

Certified Mail 7002 2030 0002 3542 8992 Return Receipt Requested

April 21, 2003

Mr. Gerald J. Kissel Florida Department of Environmental Protection Southwest District 3804 Coconut Palm Drive Tampa, Florida 33619-8218

RE: Alternative Monitoring Method Proposal

NESHAP, 40 CFR 63, Subparts AA and BB

Facility ID No. 1050059

Title V Permit No. 1050059-014-AV

**New Wales Facility** 

#### Dear Mr. Kissel:

IMC Phosphates Company has completed testing at New Wales phosphoric acid plants and certain granulation plants to establish an upper-bound for pressure drop ranges to be proposed to the Department for purposes of complying with the above-referenced MACT Rule. These data and proposed pressure drop ranges are attached for your review and approval.

Liquid flow rates on all plant scrubbers complying with Subparts AA and BB will be maintained within +/- 20% of the flow established during the most recent compliance test. With the exception of plant scrubbers addressed in this proposal, pressure drops will also be maintained within +/- 20% of the pressure drop established during the most recent compliance test.

Data summaries from East Train, West Train, and Third Train phosphoric acid plants are presented in Attachment 1. Data summaries from DAP 2 East, DAP 2 West, and GMAP 3 are presented in Attachment 2.

The recently completed stack test reports have been forwarded to Bill Proses of your staff under separate cover. For purposes of comparison, except for DAP 2 East and West, the three most recent compliance test summaries are also provided in addition to the higher pressure drop test summary. For DAP 2 plants, historical data collected since 1995 is provided to determine proposed ranges. Any additional information beyond that included on the enclosed Attachments may be found in those reports.

An extension of time for requesting an administrative hearing has been granted by the Department through and including May 1, 2003. Counsel has advised that the extension is needed until a satisfactory proposed permit has been issued. This has been discussed with Ann Quillian and a ninety (90) day extension until on or about August 1, 2003 will be requested to provide time for the Department to review and approve this proposal and issue a revised Title V permit with the appropriate modifications.

Please contact Phil Steadham at (863) 428-7106 if any supplemental information is needed.

Sincerely,

M. A. Daigle

Vice President

Concentrates - Florida

MAD:jp attachments

CC:

J. R. Schneider

M. A. Renslow

P. A. Steadham

C. D. Turley

J. B. Upton

W. C. Tims, Jr.

Susan L. Stephens (Holland & Knight, LLP)

## Attachment 1

# IMC Phosphates Company – New Wales Plant – Facility ID No. 1050059 · Phosphoric Acid Plant (East) EU ID No. 008

Test Results:	Test	Results:	
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<u> </u>				
Test Date:	5/11/2000	8/09/2001	4/09/2002	3/18/2003
TPD P <sub>2</sub> O <sub>5</sub> 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	676	589
Scrubber Pressure Drop:	0.3	1.7	0.5	10.5

Proposed Pressure Drop Range: 0.2 - 10.5

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

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Test Date:	5/18/2000	<u>5/24/2001</u>	3/26/2002	3/31/2003
TPD P <sub>2</sub> O <sub>5</sub> input:	2056	1942	2062	2068
Actual F lb/hr:	0.89	0.73	0.69	0.39
Allowable, lb/hr:	1.53	1.53	1.71	1.53
Total GPM:	636	701	669	583
Scrubber Pressure Drop	0.4	2.3	3.9	5

Proposed Pressure Drop Range: 0.2 - 5.0

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

Test	Resu	1115

Test Date:	5/25/2000	5/18/2001	4/17/2002	3/17/2003
TPD P₂O₅ input:	2673	2375	2436	2407
Actual F lb/hr:	0.58	1.42	0.25	0.23
Allowable, lb/hr:	1.79	1.79	1.79	1.79
Total GPM:	683	695	708	597
Scrubber Pressure Drop:	0.3	0.3	0.5	10.5

Proposed Pressure Drop Range: 0.2 - 10.5

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

Test Results	:
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Test Date:	1/25/95	1/30/96	<u>3/12/97</u>	2/03/98	<u>5/12/98</u>	2/23/99	8/29/00	<u>9/24/01</u>	10/10/01	10/30/2002	3/26/2003
ТРН	139	140	140	137	150	154	168	152	154	139	142
TPH P <sub>2</sub> O <sub>5</sub> input:	67.1	68.0	67.8	64.6	71.0	72.0	75.5	72.1	72.7	64.9	67.5
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 <sub>2</sub> lb/hr:	0.2			3.3		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
R/G Venturi GPM:							1000	1608	1534	1546	1501
R/G Venturi Pressure Drop:	14.0	18.5	16.5	24.0	17.0	18.0	15.7	19.2	17.2	18.8	20.1
Dryer Venturi GPM:							1000	1652	1561	1550	1497
Dryer Venturi Pressure	14.5	20	19	19.2	21.0	19.5	21.3	23.9	16.3	23.8	21.5
Drop:											
R/G Tailgas GPM:	7	•					1500	2000	1894	1936	2236
R/G Tailgas Pressure Drop:	6.2	3.0	3.4	5.4		·	5.0	5.7	5.1	5.4	6.4
Dryer Tailgas GPM:							1000	1650	1594	1894	1989
Dryer Tailgas Pressure Drop:	6.2	2.0	3.4	2.9			3.8	4.0	4.1	3.5	3.9

Proposed Pressure Drop Range

R/G Venturi: 15.0 – 24.0 Dryer Venturi: 15.0 – 23.8 R/G Tailgas: 3.0 – 6.4 Dryer Tailgas: 2.0 – 6.2

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

Test Date:	1/17/95	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 <sub>2</sub> O <sub>5</sub> 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	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 <sub>2</sub> 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:	4					1100	1520	1686	1549
R/G Venturi Pressure Drop:	17.4	18.0	16.7	16.1	17.0	18.6	20.5	21.3	21.3
Dryer Venturi GPM:						1100	1500	1712	1551
Dryer Venturi Pressure Drop:	15.7	19.0	15.5	20.7	15.5	17.1	19.5	21.9	22.1
R/G Tailgas GPM:						2200	1967	2231	2190
R/G Tailgas Pressure Drop:	7.6	3.0	3.1	•		6.0	5.2	5.2	7.0
Dryer Tailgas GPM:	•		•			1200	1700	1791	1992
Dryer Tailgas Pressure Drop:	2.9	3.0	1.9			4	4.1	3.7	4.2

Proposed Pressure Drop Range

R/G Venturi: 15.0 – 21.3 Dryer Venturi: 15.0 – 22.1 R/G Tailgas: 3.0 – 7.6 Dryer Tailgas: 1.9 – 4.2

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

#### Test Results:

Test Date:	7/13/2001	5/09/2002	5/24/2002	3/05/2003
ТРН	95	139	117.5	124
TPH P <sub>2</sub> O <sub>5</sub> 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
Allowable, lb/hr:	1.7	2	2	2.1
Venturi GPM:	1689	1854	1880	1758
Venturi Pressure Drop:	22.5	21.8	22.8	20.8
Impact Spray GPM:	1421	1568	1585	904
Kimre Face GPM:	1063	1231	1216	1150
Kimre Pressure Drop:	2.6	3.9	3.6	9.8
Equipment Venturi GPM:	378	393	418	436
Equipment Venturi Pressure	15.4	17.8	17.9	16
Drop:	•	•		
Equipment Impact Spray GPM:	238	247	241	236

Proposed Pressure Drop Range

Venturi: 20.8 – 22.8 Kimre Face: 2.6 – 9.8

Equipment Venturi: 15.4-17.9