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GAINESVILLE, FLORIDA 32609
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KA 124-00-05

March 14, 2003

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BUREAU OF AIR REGULATION

Mr. Syed Arif, P.E.
Florida Department of
Environmental Protection
Twin Towers Office Building
2600 Blair Stone Road
Tallahassee, FL 32399-2400

Subject: IMC Phosphates MP, Inc. (New Wales)
Multifos Plant - Kiln C Permit Revision
No. 1050059-024-AC, PSD-FL-244 A

033

Dear Mr. Arif:

This is a follow up to your recent request for summary pages of tests data for the above referenced emission unit.

The requested data summary information is attached. Please note that field data entry was made directly into a computer so handwritten notes were unnecessary; and, formal test summary pages were not generated for the performance evaluation tests as they were not necessary. It is our understanding that other issues have already been clarified based on your conversation with Pradeep Raval.

IMC will revise the permit application, as necessary, subsequent to your review of the enclosed information. If you have any further questions, please call Pradeep Raval or me.

Very truly yours,

KOOGLER & ASSOCIATES

John B. Koogler, Ph.D., P.E.

JBK:par
Encl.

C: C. Dave Turley, IMC

Introduction:

This report details the compliance sampling results for the following source:

Project: Multifos C-Kiln
 Facility: New Wales Operations
 Point ID: 74
 AIRS: 1050059
 Permit Number: 1050059-014-AV (1050059-024-AC)
 Test Date: October 31, 2000 & November 1, 2000

Summary of Results

The source was found to be in compliance with the conditions of the above-referenced permit with the exception of fluoride emission limitations. Compliance issues with these two pollutants are being addressed by staff of the Florida Department of Environmental Protection Bureau of Air Quality Management in Tallahassee, who issued the PSD construction permit in September, 1998. The process data and emissions testing results are summarized below:

Process Data:

Date	Kiln Feed Rate TPH	P2O5 Feed Rate TPH	Emission Type Tested
10/31/2000	10.5	3.73	Particulate, Fluoride & Visible Emissions
11/1/2000	11.23	4.08	Sulfur Dioxide

Fuel Firing Information

Date	Kiln Fuel	Kiln Fuel Rate
10/31/2000	Natural Gas	45.2 MMBtu/hr
11/1/2000	Natural Gas	44.8 MMBtu/hr

Emissions:

Allowables by Permit Condition Number P.5, P.6, P.8, & P.9

	Actual	Allowable	
Fluorides: lb/hr	0.62	0.14	based on P2O5 input rate on 10/31/2000
lb/ton P2O5	0.166	0.038	
Particulates: lb/hr	3.04	5.60	based on P2O5 input rate on 10/31/2000
lb/ton P2O5	0.814	1.5	
Sulfur Dioxide: lb/hr	2.17	8.70	
Visible Emissions: %	7.3	15	

Emissions Testing Methods:

Methods in accordance with Specific Condition Number P.15

Fluorides: Method 5 & 13B Combined with modifications as allowed by Department for analysis.

Particulate: Method 5 & 13B Combined.

Sulfur Dioxide: Method 8 without analysis for Acid Mist

Visible Emissions: Method 9

Source Sampling Summary Sheet							
		Facility:	NEW WALES				
		Plant:	MULTIFOS C- KILN				
		Company ID:	1108				
		FDEP AIRS & Pt. ID:	1050059-074				
		Test Team:	RS/FB				
		Parameter	Unit	Run 1	Run 2	Run 3	Average
		Date:		10/31/2000	10/31/2000	10/31/2000	
		Time Start:		1130	1307	1430	
		Time End:		1244	1412	1536	
		Barometric Pressure:	Inch Hg	30.13	30.13	30.13	
		Static Pressure:	Inch H2O	0.35	0.35	0.35	
		Stack Pressure:	Inch Hg	30.156	30.156	30.156	
		Average Sqrt Delta P:	Inch HOH 1/2	0.568	0.570	0.582	
		Average Delta H:	Inch HOH	1.088	1.126	1.118	1.111
		Maximum Run Vacuum:	Inch Hg	9.0	7.0	7.0	
		Meter Box Number:	Unity	3187	3187	3187	
		Average Meter Temp:	Degrees F	84.2	88.6	79.6	
		Average Stack Temp:	Degrees F	102.5	103.8	102.6	103.0
		Metered Sample Volume:	Cubic Feet	35.84	36.65	37.12	
		Standard Meter Volume:	Cubic Feet	34.99	35.49	36.55	
		Moisture Measured:	%	0.0717	0.0525	0.0583	
		Moisture Saturation:	%	0.0692	0.0717	0.0693	
		Moisture Used for Calculations:	%	0.0692	0.0525	0.0583	0.0600
		Pitot Coefficient:	Unity	0.84	0.84	0.84	
		Nozzle Diameter:	Inch	0.248	0.248	0.248	
		Stack Area:	Square Feet	7.07	7.07	7.07	
		Traverse Points:	Unity	24	24	24	
		Sampling Time:	Minutes	60	60	60	
		Stack Gas Molecular Weight:	lb/lb-mol	28.210	28.393	28.329	
		Actual Stack Velocity:	Feet/sec	33.175	33.224	33.931	33.443
		Actual Stack Gas Flow:	ACFM	14063	14084	14383	14177
		Dry Standard Stack Gas Flow:	DSCFM	12382	12596	12810	12596
		Isokinetic Rate:	%	99.28	99.00	100.23	
		Fluoride Emission:	lb/day	8.76	14.94	21.15	14.95
		Fluoride Emission:	lb/hr	0.37	0.62	0.88	0.62
		Particulate Emission:	lb/day	42.54	73.95	102.40	72.96
		Particulate Emission:	lb/hr	1.77	3.08	4.27	3.04

SO₂ Scrubber On-

Source Sampling Summary Sheet					
Facility:	NEW WALES				
Plant:	MULTIFOS C-KILN				
Company ID:	1108				
FDEP AIRS & Pl. ID:	1050059-074				
Test Team:	RS/DA				
Parameter	Unit	Run 1	Run 2	Run 3	Average
Date:		11/30/2000	11/30/2000	11/30/2000	
Time Start:		1100	1241	1438	
Time End:		1216	1400	1544	
Barometric Pressure:	Inch Hg	30.21	30.21	30.21	
Static Pressure:	Inch H ₂ O	0.46	0.46	0.46	
Stack Pressure:	Inch Hg	30.244	30.244	30.244	
Average Sqrt Delta P:	Inch HOH 1/2	0.594	0.604	0.605	
Average Delta H:	Inch HOH	1.213	1.260	1.319	1.264
Maximum Run Vacuum:	Inch Hg	10.0	7.0	10.0	
Meter Box Number:	Unity	3187	3187	3187	
Average Meter Temp:	Degrees F	75.9	81.8	82.0	
Average Stack Temp:	Degrees F	92.8	94.1	92.2	93.0
Metered Sample Volume:	Cubic Feet	37.80	38.93	39.29	
Standard Meter Volume:	Cubic Feet	37.58	38.29	38.64	
Moisture Measured:	%	0.0570	0.0525	0.0525	
Moisture Saturation:	%	0.0513	0.0534	0.0504	
Moisture Used for Calculations:	%	0.0513	0.0525	0.0504	0.0514
Pitot Coefficient:	Unity	0.84	0.84	0.84	
Nozzle Diameter:	Inch	0.248	0.248	0.248	
Stack Area:	Square Feet	7.07	7.07	7.07	
Traverse Points:	Unity	24	24	24	
Sampling Time:	Minutes	60	60	60	
Stack Gas Molecular Weight:	lb/lb-mol	28.406	28.393	28.416	
Actual Stack Velocity:	Feet/sec	34.229	34.822	34.841	34.631
Actual Stack Gas Flow:	ACFM	14510	14761	14769	14680
Dry Standard Stack Gas Flow:	DSCFM	13290	13471	13555	13439
Isokinetic Rate:	%	99.35	99.87	100.14	
Fluoride Emission:	lb/day	16.27	9.52	14.59	13.46
Fluoride Emission:	lb/hr	0.68	0.40	0.61	0.56
Particulate Emission:	lb/day	106.90	72.64	108.16	95.90
Particulate Emission:	lb/hr	4.45	3.03	4.51	4.00

SO Scrubber OFF

Source Sampling Summary Sheet						
	Facility:	NEW WALES				
	Plant:	C KILN				
	Company ID:	1108				
	FDEP AIRS & Pt. ID:	1050059-074				
	Test Team:	DA,RS				
	Parameter	Unit	Run 1	Run 2	Run 3	Average
	Date:		12/01/2000	12/01/2000	12/01/2000	
	Time Start:		824	1003	1130	
	Time End:		930	1107	1234	
	Barometric Pressure:	Inch Hg	30.11	30.11	30.11	
	Static Pressure:	Inch H2O	0.31	0.31	0.31	
	Stack Pressure:	Inch Hg	30.133	30.133	30.133	
	Average Sqrt Delta P:	Inch HOH	0.616	0.616	0.607	
	Average Delta H:	Inch HOH	1.355	1.378	1.303	1.345
	Maximum Run Vacuum:	Inch Hg	10.0	7.0	6.0	
	Meter Box Number:	Unity	3187	3187	3187	
	Average Meter Temp:	Degrees F	66.1	77.8	80.1	
	Average Stack Temp:	Degrees F	87.4	88.6	89.9	88.6
	Metered Sample Volume:	Cubic Feet	39.58	39.95	39.70	
	Standard Meter Volume:	Cubic Feet	39.97	39.47	39.05	
	Moisture Measured:	%	0.0504	0.0552	0.0545	
	Moisture Saturation:	%	0.0435	0.0451	0.0470	
	Moisture Used for Calculations:	%	0.0435	0.0451	0.0470	0.0452
	Pitot Coefficient:	Unity	0.84	0.84	0.84	
	Nozzle Diameter:	Inch	0.248	0.248	0.248	
	Stack Area:	Square Fe	7.07	7.07	7.07	
	Traverse Points:	Unity	24	24	24	
	Sampling Time:	Minutes	60	60	60	
	Stack Gas Molecular Weight:	lb/lb-mol	28.492	28.474	28.453	
	Actual Stack Velocity:	Feet/sec	35.325	35.392	34.935	35.217
	Actual Stack Gas Flow:	ACFM	14974	15003	14809	14929
	Dry Standard Stack Gas Flow:	DSCFM	13912	13885	13647	13815
	Isokinetic Rate:	%	100.94	99.86	100.52	
	Fluoride Emission:	lb/day	18.37	10.20	7.26	11.94
	Fluoride Emission:	lb/hr	0.77	0.42	0.30	0.50
	Particulate Emission:	lb/day	91.41	56.13	30.60	59.38
	Particulate Emission:	lb/hr	3.81	2.34	1.27	2.47

Source Sampling Summary Sheet						
	Facility:	NEW WALES				
	Plant:	MULTIFOS C KILN				
	Company ID:	1108				
	FDEP AIRS & Pt. ID:	1050059-074				
	Test Team:	RS/FB				
	Parameter	Unit	Run 1	Run 2	Run 3	Average
	Date:		12/08/2000	12/08/2000	12/08/2000	
	Time Start:		905	1037	1155	
	Time End:		1011	1149	1305	
	Barometric Pressure:	Inch Hg	30.15	30.15	30.15	
	Static Pressure:	Inch H2O	0.38	0.38	0.38	
	Stack Pressure:	Inch Hg	30.178	30.178	30.178	
	Average Sqrt Delta P:	Inch HOH 1/2	0.620	0.632	0.615	
	Average Delta H:	Inch HOH	1.273	1.347	1.275	1.298
	Maximum Run Vacuum:	Inch Hg	9.0	10.0	9.0	
	Meter Box Number:	Unity	3188	3188	3188	
	Average Meter Temp:	Degrees F	73.5	80.8	86.5	
	Average Stack Temp:	Degrees F	86.4	87.9	88.4	87.6
	Metered Sample Volume:	Cubic Feet	39.04	40.35	39.95	
	Standard Meter Volume:	Cubic Feet	39.90	40.69	39.86	
	Moisture Measured:	%	0.0541	0.0498	0.0514	
	Moisture Saturation:	%	0.0420	0.0441	0.0448	
	Moisture Used for Calculations:	%	0.0420	0.0441	0.0448	0.0436
	Pitot Coefficient:	Unity	0.84	0.84	0.84	
	Nozzle Diameter:	Inch	0.248	0.248	0.248	
	Stack Area:	Square Feet	7.07	7.07	7.07	
	Traverse Points:	Unity	24	24	24	
	Sampling Time:	Minutes	60	60	60	
	Stack Gas Molecular Weight:	lb/lb-mol	28.508	28.486	28.477	
	Actual Stack Velocity:	Feet/sec	35.470	36.213	35.305	35.663
	Actual Stack Gas Flow:	ACFM	15036	15351	14966	15118
	Dry Standard Stack Gas Flow:	DSCFM	14039	14263	13881	14061
	Isokinetic Rate:	%	99.84	100.23	100.88	
	Fluoride Emission:	lb/day	13.87	40.26	44.62	32.92
	Fluoride Emission:	lb/hr	0.58	1.68	1.86	1.37
	Particulate Emission:	lb/day	115.97	196.90	205.91	172.93
	Particulate Emission:	lb/hr	4.83	8.20	8.58	7.21

Source Sampling Summary Sheet

Facility:	NEW WALES		
Plant:	MULTIFOS C- KILN		
Company ID:	0		
FDEP AIRS & Pt. ID:	0		
Test Team:	RS/DA		
Parameter	Unit	Run 1	Run 2
Date:		12/15/2000	12/20/2000
Time Start:		10:00	13:50
Time End:		10:30	14:20
Barometric Pressure:	Inch Hg	30.32	30.22
Static Pressure:	Inch H2O	0.33	0.33
Stack Pressure:	Inch Hg	30.344	30.244
Average Sqrt Delta P:	Inch HOH 1/2	0.663	0.640
Average Delta H:	Inch HOH	1.368	1.500
Maximum Run Vacuum:	Inch Hg	9.0	9.0
Meter Box Number:	Unity	3188	3188
Average Meter Temp:	Degrees F	77.4	72.2
Average Stack Temp:	Degrees F	105.4	84.1
Metered Sample Volume:	Cubic Feet	19.93	20.21
Standard Meter Volume:	Cubic Feet	20.34	20.76
Moisture Measured:	%	0.0496	0.0323
Moisture Saturation:	%	0.0749	0.0390
Moisture Used for Calculations:	%	0.0496	0.0323
Pitor Coefficient:	Unity	0.84	0.84
Nozzle Diameter:	Inch	0.248	0.248
Stack Area:	Square Feet	7.07	7.07
Traverse Points:	Unity	12	12
Sampling Time:	Minutes	30	30
Stack Gas Molecular Weight:	lb/lb-mol	28.425	28.615
Actual Stack Velocity:	Feet/sec	38.558	36.431
Actual Stack Gas Flow:	ACFM	16345	15443
Dry Standard Stack Gas Flow:	DSCFM	14712	14660
Isokinetic Rate:	%	97.13	99.52
Fluoride Emission:	lb/day	16.23	29.54
Fluoride Emission:	lb/hr	0.68	1.23
Particulate Emission:	lb/day	127.11	150.93
Particulate Emission:	lb/hr	5.30	6.29

Source Sampling Summary Sheet						
Facility:	NEW WALES					
Plant:	C-KILN					
Company ID:						
FDEP AIRS & Pt. ID:						
Test Team:	RS/DA					
Parameter	Unit	Run 1	Run 2	Run 3	Average	
Date:		1/16/2001	1/16/2001	1/16/2001		
Time Start:		13:25	1405	0		
Time End:		1355	1435	0		
Barometric Pressure:	Inch Hg	30.09	30.09	30.09		
Static Pressure:	Inch H2O	0.30	0.30	0.30		
Stack Pressure:	Inch Hg	30.112	30.112	30.112		
Average Sqrt Delta P:	Inch HOH 1/2	0.615	0.633	#DIV/0!		
Average Delta H:	Inch HOH	1.298	1.363	#DIV/0!	#DIV/0!	
Maximum Run Vacuum:	Inch Hg	6.0	6.0	0.0		
Meter Box Number:	Unity	3188	3188	3188		
Average Meter Temp:	Degrees F	81.6	83.9	#DIV/0!		
Average Stack Temp:	Degrees F	96.5	96.9	#DIV/0!	#DIV/0!	
Metered Sample Volume:	Cubic Feet	19.46	20.03	0.00		
Standard Meter Volume:	Cubic Feet	19.56	20.04	#DIV/0!		
Moisture Measured:	%	0.0668	0.0733	#DIV/0!		
Moisture Saturation:	%	0.0577	0.0585	#DIV/0!		
Moisture Used for Calculations:	%	0.0577	0.0585	#DIV/0!	#DIV/0!	
Pitot Coefficient:	Unity	0.84	0.84	0.84		
Nozzle Diameter:	Inch	0.25	0.25	0.25		
Stack Area:	Square Feet	7.07	7.07	7.07		
Traverse Points:	Unity	12	12	12		
Sampling Time:	Minutes	30	30	30		
Stack Gas Molecular Weight:	lb/lb-mol	28.336	28.328	#DIV/0!		
Actual Stack Velocity:	Feet/sec	35.649	36.742	#DIV/0!	#DIV/0!	
Actual Stack Gas Flow:	ACFM	15112	15575	#DIV/0!	#DIV/0!	
Dry Standard Stack Gas Flow:	DSCFM	13596	13992	#DIV/0!	#DIV/0!	
Isokinetic Rate:	%	99.45	99.04	#DIV/0!		
Fluoride Emission:	lb/day	12.83	12.86	#DIV/0!	#DIV/0!	
Fluoride Emission:	lb/hr	0.53	0.54	#DIV/0!	#DIV/0!	
Particulate Emission:	lb/day	99.24	80.82	#DIV/0!	#DIV/0!	
Particulate Emission:	lb/hr	4.13	3.37	#DIV/0!	#DIV/0!	

Source Sampling Summary Sheet						
	Facility:	NEW WALES				
	Plant:	C-KILN				
	Company ID:	1108				
	FDEP AIRS & Pt. ID:	1050059-074				
	Test Team:	DA,FB				
	Parameter	Unit	Run 1	Run 2	Run 3	Average
	Date:		1/17/2001	1/17/2001	1/17/2001	
	Time Start:		10:00	10:51	0	
	Time End:		10:30	11:21	0	
	Barometric Pressure:	Inch Hg	30.13	30.13	30.13	
	Static Pressure:	Inch H2O	0.30	0.30	0.30	
	Stack Pressure:	Inch Hg	30.152	30.152	30.152	
	Average Sqrt Delta P:	Inch HOH 1/2	0.658	0.652	#DIV/0!	
	Average Delta H:	Inch HOH	1.486	1.464	#DIV/0!	#DIV/0!
	Maximum Run Vacuum:	Inch Hg	7.0	8.0	0.0	
	Meter Box Number:	Unity	3188	3188	3188	
	Average Meter Temp:	Degrees F	75.2	83.0	#DIV/0!	
	Average Stack Temp:	Degrees F	95.8	97.4	#DIV/0!	#DIV/0!
	Metered Sample Volume:	Cubic Feet	20.77	20.92	0.00	
	Standard Meter Volume:	Cubic Feet	21.15	21.00	#DIV/0!	
	Moisture Measured:	%	0.0549	0.0614	#DIV/0!	
	Moisture Saturation:	%	0.0565	0.0593	#DIV/0!	
	Moisture Used for Calculations:	%	0.0549	0.0593	#DIV/0!	#DIV/0!
	Pitot Coefficient:	Unity	0.84	0.84	0.84	
	Nozzle Diameter:	Inch	0.25	0.25	0.25	
	Stack Area:	Square Feet	7.07	7.07	7.07	
	Traverse Points:	Unity	12	12	12	
	Sampling Time:	Minutes	30	30	30	
	Stack Gas Molecular Weight:	lb/lb-mol	28.367	28.319	#DIV/0!	
	Actual Stack Velocity:	Feet/sec	38.063	37.838	#DIV/0!	#DIV/0!
	Actual Stack Gas Flow:	ACFM	16135	16039	#DIV/0!	#DIV/0!
	Dry Standard Stack Gas Flow:	DSCFM	14598	14402	#DIV/0!	#DIV/0!
	Isokinetic Rate:	%	100.19	100.83	#DIV/0!	
	Fluoride Emission:	lb/day	27.70	41.29	#DIV/0!	#DIV/0!
	Fluoride Emission:	lb/hr	1.15	1.72	#DIV/0!	#DIV/0!
	Particulate Emission:	lb/day	137.25	194.89	#DIV/0!	#DIV/0!
	Particulate Emission:	lb/hr	5.72	8.12	#DIV/0!	#DIV/0!

Source Sampling Summary Sheet						
	Facility:	NEW WALES				
	Plant:	C-KILN				
	Company ID:	1108				
	FDEP AIRS & Pt. ID:	1050059-074				
	Test Team:	RS/FB				
Parameter	Unit	Run 1	Run 2	Run 3	Average	
Date:		5/3/2001	5/3/2001	5/3/2001		
Time Start:		840	955	0		
Time End:		910	1025	0		
Barometric Pressure:	Inch Hg	30.27	30.27	30.27		
Static Pressure:	Inch H2O	0.32	0.32	0.32		
Stack Pressure:	Inch Hg	30.294	30.294	30.294		
Average Sqrt Delta P:	Inch HOH 1/2	0.636	0.617	#DIV/0!		
Average Delta H:	Inch HOH	1.433	1.385	#DIV/0!	#DIV/0!	
Maximum Run Vacuum:	Inch Hg	11.0	10.0	0.0		
Meter Box Number:	Unity	3187	3187	3187		
Average Meter Temp:	Degrees F	73.4	79.4	#DIV/0!		
Average Stack Temp:	Degrees F	94.0	96.2	#DIV/0!	#DIV/0!	
Metered Sample Volume:	Cubic Feet	20.42	20.02	0.00		
Standard Meter Volume:	Cubic Feet	20.63	20.00	#DIV/0!		
Moisture Measured:	%	0.0430	0.0411	#DIV/0!		
Moisture Saturation:	%	0.0532	0.0568	#DIV/0!		
Moisture Used for Calculations:	%	0.0430	0.0411	#DIV/0!	#DIV/0!	
Pitot Coefficient:	Unity	0.84	0.84	0.84		
Nozzle Diameter:	Inch	0.25	0.25	0.25		
Stack Area:	Square Feet	7.07	7.07	7.07		
Traverse Points:	Unity	12	12	12		
Sampling Time:	Minutes	30	30	30		
Stack Gas Molecular Weight:	lb/lb-mol	28.497	28.518	#DIV/0!		
Actual Stack Velocity:	Feet/sec	36.569	35.532	#DIV/0!	#DIV/0!	
Actual Stack Gas Flow:	ACFM	15501	15062	#DIV/0!	#DIV/0!	
Dry Standard Stack Gas Flow:	DSCFM	14314	13883	#DIV/0!	#DIV/0!	
Isokinetic Rate:	%	99.67	99.62	#DIV/0!		
Fluoride Emission:	lb/day	16.34	15.34	#DIV/0!	#DIV/0!	
Fluoride Emission:	lb/hr	0.68	0.64	#DIV/0!	#DIV/0!	
Particulate Emission:	lb/day	67.55	79.25	#DIV/0!	#DIV/0!	
Particulate Emission:	lb/hr	2.81	3.30	#DIV/0!	#DIV/0!	

Source Sampling Summary Sheet						
	Facility:	NEW WALES				
	Plant:	C-KILN				
	Company ID:	1108				
	FDEP AIRS & Pt. ID:	1050059-074				
	Test Team:	FB/RS				✓
	Parameter	Unit	Run 1	Run 2	Run 3	Average
	Date:		5/3/2001	5/3/2001	5/3/2001	
	Time Start:		1130	1220	0	
	Time End:		1200	1250	0	
	Barometric Pressure:	Inch Hg	30.27	30.27	30.27	
	Static Pressure:	Inch H2O	0.32	0.32	0.32	
	Stack Pressure:	Inch Hg	30.294	30.294	30.294	
	Average Sqrt Delta P:	Inch HOH 1/2	0.612	0.625	#DIV/0!	
	Average Delta H:	Inch HOH	1.407	1.373	#DIV/0!	#DIV/0!
	Maximum Run Vacuum:	Inch Hg	8.0	7.0	0.0	
	Meter Box Number:	Unity	3187	3187	3187	
	Average Meter Temp:	Degrees F	82.0	83.0	#DIV/0!	
	Average Stack Temp:	Degrees F	95.0	97.9	#DIV/0!	#DIV/0!
	Metered Sample Volume:	Cubic Feet	19.93	20.25	0.00	
	Standard Meter Volume:	Cubic Feet	19.82	20.10	#DIV/0!	
	Moisture Measured:	%	0.0493	0.0576	#DIV/0!	
	Moisture Saturation:	%	0.0548	0.0599	#DIV/0!	
	Moisture Used for Calculations:	%	0.0493	0.0576	#DIV/0!	#DIV/0!
	Pitot Coefficient:	Unity	0.84	0.84	0.84	
	Nozzle Diameter:	Inch	0.25	0.25	0.25	
	Stack Area:	Square Feet	7.07	7.07	7.07	
	Traverse Points:	Unity	12	12	12	
	Sampling Time:	Minutes	30	30	30	
	Stack Gas Molecular Weight:	lb/lb-mol	28.429	28.337	#DIV/0!	
	Actual Stack Velocity:	Feet/sec	35.283	36.170	#DIV/0!	#DIV/0!
	Actual Stack Gas Flow:	ACFM	14956	15332	#DIV/0!	#DIV/0!
	Dry Standard Stack Gas Flow:	DSCFM	13696	13845	#DIV/0!	#DIV/0!
	Isokinetic Rate:	%	100.04	100.39	#DIV/0!	
	Fluoride Emission:	lb/day	10.26	9.34	#DIV/0!	#DIV/0!
	Fluoride Emission:	lb/hr	0.43	0.39	#DIV/0!	#DIV/0!
	Particulate Emission:	lb/day	51.30	52.65	#DIV/0!	#DIV/0!
	Particulate Emission:	lb/hr	2.14	2.19	#DIV/0!	#DIV/0!

Summary for Particulate and Fluoride Testing

Test condition or discription:		Pre -test before use as dryer.			
		Direct	Direct	Direct	
Parameter	Unit	Run 1	Run 2	Run 3	Average
Date:		05/11/01	05/11/01	05/11/01	
Time Start:		923	1120	1306	
Time End:		1026	1222	1408	
Barometric Pressure:	Inch Hg	30.17	30.17	30.16	
Static Pressure:	Inch H2O	-0.2	-0.18	-0.23	
Stack Pressure:	Inch Hg	30.16	30.16	30.14	
Average Sqrt Delta P:	Inch HOH 1/2				
Average Delta H:	Inch HOH				
Maximum Run Vacuum:	Inch Hg				
Meter Box Number:	Unity				
Average Meter Temp:	Degrees F	84.2	91.2	95	
Average Stack Temp:	Degrees F	101.2	100.5	101.8	101.1667
Metered Sample Volume:	Cubic Feet	38.298	39.954	39.859	
Standard Meter Volume:	Cubic Feet	37.488	38.623	38.249	
Moisture Measured:	%				
Moisture Saturation:	%				
Moisture Used for Calculations:	%	5.8	5.9	5.7	5.8
Pitot Coefficient:	Unity	0.84	0.84	0.84	
Nozzle Diameter:	Inch	0.249	0.249	0.249	
Stack Area:	Square Feet	7.07	7.07	7.07	
Traverse Points:	Unity				
Sampling Time:	Minutes	60	60	60	
Stack Gas Molecular Weight:	lb/lb-mol				
Actual Stack Velocity:	Feet/sec	34.91	36.13	36.1	
Actual Stack Gas Flow:	ACFM	14806	15323	15311	15146.67
Dry Standard Stack Gas Flow:	DSCFM	13221	13691	13527	13479.67
Isokinetic Rate:	%	98.8	98.3	98.6	
Fluoride Emission:	lb/day				
	lb/hr	0.38	0.59	0.68	0.55
Particulate Emission:	lb/day				
	lb/hr	2	2.7	1.9	2.2

BEST AVAILABLE COPY**Extractive FTIR Testing by
EPA Method 320 of the 3rd Train,
AFI, MultiPhos C, A/B and
Clarifier Stack Emissions****Submitted to:**

**IMC Phosphates MP, Inc.
P.O. Box 2000
Mulberry, FL 33860-1100**

Submitted by:

**David Ranum
John Camin
Curtis T. Laush, Ph.D.
URS Corporation
9400 Amberglen Boulevard (78729)
P.O. Box 201088
Austin, Texas 78720-1088**

June 2002

Table 1-2. IMC Stack Testing – Process and Stack Conditions
(Provided by IMC Inc.)

Parameter	Unit	3rd Train	AFI	Multi C	Multi A/B	Clarifier
		Date				
		Time Start-End				
		5/14/02 1325-1430	5/15/02 1734-1855	5/18/02 1310-1430	5/18/02 1505-1610	5/21/02 1620-1723
Barometric Pressure	Inch Hg	30.05	30.07	30.15	30.18	30.13
Static Pressure	Inch H2O	-0.24	-0.83	-0.20	-0.20	-0.17
Stack Pressure	Inch Hg	30.032	30.009	30.135	30.165	30.118
Average Sqrt Delta P	Inch HOH 1/2	0.392	1.173	0.622	0.569	0.644
Average Delta H	Inch HOH	1.012	0.919	1.563	1.208	0.844
Maximum Run Vacuum	Inch Hg	3.0	3.0	11.0	4.0	2.0
Meter Box Number	Unity	3188	3188	3188	3188	3188
Average Meter Temp	Degrees F	84.6	87.8	76.8	80.1	83.0
Average Stack Temp	Degrees F	116.1	156.4	100.3	111.7	87.0
Metered Sample Volume	Cubic Feet	36.16	33.99	43.00	38.15	33.41
Standard Meter Volume	Cubic Feet	36.87	34.47	44.69	39.41	34.24
Moisture Measured	%	0.0995	0.2027	0.0449	0.0610	0.0342
Moisture Saturation	%	0.1029	0.2951	0.0647	0.0903	0.0429
Moisture Used for Calculations	%	0.0995	0.2027	0.0449	0.0610	0.0342
Pitot Coefficient	Unity	0.84	0.84	0.84	0.84	0.84
Nozzle Diameter	Inch	0.31	0.19	0.265	0.263	0.222
Stack Area	Square Feet	15.90	50.24	7.07	15.90	3.14
Traverse Points	Unity	12	20	24	12	8
Sampling Time:	Minutes	60	60	60	60	60
Stack Gas Molecular Weight	lb/lb-mol	27.878	26.746	28.477	28.300	28.594
Actual Stack Velocity	Feet/sec	23.329	73.826	36.069	33.411	36.849
Actual Stack Gas Flow:	ACFM	22251	222543	15290	31866	6942
Dry Standard Stack Gas Flow	DSCFM	18434	152440	13860	27862	6515
Isokinetic Rate:	%	101.19	96.24	99.20	99.42	102.42
Fluoride Emission:	lb/day	7.14	13.31	9.22	13.05	1.02
Fluoride Emission:	lb/hr	0.30	0.55	0.38	0.54	0.04
Test Team		FB,RS	RS/FB	JK, MP	JK,MP	RS/RS
FDEP AIRS & Pt. ID:		1050059-039	1050059-027	1050059-024	1050059-036	1050059-053



Jeb Bush
Governor

Department of Environmental Protection

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

David B. Struhs
Secretary

December 24, 2002

CERTIFIED MAIL - RETURN RECEIPT REQUESTED

Dr. John B. Koogler, P.E.
Koogler & Associates
Environmental Services
4014 NW Thirteenth Street
Gainesville, Florida 32609

Re: DEP File No. 1050059-033-AC (PSD-FL-244) **A**
IMC Phosphates MP Inc. (New Wales) - Kiln C Permit Extension

Dear Dr. Koogler:

The Department has reviewed your letter of October 28, 2002 on behalf of IMC Phosphates MP Inc. requesting an extension of the expiration date of the above referenced permit from December 31, 2002 through June 30, 2003.

The time extension will allow the Department to resolve the remaining technical issues associated with the project and for IMC to submit a timely application for the Title V permit revision.

The expiration date of the permit is hereby extended through **June 30, 2003** for the purposes of resolving the remaining technical issues associated with the project. This extension will allow IMC to continue to investigate and implement ways to enhance scrubber operation, reliability and maintenance to provide reasonable assurance that the project will comply with Department rules and permit conditions. This extension is not an authorization to operate Kiln C in a manner that does not comply with the Department's rules, regulations, or permit conditions. This extension does not authorize further construction work.

A copy of this letter shall be part of your records. This permitting decision is issued pursuant to Chapter 403, Florida Statutes.

A person whose substantial interests are affected by the proposed permitting decision may petition for an administrative proceeding (hearing) under sections 120.569 and 120.57 of the Florida Statutes. The petition must contain the information set forth below and must be filed (received) in the Office of General Counsel of the Department at 3900 Commonwealth Boulevard, Mail Station #35, Tallahassee, Florida, 32399-3000. Petitions filed by the permit applicant or any of the parties listed below must be filed within fourteen days of receipt of this notice of intent. Petitions filed by any persons other than those entitled to written notice under section 120.60(3) of the Florida Statutes must be filed within fourteen days of publication of the public notice or within fourteen days of receipt of this notice of intent, whichever occurs first. Under section 120.60(3), however, any person who asked the Department for notice of agency action may file a petition within fourteen days of receipt of that notice, regardless of the date of publication. A petitioner shall mail a copy of the petition to the applicant at the address indicated above at the time of filing. The failure of any person to file a petition within the appropriate time period shall constitute a waiver of that person's right to request an administrative determination (hearing) under

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sections 120.569 and 120.57 F.S., or to intervene in this proceeding and participate as a party to it. Any subsequent intervention will be only at the approval of the presiding officer upon the filing of a motion in compliance with Rule 28-106.205 of the Florida Administrative Code.

A petition that disputes the material facts on which the Department's action is based must contain the following information: (a) The name and address of each agency affected and each agency's file or identification number, if known; (b) The name, address, and telephone number of the petitioner, the name, address, and telephone number of the petitioner's representative, if any, which shall be the address for service purposes during the course of the proceeding; and an explanation of how the petitioner's substantial interests will be affected by the agency determination; (c) A statement of how and when petitioner received notice of the agency action or proposed action; (d) A statement of all disputed issues of material fact. If there are none, the petition must so indicate; (e) A concise statement of the ultimate facts alleged, including the specific facts the petitioner contends warrant reversal or modification of the agency's proposed action; (f) A statement of the specific rules or statutes the petitioner contends require reversal or modification of the agency's proposed action; and (g) A statement of the relief sought by the petitioner, stating precisely the action petitioner wishes the agency to take with respect to the agency's proposed action.

A petition that does not dispute the material facts upon which the Department's action is based shall state that no such facts are in dispute and otherwise shall contain the same information as set forth above, as required by Rule 28-106.301.

Because the administrative hearing process is designed to formulate final agency action, the filing of a petition means that the Department's final action may be different from the position taken by it in this notice. Persons whose substantial interests will be affected by any such final decision of the Department on the application have the right to petition to become a party to the proceeding, in accordance with the requirements set forth above. Mediation is not available in this proceeding.

In addition to the above, a person subject to regulation has a right to apply for a variance from or waiver of the requirements of particular rules, on certain conditions, under Section 120.542 F.S. The relief provided by this state statute applies only to state rules, not statutes, and not to any federal regulatory requirements. Applying for a variance or waiver does not substitute or extend the time for filing a petition for an administrative hearing or exercising any other right that a person may have in relation to the action proposed in this notice of intent.

The application for a variance or waiver is made by filing a petition with the Office of General Counsel of the Department, 3900 Commonwealth Boulevard, Mail Station #35, Tallahassee, Florida 32399-3000. The petition must specify the following information: (a) The name, address, and telephone number of the petitioner; (b) The name, address, and telephone number of the attorney or qualified representative of the petitioner, if any; (c) Each rule or portion of a rule from which a variance or waiver is requested; (d) The citation to the statute underlying (implemented by) the rule identified in (c) above; (e) The type of action requested; (f) The specific facts that would justify a variance or waiver for the petitioner; (g) The reason why the variance or waiver would serve the purposes of the underlying statute (implemented by the rule); and (h) A statement whether the variance or waiver is permanent or temporary and, if temporary, a statement of the dates showing the duration of the variance or waiver requested.


The Department will grant a variance or waiver when the petition demonstrates both that the application of the rule would create a substantial hardship or violate principles of fairness, as each of those terms is defined in Section 120.542(2) F.S., and that the purpose of the underlying statute will be or has been achieved by other means by the petitioner.

Persons subject to regulation pursuant to any federally delegated or approved air program should be aware that Florida is specifically not authorized to issue variances or waivers from any requirements of any such federally delegated or approved program. The requirements of the program remain fully enforceable by the Administrator of the EPA and by any person under the Clean Air Act unless and until the Administrator separately approves any variance or waiver in accordance with the procedures of the federal program.

This permitting decision is final and effective on the date filed with the clerk of the Department unless a petition is filed in accordance with the above paragraphs or unless a request for extension of time in which to file a petition is filed within the time specified for filing a petition pursuant to Rule 62-110.106, F.A.C., and the petition conforms to the content requirements of Rules 28-106.201 and 28-106.301, F.A.C. Upon timely filing of a petition or a request for extension of time, this order will not be effective until further order of the Department.

Any party to this permitting decision (order) has the right to seek judicial review of it under section 120.68 of the Florida Statutes, by filing a notice of appeal under Rule 9.110 of the Florida Rules of Appellate Procedure with the clerk of the Department of Environmental Protection in the Office of General Counsel, Mail Station #35, 3900 Commonwealth Boulevard, Tallahassee, Florida, 32399-3000, and by filing a copy of the notice of appeal accompanied by the applicable filing fees with the appropriate District Court of Appeal. The notice must be filed within thirty days after this order is filed with the clerk of the Department.


Executed in Tallahassee, Florida

JOSEPH KAHN
Far

Howard L. Rhodes, Director
Division of Air Resources
Management

CERTIFICATE OF SERVICE

The undersigned duly designated deputy agency clerk hereby certifies that this PERMIT MODIFICATION was sent by certified mail (*) and copies were mailed by U.S. Mail before the close of business on 12/24/02 to the person(s) listed:

Dr. John B. Koogler, K&A*
Mr. C. David Turley, IMC
Mr. Jerry Kissel, SWD


Greg Worley, EPA
John Bunyak, NSP

Clerk Stamp

FILING AND ACKNOWLEDGMENT FILED, on this date, pursuant to §120.52, Florida Statutes, with the designated Department Clerk, receipt of which is hereby acknowledged.

Victoria Gibson / December 24, 2002
(Clerk) (Date)

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:

John Koogler, Ph.D., P.E.
 Koogler and Associates
 Environmental Services
 4014 NW 13 St.
 Gainesville, FL 32609

2. A 7001 0320 0001 3692 7300

PS Form 3811, July 1999

Domestic Return Receipt

102595-00-M-0952

COMPLETE THIS SECTION ON DELIVERY

A. Received by (Please Print Clearly) Elena E. Hill B. Date of Delivery 12/30/12

C. Signature Elena Hill Agent
 Addressee

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HereTotal John Koogler, Ph.D., P.E.

Sent To Koogler and Associates
Environmental Services
 Street, or PO Box 4014 NW 13 St.
 City, State Gainesville, FL 32609

PS Form 3800, January 2001

See Reverse for Instructions