COOLER	107	3.50	150	45,000		77	7.700
		55	MAP PLANT COOLER	25	4.30	140	30,000		34	5.140
		56	DAP II EAST PRODUCT COOLER	170	5.00	110	76,000	66,000	64.5	6.060
		59	GTSP RAILCAR LOADOUT FACILITY W/ BAGHOUSE	10	1.50	100	7,300		68.9	5.000

Table A-1. Inventory of PM Point Sources Included in the AAQS Air Modeling Analysis

Facility ID	Facility	EU ID	Emission Unit Description	Stack Parameters						Emission Rate (lb/hr)
				Height (ft)	Diameter (ft)	Temperature (F)	Flow (ACFM)	Flow (DSCFM)	Velocity (ft/s)	
		70	LIMESTONE STORAGE SILO WITH BAGHOUSE.	110	0.75	110	3,000	2,700	113.2	0.700
		74	KILN C SCRUBBER STACK - MULTIFOS PLANT	172	4.50	105	67,000		70.2	14.300
		75	MULTIFOS KILN C COOLER BAGHOUSE	86	3.00	250	45,000	36,700	106.1	1.900
		76	MULTIFOS KILN C MILLING & SIZING BAGHOUSE	90	1.50	130	12,000	11,000	113.2	1.900
1050055	IMC-AGRICO CO.(SO. PIERCE)	1	171 MMBTU ZURN AUX.BOILER FOR SULFURIC ACID PLANTS	35	4.80	430	56,180		51	1.760
		3	PURIFIED MAP/DAP MFG.PLANT W/SCRUBBER	88	3.00	94	12,850		30	0.260
		12	PURIFIED MAP/DAP STORAGE PLANT STORAGE SILO NO. 3	10	1.30	90	300		3	0.130
		13	MAP/DAP BAGGING MACHINE HOPPER BAGHOUSE	10	1.50	77	1,000		9	0.090
		14	MAP/DAP BULK TRUCK SHIPPING BAGHOUSE	10	1.50	77	600		5	0.400
		22	NO 2 BALL MILL PHOS ROCK BAGHOUSE	10	1.80	160	10,366		67	31.800
		23	GTSP PRODUCTION PLANT SCRUBBER SYSTEM	140	9.00	110	140,000		36	35.000
		24	EAST GTSP STORAGE BLDG, NORTH SCRUBBER	80	11.00	90	145,883		25	40.100
		25	EAST GTSP STORAGE BLDG, SOUTH SCRUBBER	80	11.00	90	145,883		25.6	40.100
		26	GTSP ROCK HOPPER BIN BAGHOUSE	10	1.00	90	2,400	2,310	50	22.500
		27	PURIFIED MAP/DAP PLANT STORAGE SILO NO.2	6	1.30	77	300		3	1.300
		28	PURIFIED MAP/DAP PLANT STORAGE SILO NO. 1	10	1.30	77	300		3	0.130
		29	PURIFIED MAP/DAP PLANT BULK RAILCAR LOADER - ONE BAGHOUSE	10	1.30	77	600		7	0.400
1050003	LAKELAND ELECTRIC - LARSEN	3	FOSSIL FUEL FIRED STEAM GENERATOR # 6	165	10.00	340	98,960		21	38.300
		4	STEAM GENERATOR # 7 (PHASE II ACID RAIN UNIT)	165	10.00	340	103,673		22	76.950
		5	PEAKING GAS TURBINE # 3	31	11.80	800	662,400		101	7.940
		6	PEAKING GAS TURBINE # 2	31	11.80	800	662,400		101	7.940
		7	PEAKING GAS TURBINE # 1	31	11.80	800	662,400		101	7.940
		8	COMBINED CYCLE COMBUSTION TURBINE (PHASE II ACID RAIN UNIT)	155	16.00	481	1,034,053		85.7	26.000
1050034	IMC-AGRICO CO. (CFMO)	2	RAYMOND MILLS 1 AND 2 GRINDERS W/SCRUBBERS @ KINGSFORD MINE	60	2.50	110	19,000		64	33.500
		3	RAYMOND MILL NO 3 GRINDER W/SCRUBBER @ KINGSFORD MINE	58	1.90	100	8,500		49	30.000
		4	PHOS RK DRYER W/SCRUBBER @ KINGSFORD MINE	70	7.00	165	110,000		47	44.200
		5	PHOS ROCK TRANSFER AND STORAGE SILOS W/SCRUBBER @ KINGSFORD	106	2.50	95	20,000		67	20.000
		6	UNGROUND PHOSPHATE ROCK RR CAR LOAD OUT @ KINGSFORD MINE	35	2.50	75	10,000		33	20.000
		8	BOILER @ FOUR CORNERS MINE	26	0.95	400	1,000		23.5	0.055
		9	MAGNETITE STORAGE BIN @ FOUR CORNERS MINE (009)	122	0.60	77	500		29.5	0.129
		10	FERROSILICON STORAGE BIN @ FOUR CORNERS MINE	122	0.60	77	380		22.4	1.370
		11	PHOSPHATE ROCK DRYER NO. 1 @ NORALYN MINE (011)	76	6.50	250	113,000		56.8	42.200
		12	PHOSPHATE ROCK DRYER NO. 2 EAST @ NORALYN MINE (012)	55	9.30	155	118,000		29	45.100
		13	PHOSPHATE ROCK STORAGE SILOS 1, 2, 3, & 12 @ NORALYN MINE (0	150	3.50	100	30,000		52	35.000
		14	BALL MILL TRANSFERS (C108) @ NORALYN MINE (014)	24	2.00	110	5,000		26.5	15.000
		15	BALL MILL TRANSFERS (C109) @ NORALYN MINE (015)	24	2.00	110	5,000		26.5	10.000
		16	BALL MILL NO. 3 @ NORALYN MINE (016)	25	1.50	75	4,000		37.7	10.000
		17	BALL MILL NO. 4 @ NORALYN MINE (017)	27	2.00	75	3,000		15.9	10.000
		18	NO. 3 BALL MILL RAILCAR LOADOUTS @ NORALYN MINE (018)	25	1.50	77	4,000		37.7	10.000
		19	NO. 4 BALL MILL RAILCAR LOADOUTS @ NORALYN MINE (019)	29	1.80	77	3,000		19.7	10.000
		20	A TRACK RAILCAR PHOSPHATE ROCK LOADOUT SYSTEM @ NORALYN MINE	27	2.00	85	10,000		53.1	15.000
		21	B TRACK RAILCAR PHOSPHATE ROCK LOADOUT SYSTEM @ NORALYN MINE	27	1.90	81	12,219		71.8	15.000

Table A-1. Inventory of PM Point Sources Included in the AAQS Air Modeling Analysis

Facility ID	Facility	EU ID	Emission Unit Description	Stack Parameters						Emission Rate (lb/hr)
				Height (ft)	Diameter (ft)	Temperature (F)	Flow (ACFM)	Flow (DSCFM)	Velocity (ft/s)	
		22	T7 & T8 (TRANSFER POINTS TO CONVEYORS C31 & C33) @ NORALYN (	40	1.50	100	5,000		47.2	10.000
		23	MATERIAL TRANSFER SOURCES (C20 PIT TRANSFER AREA) @ NORALYN	43	2.00	86	5,000		26.5	15.000
		24	DRY PHOSPHATE ROCK TRANSFER SYSTEM @ NORALYN MINE (024)	135	2.80	60	20,300		55	15.000
		25	SODA ASH MIX TANK & TRANSFER SYSTEM @ LONESOME MINE (025)	35	0.50	77	1,220		103.6	16.000
		28	DRY UNGROUND ROCK TRUCK LOADOUT @ NORALYN MINE	27	2.00					0.300
0570075	CORONET INDUSTRIES, INC.	1	FEED PREP PLANT DRYER WITH WET SCRUBBER.	100	4.50	149	37,500	24,300	39	13.200
		3	PARAGON DEFLUORINATING KILN #2-PACKED BED SCRUBBER	152	5.80	81	49,959		31	13.030
		5	DEFLUORINATING KILNS 6 & 7	150	5.80	104	95,400	75,750	60	15.000
		6	FEED PREPARATION PRODUCT HANDLING DUST COLLECTOR	81	2.70	108	10,200	15,000	29	2.110
		7	7500 CFM FEED BAGHOUSE #12 - FEED PREPARATION, ROCK HANDLIN	107	1.20	77	7,500		110	1.300
		8	FEED PREP SCRUBBER #2	100	3.00	115	7	6	28	6.800
		9	FEED PREP. PLANT-ROCK STORAGE BIN BAGHOUSE	97	1.00	77	2,100		44	0.350
		12	CDP TRUCK LOADING DUST COLLECTOR	62	1.80	77	12,500	12,500	81	2.150
		13	CDP FINES BAGGING W/ BAGHOUSE	67	1.50	77	4,000		37	1.220
		15	NORTH MILL ROOM W/ BAGHOUSE	34	2.70	130	21,600		62	7.120
		16	CDP FINES STORAGE W/ BAGHOUSE	57	1.50	77	10,000		94	1.710
		17	BULK RAILCAR LOADING BAGHOUSE	54	1.80	77	10,000		65	1.710
		18	SOUTH MILL ROOM W/ BAGHOUSE	45	1.80	170	7,100		46	1.710
		20	100 HP KEWANEE BOILER FOR DEFLUORINATING PLANT.	20	1.20	630	4,500		66	1.000
		21	CRANEWAY-TEMPORARY PRODUCT STORAGE CONTROLLED BY BGHS #14	80	4.50	95	248,000		259	34.290
		22	FLUID BED REACTOR #1,DEFLUORINATING A.F.CONTROLLED BY SCRUBB	152	5.80	80	63,158		39	14.020
		23	POTASSIUM FLUOBORATE PRODUCTION WITH WET SCRUBBERS.	32	1.50	73	3,742	3,000	35	5.000
		24	DEFLUORINATING FLUID BED REACTOR #2 CONTROLLED BY SCRUBBER	152	5.80	72	58,036		36	14.020
		27	2500LB/HR KBF4 PLANT W/DUST COLLECTOR	10	0.80	150	1,800	1,470	59	0.460
		28	8 TPH BORAX STORAGE/HANDLING SYSTEM	50	0.50	70	800		67	0.210
		30	500 TON FEED TANK, 100 TON FEED TANK, ELEVATOR, RECLAIM HOPP	55	1.50	68	4,000		37	1.490
		31	80 TON LIMESTONE STORAGE BIN	80	0.60	70	1,000		58	0.275
		32	INORGANIC CHEMICAL PROD. USING SCRUBBER FLUORIDES	45	1.60	250	2,400	1,730	19	1.900
1050004	LAKELAND ELECTRIC - MCINTOSH	1	MCINTOSH UNIT 1- FFFSG (PHASE II ACID RAIN UNIT)	150	9.00	277	310,000		81.2	95.000
		2	DIESEL ENGINE PEAKING UNIT 2	20	2.60	715	24,529		77	1.740
		3	DIESEL ENGINE PEAKING UNIT 3	20	2.60	715	24,529		77	1.740
		4	GAS TURBINE PEAKING UNIT 1	35	13.50	900	682,334		79.5	12.160
		5	MCINTOSH UNIT 2 FFFSG (PHASE II ACID RAIN UNIT)	157	10.50	277	380,100		73.2	111.500
		6	MCINTOSH UNIT 3 FFFSG (PHASE II ACID RAIN UNIT)	250	18.00	167	1,260,536		82.6	273.000
		28	250 MW COMBUSTION TURBINE (SIMPLE CYCLE OPERATION). UNIT 5	85	28.00	1095	3,055,750	894,739	82.7	139.600
0570005	CF INDUSTRIES, INC., PLANT CITY PHOSP	1	GRAHAM SCOTCH MARINE TYPE BOILER	25	3.50	550	33,600		58	0.240
		9	"B" PHOS ACID PLANT WITH SCRUBBER	119	4.00	106	33,732	30,960	44	31.050
		10	"A" DORR OLIVER DAP PLANT W/ VENTURI & PACKED BED SCRUBBER	94	10.00	128	122,570	85,320	26	32.660
		11	"Z" DORN-OLIVER DAP PLANT WITH VENTURI SCRUBBER AND PACKED B	180	9.20	137	174,240	130,937	43	35.560
		12	"X" GTSP/DAP/MAP Plant with Scrubbers	180	9.20	105	107,000		26	32.600
		13	"Y" GTSP/DAP/MAP Plant with Scrubbers	180	9.20	105	10,700		26	15.300
		14	STORAGE BLDG. A SHARES SCRUBBER W/ BLDG. B (PT 18)&B SHIPPIN	115	9.20	80	144,100		36	37.500
		15	"A" SHIPPING. MATERIALS HANDLING OF DAP & GT SP	90	1.70	77	8,500		62	5.000

Table A-1. Inventory of PM Point Sources Included in the AAQS Air Modeling Analysis

Facility ID	Facility	EU ID	Emission Unit Description	Stack Parameters						Emission Rate (lb/hr)
				Height (ft)	Diameter (ft)	Temperature (F)	Flow (ACFM)	Flow (DSCFM)	Velocity (ft/s)	
		18	SIZING/SCREENING OPERATION IN BLDG."B"(EQUIPPED WITH BAGHOUS	33	3.30	78	10,000		19	5.000
		19	TRUCK LOADING STATION AT "B" SHIPPING.	115	9.20	80	20	10	35	0.500
		22	2600 TON MOLTEN SULFUR STORAGE TANK	8	0.90	212	204		5	0.200
		23	TRUCK PIT A, 679 TONS MOLTEN SULFUR STORAGE	12	0.30	212	23		5	0.100
		24	MOLTEN SULFUR STORAGE & HANDLING SYSTEM	12	0.30	212	23		5	0.537
		32	URANIUM RECOVERY MODULE, ACID CLEAN UP SCRUBBER	60	4.00	118	35,000		46.4	3.000
		34	CLAY UNLOADING OPERATION WITH BAGHOUSE.	85	0.50	77	450		38	21.170
0570025	TRADEMARK NITROGEN CORP	1	125 TPD NITRIC ACID PLANT W/2 ABSORPTION TOWERS IN SERIES	50	1.70	350	14,823		108	334.000
0570039	TAMPA ELECTRIC COMPANY - BIG BEND	1	UNIT #1 COAL FIRED BOILER W/RESEARCH-COTRELL ESP	499	24.00	269	1,224,000		45	404.000
		2	UNIT #2 RILEY-STOKER COAL FIRED BOILER W/ ESP	499	24.00	269	1,159,400		42	400.000
		3	UNIT #3 RILEY-STOKER COAL-FIRED BOILER W/ ESP	499	24.00	279	1,288,200		47	412.000
		4	UNIT #4 COAL-FIRED BOILER W/ BELCO ESP PSD-FL-040	499	24.00	156	1,622,000		59	130.000
		5	BIG BEND STATION COMBUST. TURBINE #2 - FIRED BY NO. 2 FUEL O	75	14.00	928	568,000		61	33.000
		6	GAS TURBINE #3 - WESTINGHOUSE TURBINE FIRED BY NO. 2 FUEL OI	75	14.00	928	568,000		61	33.000
		7	GAS TURBINE #1 FIRED BY #2 FUEL OIL	35	11.04	1010	527,700		91.9	33.000
		8	BIG BEND STATION UNIT NO. 1 & NO. 2 FLY ASH SILO WITH BAGHOU	102	2.50	250	15,500		52	5.160
		9	FLY-ASH SILO FOR UNIT #3	113	0.90	250	15,500		406	3.000
		12	LIMESTONE SILO A W/2 BAGHOUSES. 1 IS 100% BACK-UP P	101	0.50	150	552		46	0.050
		13	LIMESTONE SILO B W/2 BAGHOUSES. 1 IS 100% BACK-UP P	101	0.50	150	552		46	0.050
		14	FLYASH SILO FOR UNIT #4 P	139	1.60	140	7,200		59	0.200
		15	UNIT 1 COAL BUNKER W/ROTO-CLONE	179	1.70	78	9,400	9,142	69	0.480
		16	UNIT 2 COAL BUNKER W/ROTO-CLONE	179	1.70	78	9,400	9,142	69	0.480
		17	UNIT 3 COAL BUNKER W/ROTO-CLONE	179	1.70	78	9,400	9,142	69	0.480
0570040	TAMPA ELECTRIC COMPANY - GANNON	1	UNIT #1 STEAM GENERATOR	315	10.00	289	446,800		94	126.000
		2	125MW BABCOCK&WILCOX CORP WET BOTTOM CYCLONIC FIRING TYPE BL	315	10.00	298	476,900		101	126.000
		3	UNIT #3 - B&W WET BOTTOM COAL FIRED BOILER	315	10.60	296	671,200		126	160.000
		4	UNIT#4- B&W WET BOT CYCLONIC FIR`G COAL FIR BOLR, EAST STACK	315	10.00	309	355,100		75	188.000
		5	UNIT #5 COAL FIRED BOILER	315	14.60	303	763,800		76	228.000
		6	UNIT #6 - COAL FIRED BOILER WITH ESP	315	17.60	320	1,184,700		81	380.000
		7	14 MW GAS FIRED TURBINE	35	11.00	1010	527,700		92.6	122.000
		9	ECONOMIZER ASH SILO	72	0.70	350	830	541	35	0.140
		10	FLYASH SILO NO. 1 FOR UNITS 5 & 6	107	1.00	350	4,696		99	1.200
		11	FLY ASH SILO NO. 2 UNITS 1-4	104	2.00	350	11,300		59	2.900
		13	UNIT 1 COAL BUNKER W/ROTO-CLONE	175	1.70	78	9,600	9,337	70	0.190
		14	UNIT 2 COAL BUNKER W/ROTO-CLONE	175	1.70	78	9,600	9,337	70	0.190
		15	UNIT 3 COAL BUNKER W/ROTO-CLONE	177	2.00	78	9,600	9,337	50	0.190
		16	UNIT 4 COAL BUNKER W/ROTO-CLONE	175	1.70	78	9,600	9,337	70	0.190
		17	UNIT 5 COAL BUNKER W/ROTO-CLONE	174	1.20	78	5,400	5,252	79	0.190
		18	UNIT 6 COAL BUNKER W/ROTO-CLONE	175	1.70	78	9,600	9,337	70	0.190
0570038	TAMPA ELECTRIC COMPANY - HOOKER POINT	1	BOILER #1 298 MMBTU/HR (PHASE II ACID RAIN UNIT)	280	11.30	356	493,605		82	37.300
		2	BOILER #2 298 MMBTU/HR (PHASE II ACID RAIN UNIT)	280	11.30	356	493,605		82	37.300

Table A-1. Inventory of PM Point Sources Included in the AAQS Air Modeling Analysis

Facility ID	Facility	EU ID	Emission Unit Description	Stack Parameters						Emission Rate (lb/hr)
				Height (ft)	Diameter (ft)	Temperature (F)	Flow (ACFM)	Flow (DSCFM)	Velocity (ft/s)	
		3	BOILER #3 411 MMBTU/HR (PHASE II ACID RAIN UNIT)	280	12.00	341	425,318		62.7	51.400
		4	BOILER #4 411 MMBTU/HR (PHASE II ACID RAIN UNIT)	280	12.00	341	425,318		62.7	51.400
		5	BOILER #5 610 MMBTU/HR (PHASE II ACID RAIN UNIT)	280	11.30	356	493,605		82	76.300
		6	BOILER #6 778 MMBTU/HR (PHASE II ACID RAIN UNIT)	280	9.40	329	313,188		75.2	97.300
0970014	FLORIDA POWER - INTERCESSION CITY	1	COMBUSTION TURBINE (CT) PEAKING UNIT 1	20	14.63	760	1,764,000		174.9	43.000
		2	COMBUSTION TURBINE (CT) PEAKING UNIT 2	20	14.63	760	1,764,000		174.9	43.000
		3	COMBUSTION TURBINE (CT) PEAKING UNIT 3	20	14.63	760	1,764,000		174.9	43.000
		4	COMBUSTION TURBINE (CT) PEAKING UNIT 4	20	14.63	760	1,764,000		174.9	43.000
		5	COMBUSTION TURBINE (CT) PEAKING UNIT 5	20	14.63	760	1,764,000		174.9	43.000
		6	COMBUSTION TURBINE (CT) PEAKING UNIT 6	20	14.63	760	1,764,000		174.9	43.000
		7	COMBUSTION TURBINE # 7	50	13.75	1043	1,551,317		174.1	15.000
		8	COMBUSTION TURBINE # 8	50	13.75	1043	1,551,317		174.1	15.000
		9	COMBUSTION TURBINE # 9	50	13.75	1043	1,551,317		174.1	15.000
		10	COMBUSTION TURBINE # 10	50	13.75	1043	1,551,317		174.1	15.000
		11	COMBUSTION TURBINE # 11	75	19.00	1034	2,370,627		139.4	17.000

Table A-2. Summary of Source Included in the PSD Increment Air Modeling Analysis

Facility ID	Facility	Emission Unit Description	Stack Parameters					Emission Rate (lb/hr)
			Height (ft)	Diameter (ft)	Temperature (F)	Flow (ACFM)	Velocity (ft/s)	
0570008	CARGILL FERTILIZER, INC. - RIVERVIEW							
		ANIMAL FEED PLANT NO 1 STACK	136.2	6.0	151	114,143	67.2	7.9
		ANIMAL FEED PLANT AFP LOADOUT SYSTEM	20.0	3.0	89	14	0.03	1.9
		DE HOPPER VENT BAGHOUSE	64.0	1.5	89	613	5.7	0.1
		EXISTING LIMESTONE SILO BAGHOUSE	85.0	1.5	89	806	7.5	0.1
		PROPOSED LIMESTONE SILO BAGHOUSE	85.0	1.5	89	806	7.5	0.1
		PROPOSED SECOND GRANULATION TRAIN	136.2	6.0	151	100,210	59.0	7.9
		NO 3 AND 4 MAP PLANTS AND SOUTH COOLER	132.9	7.0	142	164,450	71.5	2.6
		ROCK PLANT NO 5 MILL DUST COLLECTOR	90.9	2.5	165	18,899	64.5	2.1
		ROCK PLANT NO 7 MILL DUST COLLECTOR	90.9	3.0	165	19,804	47.1	2.6
		ROCK PLANT NO 9 MILL DUST COLLECTOR	90.9	2.5	165	18,899	64.5	0.4
		GROUND ROCK SILO DUST COLLECTOR	66.9	0.8	80	1	0.03	16.8
		NO 5 DAP PLANT	132.9	7.0	109	121,337	52.7	12.8
		GTSP/DAP MANUFACTURING PLANT	126.0	8.0	125	140,598	46.6	21.6
		GTSP TRUCK LOADING STATION	38.1	2.7	77	11	0.03	0.6
		GTSP GROUND ROCK HANDLING	86.9	1.2	77	2	0.03	1.0
		BUILDING NO.6 BAGHOUSE	29.9	1.1	80	2	0.03	0.6
		BELT 7 TO 8 BAGHOUSE	44.9	1.1	80	2	0.03	0.6
		BELT 8 TO 9 BAGHOUSE	75.1	1.6	80	4	0.03	1.2
		SODIUM FLUORIDE PLANT DRYER SCRUBBER	40.0	1.7	120	5,420	41.1	1.0
		MATERIAL HANDLING BAGHOUSE	29.9	1.3	89	4,093	48.0	0.7
		CARGILL RIVERVIEW BASELINE SOURCES						
		PHOSPHATE ROCK GRINDING NO 5&9 MILL DUST COL.	60.0	1.9	140	10,167	57.6	-1.9
		AMMONIA PLANT	60.0	8.3	601	36,828	11.3	-22.2
		SODIUM SILICOFLUORIDE/SODIUM FLUORIDE	28.0	2.5	95	2,326	7.9	-2.4
		NO. 2 AND NO. 3 ROCK SILO BAG FILTER	93.0	1.0	100	2,556	49.2	-0.9
		NOS. 6, 7, AND 8 ROCK MILLS	95.0	2.0	91	6	0.03	-5.2
		NO. 10 KVS MILL	87.0	1.6	118	6,973	57.3	-3.7
		NO. 11 KVS MILL	70.0	1.6	125	6,166	50.6	-3.0
		NO. 12 KVS MILL	71.0	1.6	136	5,562	45.7	-1.3
		NO. 2 AIR SLIDE NORTH BAG FILTER	85.0	0.9	97	1,456	36.6	-0.6
		NO. 2 AIR SLIDE SOUTH BAG FILTER	96.0	0.9	115	2,115	61.7	-0.3
		NO. 3 AIR SLIDE NORTH BAG FILTER	82.0	1.2	113	529	7.2	-0.2
		NO. 3 AIR SLIDE CENTER BAG FILTER	115.0	1.6	116	1,363	11.2	-0.5
		NO. 3 AIR SLIDE SOUTH BAG FILTER	96.0	1.6	116	994	7.8	-0.8
		NO. 3 AIR SLIDE BIN BAG FILTER	108.0	1.2	122	1,375	18.8	-0.9
		NO. 2 PHOSPHORIC ACID SYSTEM	109.0	4.0	140	19,940	26.4	-7.5
		NO. 3 PHOSPHORIC ACID SYSTEM	93.0	4.0	118	11,890	15.7	-5.1

Table A-2. Summary of Source Included in the PSD Increment Air Modeling Analysis

Facility ID	Facility	Emission Unit Description	Stack Parameters					Emission Rate (lb/hr)
			Height (ft)	Diameter (ft)	Temperature (F)	Flow (ACFM)	Velocity (ft/s)	
		NO. 1 HORIZONTAL FILTER SCRUBBER	59.0	4.8	88	35,131	32.9	-6.2
		NO. 2 HORIZONTAL FILTER SCRUBBER	51.0	4.0	89	31,880	42.2	-6.0
		NO. 3 HORIZONTAL FILTER VACUUM SYSTEM	4.5	1.5	125	1,190	11.1	-0.1
		NO. 7 OIL-FIRED CONCENTRATOR	78.0	6.0	165	15,661	9.2	-7.6
		NO. 8 OIL-FIRED CONCENTRATOR	78.0	6.0	158	16,609	9.8	-14.4
		GTSP BAG FILTER	88.0	1.3	152	3	0.0	-0.3
		GTSP PLANT	126.0	8.0	129	76,194	25.2	-18.3
		NO. 3 TRIPLE REACTOR BELT	65.0	4.0	79	32,128	42.6	-6.2
		NO. 4 TRIPLE REACTOR BELT	65.0	4.0	75	34,481	45.7	-4.7
		NO. 3 CONTINUOUS TRIPLE DRYER	68.0	3.5	118	20,483	35.3	-14.4
		NO. 4 CONTINUOUS TRIPLE DRYER	68.0	3.5	104	28,448	49.0	-9.0
		NOS. 2 & 4 SIZING UNITS	74.0	4.0	77	20,139	26.7	-4.1
		NORMAL SUPERPHOSPHATE	73.0	2.5	106	11,776	40.2	-0.5
		NO. 1 AMMONIUM PHOSPHATE PLANT	90.0	4.0	140	26,034	34.5	-9.4
		NO. 2 AMMONIUM PHOSPHATE PLANT	90.0	3.5	133	27,419	47.2	-11.7
		NO. 3 AMMONIUM PHOSPHATE PLANT	90.0	3.5	143	24,732	42.6	-13.1
		NO. 4 AMMONIUM PHOSPHATE PLANT	90.0	3.5	149	21,474	37.0	-7.0
		NORTH AMMONIUM PHOSPHATE COOLER	54.0	4.3	143	40,220	45.5	-47.0
		SOUTH AMMONIUM PHOSPHATE COOLER	54.0	4.3	125	42,453	48.0	-37.2
	IMC AGRICO PIERCE							
		1AGRI	80.0	8.0	118	210,550	69.7	-40.0
		2AGRI	95.0	5.8	770	76,905	48.4	-31.1
1050055	IMC AGRICO S. PIERCE							
		3AGRI	149.9	5.2	170	166,414	128.2	389.7
	CFI BARTOW PHOSPHATE COMPLEX (FORMERLY BONNIE MINE RD)							
		5CFIN	140.1	2.6	77		70.9	**40.4**
		7CFIN	136.0	9.3	140		59.2	**40.4**
1050057	IMC NICHOLS (FORMERLY CONSERVE)							
		8CONS	150.0	7.5	170	89,980	33.8	-229.4
		9CONS	42.0	4.0	100	26,257	34.8	-39.0
1050053	FARMLAND - GREEN BAY PLANT							
		10FARM	**100**	**4.59**	**80**	**75,663**	**60.03937**	**94.524**

Table A-2. Summary of Source Included in the PSD Increment Air Modeling Analysis

Facility ID	Facility	Emission Unit Description	Stack Parameters					Emission Rate (lb/hr)
			Height (ft)	Diameter (ft)	Temperature (F)	Flow (ACFM)	Velocity (ft/s)	
	FARMLAND-HYDRO LTD (GREEN BAY)							
		10FARM	100.1	4.6	95	59,693	60.0	222.9
490015	HARDEE POWER PARTNERS							
		HPPCC	89.9	14.5	236	767,966	77.5	20.0
		HPPSC	75.1	17.9	986	1,425,901	94.3	20.0
	IMC FORT LONESOME (PSD EXPANDING)							
		12IMCF	125.0	8.0	151	150,209	49.7	-25.2
		13IMCF	125.0	8.0	151	166,459	55.1	-24.9
		14IMCF	150.0	2.7	110	9,433	27.7	-51.2
	IMC-AGRICO NORALYN MINE							
		15IMCF	38.0	1.9	140	4,014	23.5	0.0
	BARTOW PHOSPHATE CENTER (FORMERLY IMC URANIUM RECOVERY)							
		16IMCF	85.0	0.7	75	772	38.1	0.0
	CITY OF LAKELAND LARSEN							
		17LAKE	100.0	19.0	950	1,574,460	92.6	15.0
1050004	CITY OF LAKELAND MCINTOSH							
		18LAKE	250.0	16.1	170	1,302,648	107.0	324.0
		19LAKE	149.9	9.0	295	296,994	78.0	111.1
	MOBIL ELECTOPHOSPHATE							
		20MOBI	100.0	4.3	115	35,243	40.5	126.6
570039	TECO BIG BEND							
		22TECO	490.0	24.0	156	1,623,864	59.7	433.4
		23TECO	490.2	24.0	156	1,783,486	65.6	1327.8
	CARGILL BARTOW							
		CGBAR1	50.0	6.6	140	113,834	56.1	108.0
		CGBAR2	200.0	5.0	165	96,511	82.4	37.1
1030013	FPC BAYBORO							
		27FPCB	40.0	22.9	900	530,281	21.5	64.6

Table A-2. Summary of Source Included in the PSD Increment Air Modeling Analysis

Facility ID	Facility	Emission Unit Description	Stack Parameters					Emission Rate (lb/hr)
			Height (ft)	Diameter (ft)	Temperature (F)	Flow (ACFM)	Velocity (ft/s)	
105233	TECO POLK CO							
		28TECO	20.0	3.0	500	17,659	43.0	16.0
		29TECO	149.9	19.0	260	939,992	55.1	59.0
		30TECO	199.1	3.5	1400	17,415	30.0	25.0
1030011	FPC BARTOW							
		31FPCB	299.9	9.0	305	388,454	102.0	253.7
		32FPCB	299.9	11.0	275	643,236	113.0	221.4
		33FPCB	29.9	3.0	515	7,139	17.0	0.3
		34FPCB	44.9	17.3	930	1,028,416	73.0	101.6
		35FPCB	24.9	0.9	77	5	0.1	0.1
	FPL MANATEE							
		44FLOR	499.0	26.2	307	2,508,459	77.5	1730.2
	HILLSBOROUGH CO RRF							
		HILRFC3	220.1	11.5	430	343,642	55.0	21.0
570127	CITY OF TAMPA MCCAY BAY REFUGE-TO-ENERGY							
		MCKBAYC5	149.9	4.3	440	59,908	69.9	28.3
	TROPICANA							
		TROPNC3	95.1	3.0	140	29,713	70.7	95.2
		TROPNC8	49.9	1.0	90	484	10.6	111.2
1010071	PASCO CO COGEN							
		PASCOGEN	274.9	4.8	310	54,064	50.0	5.0
0690046	OGDEN MARTIN							
		OGDENMAR	125.0	6.0	300	130,194	76.6	7.6
0694801	LAKE CO COGEN							
		LAKEOGEN	80.1	10.0	3	2,942	0.6	20.0
	POLK POWER PARTNERS							
		POLKPOWP	125.0	15.0	220	678,816	64.1	9.0

Table A-2. Summary of Source Included in the PSD Increment Air Modeling Analysis

Facility ID	Facility	Emission Unit Description	Stack Parameters					Emission Rate (lb/hr)
			Height (ft)	Diameter (ft)	Temperature (F)	Flow (ACFM)	Velocity (ft/s)	
1050234	FPC HINES							
		FPCHINES	299.9	9.0	312	453,800	119.2	92.4
1050223	FPC TIGER BAY COGEN							
		FPCTIGER	180.1	18.0	220	1,505	0.1	9.0
	NATIONAL GYPSUM							
		NATGYPS1	98.1	3.7	350	38,196	57.9	15.4
		NATGYPS2	54.1	13.4	384	491,464	58.2	2.3

CARGILL FERTILIZER, INC.

P.O. Box 9002 • Bartow, Florida 33831 • Telephone 941-534-9610 • FAX 941-534-9680

RECEIVED

AUG 02 2000

BUREAU OF AIR REGULATION

August 1, 2000

Florida Department of Environmental Protection
Twin Towers Office Building
2600 Blairstone Road
Tallahassee, Florida 32399-2400

Attention: A.A. Linero, P.E., Administrator, New Source Review Section

RE: Cargill Fertilizer, Inc. - PSD Permit Application to Modify the Phosphoric Acid Plant at the Bartow Facility, DEP File No. 1050046-013-AC (PSD-FL-295)

Dear Mr. Linero:

This letter is in response to your letter to Ms. Debra R. Waters, dated July 14, 2000, requesting additional information to continuing processing a PSD permit application to modify the Phosphoric Acid Plant at Cargill Fertilizer, Inc.'s facility located in Bartow, Polk County, Florida. Our responses, presented below, are organized in the same manner as your original letter:

1. The anticipated additional recovery of acid afforded by the project is approximately 140 TPD of P2O5 produced. The proposed project will not increase the P2O5 input to the process, it is intended to increase the process efficiency and reduce losses to the phosphogypsum management system. The size of the filter table will increase by 50% from approximately 1,000 sq. ft total surface area to 1,500 sq. ft. Under normal operating conditions, the increased area will allow this filter to accommodate an additional 60 gpm (from 400 gpm to 460 gpm) of reactor slurry, which is currently fed to other filters. No change in operating temperatures is anticipated. There is no evacuation rate change.

2. The distribution of the additional P_2O_5 recovered as a result of this project is dependent on production demands that can vary daily. Theoretically, all of the additional P_2O_5 could go to either plant on any given day. The additional 140 TPD of P2O5 recovered is equivalent to 304 TPD of DAP verses permitted capacity of 3,000 TPD at the #3 Fertilizer Plant and 6264 TPD at the #4 DAP plant.

3. We acknowledge the Department's clarification to the meaning of the language "wiped clean", i.e., that it refers to the consideration of contemporaneous

analysis, subsequent modeling showed that the increase in NO_x emissions due to the project resulted in impacts below significant impact levels). Additionally, federally enforceable permit conditions limiting NO_x emissions from the Sulfuric Acid Plant were incorporated into the permit (See Construction Permit AC53-271436/PSD-FL-229 or page E-2 of the current Title V Air Operating Permit for the facility).

Contemporaneous emission estimates shown in the application to modify the Phosphoric Acid Plant were based on previous permit applications and included those pollutants not subject to new source review (increases below significant emissions rates), and, therefore, not included in the modeling analysis or subject to federally enforceable permit conditions. Emission estimates due to potential debottlenecking were calculated as the difference between potential and actual emission rates. Actual emission rates were based on the emission rates reported in Cargill's 1998 and 1999 Annual Operating Reports for the Bartow facility. This information is summarized in Table 3-2 of the application.

4. The previous BACT determination at this facility was for the installation of the 3rd filter. As indicated in your question, this BACT established an emission limit of 0.012 lb F/ton P2O5 for new plant sections. Due to the configuration of this plant, separation and quantification of emissions from new plant sections from existing plant sections will be impractical if not impossible. However, in recognition of this problem, and following review of the historical test data for these sources, Cargill proposes that the new BACT for this facility be established as an emission limit of 2.04 lb F/hour. This limit is equivalent to 0.012 lb F/ton P2O5 at the maximum production input limit of 170 tons P2O5 per hour. Note also, that this limit is lower than the value that would be established using the Department's typical rationale of providing a margin for compliance based on doubling the actual representative test results for the entire plant. A summary of past test data is attached for your review.

5. The proposed project involves a physical change to the Phosphoric Acid Plant only. This physical change to the Phosphoric Acid Plant will result in additional P2O5 being processed in downstream emission units and may result in an actual increase in emissions from these emission units. However, Cargill is not requesting to increase potential or allowable emissions from these downstream emissions units or to make physical or operational changes to these emission units.

   EPA's PSD regulations are codified at 40 CFR 52.21. This rule requires, among other things, that BACT be employed to control emissions from a proposed new source or modification. However, the EPA rules governing control technology review state:

   > "A major modification shall apply best available control technology for each pollutant subject to regulation under the Act for which it would result in a significant net emissions increase at the source. This requirement applies to each proposed emissions unit at which a net

> emissions increase in the pollutant would occur as a result of a physical change or change in the method of operation in the unit." (40 CFR 52.21 (j)(3)).

Therefore, it is clear that BACT does not apply to an emissions unit at which there is no physical change or change in the method of operation. Further, under the federal PSD rules, a change in the method of operation specifically excludes increased operating hours and production rates, unless prohibited by a federally enforceable NSR/PSD air construction permit condition that was established after January 6, 1975. (40 CFR 52.21(b)(2)(iii)).

Historically, EPA has consistently interpreted the federal PSD rule in this manner, through guidance memos, applicability determinations, and the PSD workshop manual (draft). The only exception to the application of the rule was a recent determination for a case where a separate emissions unit served as the control device for an emissions unit undergoing a modification (such as pulp digesters subject to PSD, with a limekiln used to incinerate TRS emissions). In that case, EPA determined that the control device was to be considered as part of the emissions unit. Hence, if the emissions unit required BACT review, then the associated emissions unit serving as the control device was also required to undergo BACT review for those pollutants that would significantly increase as a result of the modification.

The State of Florida PSD rule was promulgated in the early 1980's, after EPA revised the federal PSD rule. The State of Florida's PSD rules state that:

> "The proposed facility or modification shall apply Best Available Control Technology (BACT) for each pollutant subject to preconstruction review requirements as set forth in Rule 62-212.400(2)(f), F.A.C.". (Rule 62-212.400(5)(c)).

Thus, the state rule is not as clear as the federal rule. Mr. David Buff, P.E., Q.E.P., now of Golder Associates Inc., recalls that at the time of adoption of the state rule, there was no intention to be more stringent than the EPA PSD rule. It was intended that the rule be interpreted and applied in the same manner as the federal rule. This is witnessed by the fact that an economic impact statement was not performed by the State of Florida at the time of rule adoption, nor was there review by the Governor and Cabinet, which would have been required if the rule was more stringent than the EPA rule.

Interpretation of the state PSD rule in the manner, which FDEP is now prescribing, would have severe economic consequences on sources. Being required to apply BACT to multiple emissions units not being physically modified could result in severe economic impacts, and would likely stifle economic growth. Companies would find PSD too costly or too risky to undertake, and therefore would not be as likely to undertake expansion projects. Generally, as EPA intended, when an emission unit is physically modified, or undergoes a change in the method of operation, a capital expenditure is associated with the change. This is the appropriate time to

require additional capital expenditure for pollution control purposes, and makes it much easier to justify the additional capital and operating costs as part of an expansion project. However, again, if BACT requirements are expanded to other emissions units that have no associated capital expenditure, the cost impact is much greater.

The state PSD rule states that "The proposed facility or modification shall apply Best Available Control Technology...". The Cargill Bartow facility is not a "proposed facility", since the facility already exists. Therefore, one must again turn to the definition of "modification" to determine the application of Best Available Control Technology to both upstream and downstream emission units. The state's definition of modification at Rule 62-210.200(185) is very similar to the federal definition. Specifically, the state definition excludes increases in operating hours or production rates from the term "modification", unless the increase would be prohibited under any federally enforceable NSR/PSD air construction permit condition established after January 6, 1975. Applying this reading directly to Cargill's proposed project, the "modification" would not include the downstream emission units which are not being physically modified or for which there is no change in the method of operation (i.e., the fertilizer and shipping plants).

Hence, FDEP should not require BACT to be applied to all emission units for which there is an increase in emissions associated with the "modification" -- in this case an increase in production without a physical change or change in method of operation. FDEP can continue to require emission increases "associated with" the "modification", but not part of the specific modification being requested (in this case, from the Nos. 3 and 4 Fertilizer and Shipping Plants), to be included in the PSD netting analysis to determine pollutants which trigger PSD review.

This interpretation of the application of BACT to only new emission units or those undergoing a physical change or change in the method of operation, is further supported by the Technical Evaluation and Preliminary Determination you cited for Cargill's No. 7 Rock Dryer/Grinder (PSD-FL-247) at their Riverview facility. During the permitting process for the No. 7 Rock Dryer/Grinder, the Environmental Protection Commission of Hillsborough County (EPCHC) commented that BACT should be applied to associated process units that are upstream and downstream of the rock mills. In its response to EPCHC's comment, presented in the referenced Technical Evaluation and Preliminary Determination, FDEP determined, after consulting with USEPA, that BACT was not applicable to upstream or downstream emission units not undergoing a physical change or change in the method of operation as part of the project.

The State of Florida has for nearly 20 years applied its PSD regulations in a manner consistent with EPA PSD regulations, guidance and policy. This has set a legal precedent, which now cannot be changed merely by a different interpretation or policy. A formal rule change and economic impact statement

would be required. Absent that, such an interpretation constitutes non-rule policy and is invalid under Section 120, Florida Statutes.

6. Please find enclosed the requested 1998 and 1999 stack test reports.

Sincerely,

David B. Jellerson
8-1-00

David Jellerson, P.E.
Environmental Manager
Florida Seal No. 38676

Enclosures

cc: Debra Waters – Cargill
Scott McCann – Golder
David Buff - Golder
J. Reynolds
C. Holladay
J. Spence, Polk Co.
EPA
NPS
SWD

Document4

Cargill Fertilizer, Inc. - Bartow Plant

Summary of Fluoride Stack Test Data for the Phosphoric Acid Plants

	No. 4 Phosphoric Acid Plant				No. 3 Phosphoric Acid Filter		No. 5 Phosphoric Acid Plant				Total Phosphoric Acid Plant			
	Production Rate	Run	Fluoride Emission Rate		Run		Production Rate	Run	Fluoride Emission Rate		Production Rate	Run	Fluoride Emission Rate	
Test Date	(tons P_2O_5 /hr)	No.	(lb F/ hr)	(lb F/ton P_2O_5)	No.	(lb F/ hr)	(tons P_2O_5 /hr)	No.	(lb F/ hr)	(lb F/ton P_2O_5)	(tons P_2O_5 /hr)	No.	(lb F/ hr)	(lb F/ton P_2O_5)
08/30/96	51	1	0.287	0.006	1	0.107	70	1	0.193	0.003	121	1	0.587	0.005
		2	0.305	0.006	2	0.099		2	0.355	0.005		2	0.759	0.006
		3	0.366	0.007	3	0.132		3	0.464	0.007		3	0.962	0.008
03/13/97	59	1	0.941	0.016	1	0.092	88	1	0.261	0.003	147	1	1.294	0.009
		2	0.784	0.013	2	0.128		2	0.389	0.004		2	1.301	0.009
		3	0.337	0.006	3	0.191		3	0.251	0.003		3	0.779	0.005
07/10/98	59	1	0.154	0.003	1	0.065	89	1	0.144	0.002	148	1	0.363	0.002
		2	0.144	0.002	2	0.094		2	0.345	0.004		2	0.583	0.004
		3	0.130	0.002	3	0.229		3	0.157	0.002		3	0.516	0.003
06/03/99	58	1	0.09	0.002	1	0.02	88	1	0.28	0.003	146	1	0.39	0.003
		2	0.13	0.002	2	0.05		2	0.17	0.002		2	0.35	0.002
		3	0.10	0.002	3	0.05		3	0.20	0.002		3	0.35	0.002

	Test Statistics		
Average	**140.5**	**0.686**	**0.005**
Maximum		**1.301**	**0.009**
Stardard Deviation		**0.344**	**0.002**
95% Confidence Level[a]		**1.361**	**0.010**

Footnotes:

[a] Calculated as the average plus 1.96 times the standard deviation.

Department of Environmental Protection

Jeb Bush
Governor

Marjory Stoneman Douglas Building
3900 Commonwealth Boulevard
Tallahassee, Florida 32399-3000

David B. Struhs
Secretary

July 27, 2000

CERTIFIED MAIL - RETURN RECEIPT REQUESTED

Ms. Debra R. Waters
Environmental Superintendent
Cargill Fertilizer, Inc.
P.O. Box 9002
Bartow, Florida 33830

Re: DEP File No. 1050046-013-AC (PSD-FL-295)
No. 4 Phosphoric Acid Plant Filter Modification - Bartow

Dear Ms. Waters:

The Bureau of Air Regulation reviewed the above application received on June 27, 2000 and found that additional information is required. A letter requesting this information has already been sent to you on July 14, 2000. This letter stated that additional items could be requested later which could include modeling items if applicable. The Bureau received the modeling input and output files on July 26, 2000, and will conduct a review of this information within the next thirty days. However, preliminary completeness items based on the modeling information provided in the PSD report are listed below. Additional items may be requested later after the modeling input and output files have been reviewed.

1. More information is needed to allow the Department to determine the extent of the ambient air exemption on Cargill's property. 40 CFR Part 50.1(e) defines ambient air as "...that portion of the atmosphere, external to buildings, to which the general public has access." The exemption from ambient air is available only for the atmosphere over land owned or controlled by the source and to which public access is precluded by a fence or other physical barriers. Please provide a detailed USGS map or the equivalent showing the location of the fenceline and/or any other physical barriers equivalent to a fence.
2. A PM_{10} background concentration for use in the AAQS analysis is needed for the 24-hour averaging time. An annual average value may not be used for a short-term background concentration.
3. EPA has advised us in recent PSD permit applications that a receptor spacing of 100 meters or less is required along the fenced property boundary as input to the modeling runs. Please redo the modeling along the fenceline.

Permit applicants are advised that Rule 62-4.055, F.A.C. now requires applicants to respond to requests for information within 90 days. If there are any questions, please call Cleve Holladay at 850/921-8986.

Sincerely,

7/27

A. A. Linero, P.E. Administrator
New Source Review Section

AAL/CH

cc: Gregg Worley, EPA
John Bunyak, NPS
Bill Thomas, SWD
Jeff Spence, Polk Co.
David Buff, Golder Assoc.

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1. Article Addressed to:

Ms Debra R Waters
Environmental Superintendent
Cargill Fertilizer Inc
PO Box 9002
Bartow FL 33830

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C. Signature X [signature] ☒ Agent ☐ Addressee

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Ms Debra Waters, Env. Superintendent
Street, Apt. No.; or PO Box No.
Cargill Fertilizer PO Box 9002
City, State, ZIP+4
Bartow, FL 33830

PS Form 3800, February 2000 See Reverse for Instructions

Department of
Environmental Protection

Jeb Bush
Governor

Twin Towers Office Building
2600 Blair Stone Road
Tallahassee, Florida 32399-2400

David B. Struhs
Secretary

July 14, 2000

CERTIFIED MAIL - RETURN RECEIPT REQUESTED

Ms. Debra.R. Waters
Environmental Superintendent
Cargill Fertilizer, Inc.
P.O. Box 9002
Bartow, Florida 33830

Re: DEP File No. 1050046-013-AC (PSD-FL-295)
No. 4 Phosphoric Acid Plant Filter Modification - Bartow

Dear Ms. Waters:

The Bureau of Air Regulation reviewed the above application received on June 27 and found that additional information is required. The preliminary completeness items are listed below. Additional items may be requested later including modeling issues if applicable.

1. The application should state how much additional P_2O_5 in tons/day will be recovered by the new filter and thus involved in downstream processing. It should also state the design capacity of the new filter and describe any differences in operating conditions such as temperatures, filtrate rates, evacuation air rates, etc., compared to the existing No. 4 filter system.
2. Provide an estimate in tons/day of the increased P_2O_5 recovery that will go to each of the No. 3 and No.4 Fertilizer Plants and Shipping Plants.
3. The statement on Page PSD-8, "when PSD is triggered for a particular pollutant, the slate is 'wiped clean' and there is no further consideration of past contemporaneous emission changes for that pollutant" should be corrected to reflect that only those that have been relied upon during modeling and have been included in federally enforceable permit conditions are actually "wiped clean". Please address this clarification with respect to the Sulfuric Acid Plant Production Rate Increase (November 1995) and provide calculations showing how the contemporaneous and debottlenecking emission estimates were derived. The possibility exists that the NOx.emissions from the Sulfuric Acid Plant increase should be considered as contemporaneous.
4. The limit of 0.012 lb/ton P_2O_5 was listed in the BACT Clearinghouse so that others will understand that it is the appropriate BACT limit for the new or modified equipment segment of the hybrid Cargill Phos Acid Plant. Otherwise, the fact that the Cargill limit of 0.035 reflects a weighted average of new and existing equipment could easily be misconstrued by those using that reference to establish limits. Given that the PSD regulations often result in ratcheting down of emission limits when actual emissions are substantially below allowable limits, explain Cargill's arguments, if any, as to why the 0.012 segment should not be ratcheted down using the Department's typical rationale of providing a margin for compliance based on doubling the actual representative test results.
5. The application provides a BACT analysis only for fluoride emissions from the Phos Acid Plant. Where upstream or downstream emissions increases are triggered by the subject modification, these processes can be included in the PSD/BACT review even if there is no physical change, provided that the production rate of the upstream or downstream unit is limited by a federally enforceable permit issued after January 6, 1975. If the upstream or downstream emission unit permit was issued before January 6, 1975, and the production rate

SENDER: COMPLETE THIS SECTION

- Complete items 1, 2, and 3. Also complete item 4 if Restricted Delivery is desired.
- Print your name and address on the reverse so that we can return the card to you.
- Attach this card to the back of the mailpiece, or on the front if space permits.

1. Article Addressed to:

Ms Debra R Waters
Environmental Superintendent
Cargill Fertilizer Inc
PO Box 9002
Bartow FL 33830

COMPLETE THIS SECTION ON DELIVERY

A. Received by *(Please Print Clearly)*: Kelly Pickard
B. Date of Delivery: 07-20-0(

C. Signature: X Pickard
☒ Agent ☐ Addressee

D. Is delivery address different from item 1? ☐ Yes
If YES, enter delivery address below: ☐ No

3. Service Type
☒ Certified Mail ☐ Express Mail
☐ Registered ☐ Return Receipt for Merchandise
☐ Insured Mail ☐ C.O.D.

4. Restricted Delivery? *(Extra Fee)* ☐ Yes

2. Article Number *(Copy from service label)*
Z 341 355 334

PS Form 3811, July 1999 Domestic Return Receipt 102595-99-M-1789

Z 341 355 334

US Postal Service
Receipt for Certified Mail
No Insurance Coverage Provided.
Do not use for International Mail *(See reverse)*

Sent to: Debra Waters	
Street & Number: P.O. Box 9002	
Post Office, State, & ZIP Code: Bartow, FL 33830	
Postage	$
Certified Fee	
Special Delivery Fee	
Restricted Delivery Fee	
Return Receipt Showing to Whom & Date Delivered	
Return Receipt Showing to Whom, Date, & Addressee's Address	
TOTAL Postage & Fees	$
Postmark or Date: Cargill Fertilizer 7/17/01	

PS Form **3800**, April 1995

has not been subsequently modified under a federally enforceable permit condition, the production rate can be increased up to the maximum allowed without constituting a change in the method of operation and the emissions would not be subject to PSD review. Please refer to the Department's discussion on Pages 10 and 11 of the Technical Evaluation and Preliminary Determination issued for Cargill's PSD-FL-247 (No.7 Rock Dryer/Grinder). Please submit all applicable BACTanalyses.

6. The application contains only a summary of fluoride stack test data. Please submit the detailed test reports for the 1998 and 1999 annual fluoride stack tests containing data on production rates, stack flows, scrubber conditions, etc. for each test run. Also, please note that the test dates are all listed as "July 10, 1998".

Permit applicants are advised that Rule 62-4.055, F.A.C. now requires applicants to respond to requests for information within 90 days. If there are any questions, please call John Reynolds at 850/921-9536.

Sincerely,

7/14

A. A. Linero, P.E. Administrator
New Source Review Section

AAL/JR

cc: Gregg Worley, EPA
John Bunyak, NPS
Bill Thomas, SWD
Jeff Spence, Polk Co.
David Buff, Golder Assoc.

Department of
Environmental Protection

Jeb Bush
Governor

Twin Towers Office Building
2600 Blair Stone Road
Tallahassee, Florida 32399-2400

David B. Struhs
Secretary

June 23, 2000

CERTIFIED MAIL - RETURN RECEIPT REQUESTED

Mr. Gregg Worley, Chief
Air, Radiation Technology Branch
Preconstruction/HAP Section
U.S. EPA – Region 4
61 Forsyth Street
Atlanta, GA 30303

Re: Cargill Fertilizer – Bartow Facility
Project: No. 4 Phosphoric Acid Plant Filter Modification
PSD-FL-295
Facility ID No. 1050046-013-AC

Dear Mr. Worley:

Enclosed for your review and comment is an application for a modification to an existing PSD source. The applicant, Cargill Fertilizer, proposes to replace the No. 4 Phosphoric Acid Filter at their Polk County facility resulting in increase in annual fluoride emissions.

Your comments may be forwarded to my attention at the letterhead address or faxed to the Bureau of Air Regulation at 850/922-6979. If you have any questions, please contact the project engineer, Syed Arif, at 850/921-9528.

Sincerely,

Cathy Adams

for Al Linero, P.E.
Administrator
New Source Review Section

AAL/saa

Enclosures

Department of
Environmental Protection

Jeb Bush
Governor

Twin Towers Office Building
2600 Blair Stone Road
Tallahassee, Florida 32399-2400

David B. Struhs
Secretary

June 23, 2000

CERTIFIED MAIL - RETURN RECEIPT REQUESTED

Mr. John Bunyak, Chief
Policy, Planning & Permit Review Branch
NPS – Air Quality Division
P.O. Box 25287
Denver, CO 80225

Re: Cargill Fertilizer – Bartow Facility
Project: No. 4 Phosphoric Acid Plant Filter Modification
PSD-FL-295
Facility ID No. 1050046-013-AC

Dear Mr. Bunyak:

Enclosed for your review and comment is an application for a modification to an existing PSD source. The applicant, Cargill Fertilizer, proposes to replace the No. 4 Phosphoric Acid Filter at their Polk County facility resulting in increase in annual fluoride emissions.

Your comments may be forwarded to my attention at the letterhead address or faxed to the Bureau of Air Regulation at 850/922-6979. If you have any questions, please contact the project engineer, Syed Arif, at 850/921-9528.

Sincerely,

Patty Adams

for Al Linero, P.E.
Administrator
New Source Review Section

AAL/saa

Enclosures