

Certified Mail 7002 0460 0002 8878 5908 Return Receipt Requested

June 25, 2003



Mr. Eric Peterson, P.E.
District Air Permitting Supervisor
Southwest District
Florida Department of Environmental Protection
3804 Coconut Palm Drive
Tampa, FL 33619

Re: Response to Request for Additional Information

Monitoring Method Proposal, NESHAP, 40 CFR 63, Subpart AA and BB

Facility ID No. 1050059

Title V Permit Revision Project No. 1050059-038-AV

Initial Title V Permit No. 1050059-014-AV

New Wales Plant

Dear Mr. Peterson:

The Request for Additional Information referenced above was received on May 30, 2003. The questions are repeated below in bold with each response following.

1. <u>All Emission Units</u>. No pressure drop units were provided in the tables. Reviewing the Title V permit (1050059-014-AV) would indicate that the pressure drop is recorded in inches of water. Please confirm and include the units with the information provided.

Response:

Pressure drop is recorded in inches of water.

2. <u>DAP Plant No. 2 East Train (EU No. 045)</u>. The pressure drop range proposed for the Dryer Venturi Scrubber was 15.0 - 23.8 inches of water (see item 1 of this correspondence). However, a pressure drop of 23.9 was indicated for the 9/24/01 test. Please confirm that the high end of the range requested is 23.8 or 23.9. If the applicant chooses 23.8, please provide a rationale for that choice.

Eric Peterson, P.E., District Air Permitting Supervisor Florida Department of Environmental Protection June 25, 2003 Page 2



Response:

The high end of the proposed pressure drop range should have been 23.9 inches of water. Thanks for catching our oversight.

3. All Emissions Units. Rule 62-4.050(3), F.A.C. requires that all applications for a Department permit must be certified by a professional engineer registered in the State of Florida. This requirement also applies to responses to Department requests for additional information of an engineering nature. Therefore, please have your response and proposed pressure drop range request certified by a professional engineer.

Response:

This response has been certified by a professional engineer registered in the State of Florida. Attachments 1 and 2 from the proposed pressure drop range request being resubmitted under this certification are also enclosed.

Should any additional information be required to process the proposed monitoring method, please contact Phil Steadham (863-428-7106) or Dave Turley (863-428-7153). Thank you

Sincerely,

Vice President

Concentrates - Florida

MAD:jp attachments

CC:

C. D. Turley

P. A. Steadham

NESHAP Request for add inf 053003



ATTACHMENT 1

IMC Phosphates Company – New Wales Plant – Facility ID No. 1050055 Phosphoric Acid Plant (East) EU ID No. 008

	Test Results:				SAMPLIATO AMPO
•	Test Date:	5/11/2000	8/09/2001	4/09/2002	3/18/2003
	TPD P ₂ O ₅ input:	1872	(1847)	(1968)	1950
	Actual F lb/hr:	1.06	0.81	1.14	0.49
	Allowable, lb/hr:	1.53	1.53	1.53	1.53
	Total GPM:	641	657	<u>(676</u>)	(589) 471- 707
IN H20	Scrubber Pressure Drop:	0.3	_1.7	0.5	(10.5) 8.4-12.6

Proposed Pressure Drop Range: (0.2)-10.5 GPM 589-676

IMC Phosphates Company – New Wales Plant – Facility ID No. 1050059 Phosphoric Acid Plant (West) EU ID No. 017

•	Test Results: Test Date: TPD P ₂ O ₅ input: Actual F lb/hr: Allowable, lb/hr:	5/18/2000 2056 0.89 1.53	5/24/2001 1942 0.73 1.53	3/26/2002 2062 0.69 1.71	SPECIAL SAMPUNG 3/31/2003 (2068) 0.39 1.53 ± 20 5
`	•		1.53		1.JJ
	Total GPM:	636	(701)	669	583 467 - 700
	Scrubber Pressure Drop:	0.4	12.3	_ 3.9 -	C3.0 7-6

Proposed Pressure Drop Range: 0.2-5.0 SPM 583 - 701

IMC Phosphates Company – New Wales Plant – Facility ID No. 1050059 Phosphoric Acid Plant No. 3 EU ID No. 039

<u>Test Results:</u>				
Test Date:	5/25/2000	<u>5/18/2001</u>	4/17/2002	<u>3/17/2003</u>
TPD P ₂ O ₅ input:	(2673)	(2375)	2436	2407
Actual F lb/hr:	0.58	1.42	0.25	$0.23 + 20^{2}$
Allowable, lb/hr:	1.79	1.79	1.79	1.17
Total GPM:	683	695	708	(597) 478-716
Scrubber Pressure Drop:	$\widehat{0.3}$	-0.3	0.5	10.5 9.4-12.6

Proposed Pressure Drop Range: (0.2) - 10.5 GPM 547 - 705

ATTACHMENT 2

IMC Phosphates Company – New Wales Plant – Facility ID No. 1050059 DAP Plant No. 2 – West Train EU ID No. 046

									SAMBUNG
Test Date:	<u>1/17/95</u>	2/13/96	1/26/98	4/14/98	2/10/99	9/25/00	9/10/01	5/22/02	4/01/03
ТРН	153.02	(140)	140	150	154	(157)	148	149	(141)
TPH P ₂ O ₅ input:	74.1	68.2	66.0	71.0	73.0	74.8	70.6	71.6	67.0
Fuel Type:	No. 6 Oil		No. 6 Oil	No. 6 Oil	No. 6 Oil	No. 6 Oil	No. 6 Oil	Natural Gas	Natural Gas
Allowable, mmBtu/hr:	11.52		7.5	13.1	8.15	19.8	9	1.4	1.8
Actual PM lb/hr:	4.1	2.1	8.7	3.1	2.7	5.1	3.7	3.8	2.7
Allowable, lb/hr:	14.1	14.1	14.1	5.7	5.8	6.0	5.7	5.7	5.4
Actual F lb/hr:	1.2	1.2	2.5	2.5	2.6	2.6	1.7	1.8	1.8
Allowable, lb/hr:	3.5	3.5	3.5	3.0	3.0	3.1	2.9	3.0	2,8
Actual SO ₂ lb/hr:	18.9		4.99		5.5	14.2	14.0		-
Allowable, lb/hr:	22		22		22	22	22		
Actual NOx lb/hr:	3.6		3.9	2.7	3.7	5.8	0.8	0.2	2.6
Allowable, lb/hr:	12.6	. •	12.6	12.6	12.6	12.6	12.6	12.6	12.6
R/G Venturi GPM:						J1400	1520	1686	(1549) 123 7
R/G Venturi Pressure Drop:	17.4	18.0	16.7	16.1	$17.\overline{0}$	18.6	20.5	21.3	21.3 17.0+
Dryer Venturi GPM:			•			1160	1500	1712	1551 1241.
Dryer Venturi Pressure Drop:	15.,7	19.0	15,5	20.7	15.5	12/1	19.5	21.9	22.1 17.7-
R/G Tailgas GPM:	*	i				2200	1967	2231	/2190: 175¢ -
R/G Tailgas Pressure Drop:	7.6	3.0	3.1		•	6.0	5.2	5.2	7.0 5.6
Dryer Tailgas GPM:						1200	1700	1791	(1992)1594-
Dryer Tailgas Pressure Drop:	2.9	3.0	1.9		*	4	4.1	3.7	4.2 3.4

ALL TESTS	Proposed Pressure Drop Range 2000-2003
(16.1)-21.3	R/G Venturi: (15.0) - 21.3 19.6-21.3
15.5. 22.1	Dryer Venturi: 15.0-22.1 17.1-22.1
3.0-7.6	R/G Tailgas: 3.0 – 7.6 5.2 - 7.0
1,9-4.2	Dryer Tailgas: 1.9 - 4.2 3.7 - 4.2

GfM 2000-2003 1100-1686 1100-1712 1967-2231 1200-1992

IMC Phosphates Company – New Wales Plant – Facility ID No. 1050059 DAP Plant No. 2 – East Train EU ID No. 045

Test Results:			<u> </u>							<u></u>	SPECIAL	
Test Date:	1/25/95	1/30/96	3/12/97	2/03/98	5/12/98	2/23/99	8/29/00	9/24/01	10/10/01	10/30/2002	SAMPLING 3/26/2003	
ТРН	139	140	140	(137)	150	154	(168)	152	154	(139)	. 142	17%
TPH P ₂ O ₅ input:	67.1	68.0	67.8	64.6	71.0	72.0	75.5	72.1	72.7	64.9	.67.5	Ì
Fuel Type:	No. 6 Oil		Natural Gas	No. 6 Oil	No. 6 Oil	No. 6 Oil	No. 6 Oil	No. 6 Oil	Natural Gas	Natural Gas	Natural Gas	
Allowable, mmBtu/hr:	5.4		4	9	6.2	10	20.1	9.9	1.3	1.2	3.3	
Actual PM lb/hr:	3.3	1.9	1.3	3.5	2.1	2.1	4.0	2.8	3.3	4.0	3.1	
Allowable, lb/hr:	14.1	14.1	14.1	14.1	5.7	5.8	6.0	5.8	5.8	5.2	5.4	
Actual F lb/hr:	0.4	0.9	2.6	2.1	1.5	1.5	2.4	0.9	1.2	1.0	1.8	
Allowable, lb/hr:	3.5	3.5	3.5	3.5	3.5	3.5	3.2	3.0	3.0	2.7	2.8	
Actual SO ₂ lb/hr:	0.2			3.3	٠	3.4	8.5	4.5				
Allowable, lb/hr:	22			22		22	22	22	-			
Actual NOx lb/hr:	5.1		0.8	3.6	1.3	6.2	5.2	2.7	1.7	1.0	0.9	
Allowable, lb/hr:	12.6		12.6	12.6	12.6	12.6	12.6	12.6	12.6	12.6	12.6 🚊 🛨	20%
R/G Venturi GPM:		s * _				2	1000	1608	1534	1546	(501) 120	1-18
R/G Venturi Pressure Drop:	14.0	18.5	16.5	24.0	17.0	18.0	1000	19.2	17.2	18.8	20.1 (6.1	1-24
Dryer Venturi GPM:	y e					•	1000	1652	1561	1550	(1497) 11	48-17
Dryer Venturi Pressure	14.5	20	19	19.2	21.0	19.5	Ž1.3	23.9	16.3	23.8	21.5 17.8	2-25.
Drop:												
R/G Tailgas GPM:							1 5Q 0	2000	1894	1936	(2236)178	99-261
R/G Tailgas Pressure Drop:	6.2	3.0	3.4	5.4			5,0°	5.7	5.1	5.4	6.4 5.1	トフィ
Dryer Tailgas GPM:		•				-	1300 50 1000 3.8	1650	1594	1894	(1989) 159	1-238
Dryer Tailgas Pressure Drop:	6.2	2.0	3.4	2.9		•	3.8	4.0	4.1	3.5	3.9 3.1	+47

AU TESTS Proposed Pressure Drop Range 2000-2003 [4.0-24.0 R/G Venturi: (15.0-24.0 |5.7-24.0 | [4.5-25.9 Dryer Venturi: (15.0-23.8 |6.3-23.9 | 3.0-6.4 R/G Tailgas: 3.0-6.4 5.0-6.4 | 2.0-6.2 Dryer Tailgas: 2.0-6.2 3.5-4.1

GPM 2000-2003 1000-1608 1000-1652 1500-2236 1000-1989

IMC Phosphates Company – New Wales Plant – Facility ID No. 1050059 GMAP 3 Plant EU ID No. 078

Test Results:				5 PECIAL
Test Date:	7/13/2001	5/09/2002	5/24/2002	3/05/2003
TPH	95	139	117.5	124
TPH P ₂ O ₅ input:	45.3	74.7	62.3	67.1
Fuel Type:	Natural Gas	No. 6 Oil	Natural Gas	Natural Gas
Allowable, mmBtu/hr:	15.4	9.6	10.2	6.1
Actual PM lb/hr:	5.54	5.24		·
Allowable, lb/hr:	6.1	9		
Actual F lb/hr:	0.28	0.64	0.61	0.21 + 200
Allowable, lb/hr:	1.7	2	2	2.1
	1689-1854 1689	1854	1880	1758 1406-2
Venturi Pressure Drop: 2		21.8	22.8	20.8 16.6-25
Impact Spray GPM:	904-1505 (1421)	(1568)	(1585)	904 (723-100
	063-123/ 1063	1231	1216	1150 420 - 139
Kimre Pressure Drop: ((2.6-9.8) 2.6	3.9	3.6	9.8 (7.8 - 11.3
Equipment Venturi GPM	M: 378-436 378	393	418	436 349-52
Equipment Venturi Press		17.8	17.9	16 12.8-14
Drop:				
Equipment Impact Spray	y 236-249 238	247	241	236 189 - 28
GPM:				1
GPM:				.

Proposed Pressure Drop Range

Kimre Face: 2.6 – 9.8

ATTACHMENT 3

Certification by Professional Engineer

Based on my review of the above information submitted, I certify, to the best of my knowledge, that there is reasonable assurance the air pollutant emission unit and the air pollution control equipment described herein, when properly operated and maintained, will comply with all applicable standards for control of air pollutant emissions found in Florida statutes and rules of the Department. Furthermore, I certify that, to the best of my knowledge, the emission estimates and cost estimates reported or relied upon in these documents are true, accurate and complete and are based on reasonable techniques available for calculating emissions.

C. D. Turley, P.E.

No. 0023344

Date