

KOOGLER & ASSOCIATES  
ENVIRONMENTAL SERVICES

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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:	10S0059-074				
		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

SO<sub>2</sub> 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 <sub>2</sub> 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<sub>2</sub> 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 H <sub>2</sub> O	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		
Pitot 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:	1108				
	FDEP AIRS & Pl. 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

**Extractive FTIR Testing by  
EPA Method 320 of the 3<sup>rd</sup> 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 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
Pitor 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*  
*FA2*  
  
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 THIS SECTION ON DELIVERY	
<ul style="list-style-type: none"> <li>Complete items 1, 2, and 3. Also complete item 4 if Restricted Delivery is desired.</li> <li>Print your name and address on the reverse so that we can return the card to you.</li> <li>Attach this card to the back of the mailpiece, or on the front if space permits.</li> </ul>	A. Received by (Please Print Clearly) <i>Elena E. Hill</i>	B. Date of Delivery <i>12/30/2</i>
<p>1. Article Addressed to:</p> <p style="text-align: center;">John Koogler, Ph.D., P.E. Koogler and Associates Environmental Services 4014 NW 13 St. Gainesville, FL 32609</p>	C. Signature <input checked="" type="checkbox"/> <i>Elena Hill</i> <input type="checkbox"/> Agent <input type="checkbox"/> Addressee	
<p>2. A</p> <p style="text-align: center;">7001 0320 0001 3692 7300</p>	D. Is delivery address different from item 1? If YES, enter delivery address below: <input type="checkbox"/> Yes <input type="checkbox"/> No	
<p>PS Form 3811, July 1999</p>	<p>3. Service Type</p> <input checked="" type="checkbox"/> Certified Mail <input type="checkbox"/> Express Mail <input type="checkbox"/> Registered <input type="checkbox"/> Return Receipt for Merchandise <input type="checkbox"/> Insured Mail <input type="checkbox"/> C.O.D.	<p>4. Restricted Delivery? (Extra Fee)    <input type="checkbox"/> Yes</p> <p style="text-align: right;">102595-00-M-0952</p>

U.S. Postal Service <b>CERTIFIED MAIL RECEIPT</b> (Domestic Mail Only; No Insurance Coverage Provided)	
7001 0320 0001 3692 7300	
Postage	\$
Certified Fee	
Return Receipt Fee (Endorsement Required)	
Restricted Delivery Fee (Endorsement Required)	
Total	John Koogler, Ph.D., P.E. Koogler and Associates Environmental Services 4014 NW 13 St. Gainesville, FL 32609
Sent To	
Street or PO Box	
City, St.	
PS Form 3800, January 2001                      See Reverse for Instructions	



**KOOGLER & ASSOCIATES**  
**ENVIRONMENTAL SERVICES**  
4014 NW THIRTEENTH STREET  
GAINESVILLE, FLORIDA 32609  
352/377-5822 • FAX/377-7158

KA 124-00-05

October 28, 2002

**RECEIVED**

**OCT 29 2002**

**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 Company (New Wales)  
Multifos Plant - Kiln C Permit Extension  
File No. 1050059-033-AC, PSD-FL-244

Dear Mr. Arif:

This is a follow up to your conversation with Pradeep Raval regarding an extension of the above referenced permit for an additional period of 6 months to resolve the remaining technical issues associated with the project. The time extension will also allow FDEP to complete the review regarding permit revision and for IMC to submit a timely application for the Title V permit revision. Additional supporting information is not submitted herein as this information has been previously submitted to FDEP.

It is requested that FDEP revise the permit expiration date from December 31, 2002 to June 30, 2003.

If you have any questions, please call Pradeep Raval or me.

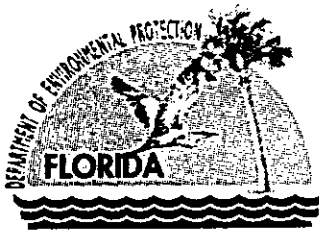
Very truly yours,

KOOGLER & ASSOCIATES

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

Par.

c: C. Dave Turley, IMC



Jeb Bush  
Governor

# Department of Environmental Protection

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

David B. Struhs  
Secretary

September 10, 2002

CERTIFIED MAIL – RETURN RECEIPT REQUESTED

Mr. John B. Koogler, Ph.D., P.E.  
Koogler & Associates Environmental Services  
4014 N.W. 13<sup>th</sup> Street  
Gainesville, FL 32609

Re: IMC Phosphates MP, Inc. (New Wales)  
DEP File No. 1050059-033-AC (PSD-FL-244)  
Multifos Plant – Kiln C Permit Revision

Dear Mr. Koogler:

The Department received additional information on August 12, 2002 in response to our request for information letter dated May 22, 2002.

In order for the Department to make an informed decision regarding the BACT limits established for fluorides, the following information is required:

- 1) IMC makes reference to a proposal received from Kimre, which proposes to replace the packing in the cross-flow scrubber with four pads in order to control fine particulate. This was stated in IMC's letter to the Department dated May 11, 2001. Please provide a copy of Kimre's proposal and cost data.
- 2) The original BACT determination refers to a separate neutralized scrubber pond to be used for scrubber water for the three kilns. Please provide an estimate (\$/ton of F1 removal) if a separate neutralized pond is to be used for the Kiln C only.
- 3) All cost data should be based on non-incremental allocations (total costs per total tons removed).

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. Permit applicants are advised that Rule 62-4.055(1), F.A.C. now requires applicants to respond to requests for information within 90 days.

If you have any questions regarding this matter, please contact me at 850/921-9528.

Sincerely,

Syed Arif, P.E. II  
New Source Review Section

cc: Dave Turley, IMC  
Jerry Kissel, DEP-SWD

"More Protection, Less Process"

Printed on recycled paper.

SENDER: COMPLETE THIS SECTION	COMPLETE THIS SECTION ON DELIVERY
<ul style="list-style-type: none"> <li>Complete items 1, 2, and 3. Also complete item 4 if Restricted Delivery is desired.</li> <li>Print your name and address on the reverse so that we can return the card to you.</li> <li>Attach this card to the back of the mailpiece, or on the front if space permits.</li> </ul>	<p>A. Received by (Please Print Clearly) <i>J. Miller</i> B. Date of Delivery <i>9/12/02</i></p> <p>C. Signature <i>J. Miller</i> <input type="checkbox"/> Agent <input type="checkbox"/> Addressee</p>
<p>1. Article Addressed to:</p> <p>John Koogler, Ph.D., P.E.          Koogler and Associates          Environmental Services          4014 NW 13 St.          Gainesville, FL 32609</p>	<p>D. Is delivery address different from item 1? <input type="checkbox"/> Yes          If YES, enter delivery address below: <input type="checkbox"/> No</p> <p>3. Service Type  <input checked="" type="checkbox"/> Certified Mail <input type="checkbox"/> Express Mail  <input type="checkbox"/> Registered <input type="checkbox"/> Return Receipt for Merchandise  <input type="checkbox"/> Insured Mail <input type="checkbox"/> C.O.D.</p> <p>4. Restricted Delivery? (Extra Fee) <input type="checkbox"/> Yes</p>
<p>2. 7001 0320 0001 3692 7966</p>	
<p>PS Form 3811, July 1999 Domestic Return Receipt 102595-00-M-0952</p>	

<b>U.S. Postal Service</b> <b>CERTIFIED MAIL RECEIPT</b> <i>(Domestic Mail Only; No Insurance Coverage Provided)</i>											
7001 0320 0001 3692 7966	<table border="1"> <tr> <td>Postage \$</td> <td></td> </tr> <tr> <td>Certified Fee</td> <td></td> </tr> <tr> <td>Return Receipt Fee (Endorsement Required)</td> <td></td> </tr> <tr> <td>Restricted Delivery Fee (Endorsement Required)</td> <td></td> </tr> <tr> <td><b>Total Paid</b></td> <td></td> </tr> </table> <p>Postmark Here</p> <p>Sent To <b>John Koogler, Ph.D., P.E.</b>  <b>Koogler and Associates</b>  <b>Environmental Services</b>          4014 NW 13 St.          Gainesville, FL 32609</p>	Postage \$		Certified Fee		Return Receipt Fee (Endorsement Required)		Restricted Delivery Fee (Endorsement Required)		<b>Total Paid</b>	
Postage \$											
Certified Fee											
Return Receipt Fee (Endorsement Required)											
Restricted Delivery Fee (Endorsement Required)											
<b>Total Paid</b>											
<p>PS Form 3800, January 2001 See Reverse for Instructions</p>											



**KOOGLER & ASSOCIATES**  
**ENVIRONMENTAL SERVICES**  
4014 NW THIRTEENTH STREET  
GAINESVILLE, FLORIDA 32609  
352/377-5822 ■ FAX/377-7158

KA 124-00-05

August 8, 2002

**RECEIVED**

**AUG 12 2002**

**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 in response to FDEP's letter dated May 22, 2002, requesting additional information on the above referenced project. The issues raised in that letter are addressed below.

1. Previously, only a summary of equipment costs was submitted, as presented in Attachment 1. The detailed information requested by FDEP is being submitted under separate cover. The vendor has quoted the cost of installing a venturi scrubber upstream of the cross flow scrubber without the Kimre panels. As previously indicated in our letter dated November 9, 2001, these costs indicated that these alternatives are cost prohibitive. IMC proposes the use of the existing equipment as BACT.

2. The requested summary of all the available emission testing information on Kiln C, has been previously submitted, and is presented in Attachment 2 for the sake of convenience. The fluorides performance tests included 11 scenarios:

- initial compliance test;
- second compliance test;
- test while using dried feed;
- test with caustic flow in SO<sub>2</sub> scrubber;
- test without caustic flow in SO<sub>2</sub> scrubber;
- test with fresh water to demist section;
- test under less erratic operation levels;
- test and vary the source of pond water;
- test and add steam;
- pre-test before use as dryer;
- test while operating as dryer.

Mr. Syed Arif, P.E.  
Florida Department of  
Environmental Protection

August 8, 2002

Please note that the source of pond water was changed; the source of pond water was varied; and, steam was introduced in the scrubber (the scenarios suggested by FDEP). As the test data indicate, it was not possible to achieve the level of emissions expected by FDEP despite IMC's best efforts.

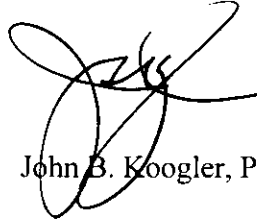
3. Based on all the testing conducted, IMC requests a fluoride emission limit of 0.6 lb/ton P<sub>2</sub>O<sub>5</sub>. The summary and calculations are presented in Attachment 3.

The testing for sulfur dioxide emissions from the Multifos A/B Kilns has been scheduled for August 29, 2002.

If you have any 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  
*D. Linsell, SWD*

**ATTACHMENT 1**

**REVISED VENDOR LETTER ON SCRUBBER COST**





# **PENN PRO**

**Engineering & Technical Services**

Mr. George Bien  
IMC Phosphates  
P.O. Box 2000  
Mulberry, FL 33860-100

12/17/01

**REF: PENN PRO estimate for "C" Kiln Fluorine Scrubber Replacement  
Revision 3**

**In accordance with your request, I have developed an additional estimate for the scrubber modifications to "C" Kiln.**

**The scope of this new estimate was to reuse the existing scrubber body and install Kimre panels. Based on the scope from Kimre for the scrubbing requirements, I have estimated new stainless steel support frames to be installed in the existing scrubber. The system allows for changing panels "on the run" and still maintaining scrubbing requirements.**

**Because the existing scrubber body is carbon steel, rubber-lined, the support frames have been estimated to be installed against the rubber lining (bolted in). Rubber lining repairs are included to prepare the areas where the panel support frames are installed, if it is necessary.**

**I have also revised the estimate to compress the Kiln downtime.**

**The estimate of Kiln downtime is 4 weeks on a premium time basis. The job will require 1-2 weeks before to prep and start electrical and piping additions and 1-2 weeks after to install the monorail system to pull the Kimre panels. This is field time only.**

**The estimated cost for this project is \$ 500,000.00. The cost estimate is attached.**

**If you have any questions, please call**

Sincerely,

**Robert A. Herz, P.E.  
Project Manager**



# PENN PRO

CAD Design & Technical Services

Mr. George Bien  
IMC Phosphates  
P.O. Box 2000  
Mulberry, FL 33860-100

12/14/01

REF: PENN PRO estimate for "C" Kiln Fluorine Scrubber Replacement  
Revision 2

After our review of the revised order of magnitude cost estimate for "C" Kiln Fluorine Scrubber replacement with a DR Technology Venturi scrubber on 12/12/01, I am providing these additional comments to clear up the apparent confusion with this estimate.

I apologize for the mix-up between the cost estimate and the letter that was attached. The second page of that memo was from the previous estimate. I have no explanation how that occurred. I have attached the report and cost estimate from 10/11/01, with the proper second page, as it should have been sent. This should clear up part of the confusion.

The addition of the venturi scrubber section resulted in replacing the existing fan with a larger fan. DR Technology had advised us that the existing SO<sub>2</sub> scrubber could withstand the new suction pressure conditions. The packed cross flow scrubber most probably will not as it is rectangular. Because it is carbon steel, rubber lined, adding additional external bracing will require stripping rubber internally, welding bracing and then re-installing the rubber lining, if it is reused. This would have caused extended kiln downtime. To shorten the plant downtime, I estimated a new scrubber body designed based on the new suction pressure.

Also, as stated in the original letter, this design would have reused the existing saddle packing.

I have included the original letter and cost estimate from 10/11/01.

If you have any questions, please call

Sincerely

  
Robert A. Herz, P.E.  
Project Manager

Mr. George Bien  
IMC Phosphates  
P.O. Box 2000  
Mulberry, FL 33860-100

10/11/01

REF: PENN PRO estimate for "C" Kiln Fluorine Scrubber Replacement  
Revision 2

I have completed the revised order of magnitude cost estimate for "C" Kiln Fluorine Scrubber replacement with a DR Technology Venturi scrubber.

The DR Technology Venturi Scrubber data was provided to PENN PRO by IMC and reviewed with Richard Swartz at DR technology by me. Richard advised me that the existing SO<sub>2</sub> scrubber can be used "as is" with the new operating and fan conditions.

This should be verified in writing by DR technology should this project proceed before finalizing the capital cost. I have not included any funds for any SO<sub>2</sub> scrubber modifications.

In addition, the existing pond water supply has been deemed sufficient for the new scrubber conditions by IMC. The existing "hot" system will be converted to a "cold" system as we discussed. PENN PRO has not checked this system. Funds for the piping modifications are included in the estimate.

I faxed the scrubber fan data for the new conditions, provided by you, to Robinson Fan, Pete Beringer. His reply indicates that a new fan will be required with the new conditions. I have attached the revised fan curve proposal provided by Robinson Fan. This is just a preliminary review by Robinson Fan. If the project does become a reality; the local office will have the factory engineers run the calculations for official verification. A new 250 HP motor will be required as well as foundation modifications.

The Cross Flow Scrubber body will need to be replaced to withstand the new suction conditions as well as the modifications for inlet ductwork to the venturi.

I have also assumed that IMC would re-use the existing packing in the new scrubber body.

I have based the revised estimate on a compressed schedule for Kiln downtime.

The estimate of Kiln downtime is 3 weeks on a premium time basis. The job will require 2-3 weeks before to prep and start electrical and piping additions and 1-2 weeks after to install the monorail system to pull the overhead piping. This is field time only.

The estimated cost for this project is \$ 839,000.00

If you have any questions, please call

Sincerely

Robert A. Herz, P.E.  
Project Manager

**ATTACHMENT 2**

**MULTIFOS PLANT – KILN C TEST SUMMARY**



Source Sampling Summaries for Particulate and Fluoride Testing done on C Kiln									
Test condition or discription:		Initial compliance test				Second Compliance Test			
Parameter	Unit	Run 1	Run 2	Run 3	Average	Run 1	Run 2	Run 3	Average
Date:		07/11/00	07/12/00	07/13/00		08/04/00	08/04/00	08/04/00	
Time Start:		844	853	1020		1224	1430	1555	
Time End:		948	1009	1125		1330	1537	1700	
Barometric Pressure:	Inch Hg	30.10	30.10	30.10		30.11	30.11	30.11	
Static Pressure:	Inch H2O	0.32	0.32	0.32		0.31	0.31	0.31	
Stack Pressure:	Inch Hg	30.124	30.124	30.124		30.133	30.133	30.133	
Average Sqrt Delta P:	Inch HOH 1/2	0.747	0.650	0.635		0.646	0.682	0.690	
Average Delta H:	Inch HOH	1.821	1.413	1.358	1.530	1.363	1.517	1.533	1.471
Maximum Run Vacuum:	Inch Hg	10.0	11.0	10.0		15.0	12.0	10.0	
Meter Box Number:	Unity	3187	3187	3187		3187	3187	3187	
Average Meter Temp:	Degrees F	84.8	81.2	91.7		82.9	83.8	82.2	
Average Stack Temp:	Degrees F	113.8	111.5	110.7	112.0	111.8	112.0	112.7	112.2
Metered Sample Volume:	Cubic Feet	46.51	41.03	40.99		40.02	42.61	43.30	
Standard Meter Volume:	Cubic Feet	45.39	40.27	39.46		39.16	41.65	42.44	
Moisture Measured:	%	0.0894	0.0897	0.0787		0.0886	0.0824	0.0808	
Moisture Saturation:	%	0.0962	0.0900	0.0880		0.0908	0.0912	0.0931	
Moisture Used for Calculations:	%	0.0894	0.0897	0.0787	0.0860	0.0886	0.0824	0.0808	0.0839
Pitot Coefficient:	Unity	0.84	0.84	0.84		0.84	0.84	0.84	
Nozzle Diameter:	Inch	0.25	0.25	0.25		0.250	0.250	0.250	
Stack Area:	Square Feet	7.07	7.07	7.07		7.07	7.07	7.07	
Traverse Points:	Unity	24	24	24		24	24	24	
Sampling Time:	Minutes	60	60	60		60	60	60	
Stack Gas Molecular Weight:	lb/lb-mol	27.988	27.985	28.106		27.997	28.066	28.083	
Actual Stack Velocity:	Feet/sec	44.285	38.404	37.416	40.035	38.220	40.275	40.786	39.760
Actual Stack Gas Flow:	ACFM	18772	16279	15861	16971	16201	17072	17289	16854
Dry Standard Stack Gas Flow:	DSCFM	15835	13784	13610	14409	13730	14565	14756	14350
Isokinetic Rate:	%	99.10	101.00	100.23		98.61	98.87	99.44	
Fluoride Emission:	lb/day	7.74	14.05	10.56	10.78	17.54	15.14	8.90	13.86
	lb/hr	0.32	0.59	0.44		0.73	0.63	0.37	
Particulate Emission:	lb/day	13.28	41.58	105.46	53.44	156.02	101.93	65.73	107.89
	lb/hr	0.55	1.73	4.39		6.50	4.25	2.74	
Food Rate	tph				5.80				7.50
Input P2O5 rate	P2O5 tph				2.05				2.59
Heat input	mmBtu/hr				32.10				40.00
Fluoride allowable	lb/hr				0.078				0.098
Average Fluoride	lb/hr				0.45				0.58
PM allowable	lb/hr				3.08				3.89
Average PM	lb/hr				2.23				4.50

Test condition or description:		Compliance test for authorization for the use of A or B as dryer for mixed feed. C Kiln was using dried feed.				Test for comparison of results with caustic flow on or off in SO2 scrubber. Samples analyzed by Pixe. This test with caustic ON.			
Parameter	Unit	Run 1	Run 2	Run 3	Average	Run 1	Run 2	Run 3	Average
Date:		10/31/00	10/31/00	10/31/00		11/30/00	11/30/00	11/30/00	
Time Start:		1130	1307	1430		1100	1241	1438	
Time End:		1244	1412	1536		1216	1400	1544	
Barometric Pressure:	Inch Hg	30.13	30.13	30.13		30.21	30.21	30.21	
Static Pressure:	Inch H2O	0.35	0.35	0.35		0.46	0.46	0.46	
Stack Pressure:	Inch Hg	30.156	30.156	30.156		30.244	30.244	30.244	
Average Sqrt Delta P:	Inch HOH 1/2	0.568	0.570	0.582		0.594	0.604	0.605	
Average Delta H:	Inch HOH	1.088	1.126	1.118	1.111	1.213	1.260	1.319	1.264
Maximum Run Vacuum:	Inch Hg	9.0	7.0	7.0		10.0	7.0	10.0	
Meter Box Number:	Unity	3187	3187	3187		3187	3187	3187	
Average Meter Temp:	Degrees F	84.2	88.6	79.6		75.9	81.8	82.0	
Average Stack Temp:	Degrees F	102.5	103.8	102.6	103.0	92.8	94.1	92.2	93.0
Metered Sample Volume:	Cubic Feet	35.84	36.65	37.12		37.80	38.93	39.29	
Standard Meter Volume:	Cubic Feet	34.99	35.49	36.55		37.58	38.29	38.64	
Moisture Measured:	%	0.0717	0.0525	0.0583		0.0570	0.0525	0.0525	
Moisture Saturation:	%	0.0692	0.0717	0.0693		0.0513	0.0534	0.0504	
Moisture Used for Calculations:	%	0.0692	0.0525	0.0583	0.0600	0.0513	0.0525	0.0504	0.0514
Pitot Coefficient:	Unity	0.84	0.84	0.84		0.84	0.84	0.84	
Nozzle Diameter:	Inch	0.248	0.248	0.248		0.248	0.248	0.248	
Stack Area:	Square Feet	7.07	7.07	7.07		7.07	7.07	7.07	
Traverse Points:	Unity	24	24	24		24	24	24	
Sampling Time:	Minutes	60	60	60		60	60	60	
Stack Gas Molecular Weight:	lb/lb-mol	28.210	28.393	28.329		28.406	28.393	28.416	
Actual Stack Velocity:	Feet/sec	33.175	33.224	33.931	33.443	34.229	34.822	34.841	34.631
Actual Stack Gas Flow:	ACFM	14063	14084	14383	14177	14510	14761	14769	14680
Dry Standard Stack Gas Flow:	DSCFM	12382	12596	12810	12596	13290	13471	13555	13439
Isokinetic Rate:	%	99.28	99.00	100.23		99.35	99.87	100.14	
Fluoride Emission:	lb/day	8.76	14.94	21.15	14.95	16.27	9.52	14.59	13.46
	lb/hr	0.37	0.62	0.88		0.68	0.40	0.61	
Particulate Emission:	lb/day	42.54	73.95	102.40	72.96	106.90	72.64	108.16	95.90
	lb/hr	1.77	3.08	4.27		4.45	3.03	4.51	
Feed Rate:	tph				10.50				7.00
Input P2O5 rate:	P2O5 tph				3.73				2.43
Heat input:	mmBtu/hr				45.20				48.89
Fluoride allowable:	lb/hr				0.142				0.092
Average Fluoride:	lb/hr				0.62				0.56
PM allowable:	lb/hr				5.60				3.65
Average PM:	lb/hr				3.04				4.00



Parameter	Unit	Run 1	Run 2	Run 3	Average	Run 1	Run 2	Run 3	Average
Test condition or description:		Test for comparison of results with caustic flow on or off in SO2 scrubber. Samples analyzed by Pixe. This test with caustic OFF.				Test done with fresh water supplied to demist section of packed scrubber before SO2 scrubber.			
Date:		12/01/00	12/01/00	12/01/00		12/08/00	12/08/00	12/08/00	
Time Start:		824	1003	1130		905	1037	1155	
Time End:		930	1107	1234		1011	1149	1305	
Barometric Pressure:	Inch Hg	30.11	30.11	30.11		30.15	30.15	30.15	
Static Pressure:	Inch H2O	0.31	0.31	0.31		0.38	0.38	0.38	
Stack Pressure:	Inch Hg	30.133	30.133	30.133		30.178	30.178	30.178	
Average Sqrt Delta P:	Inch HOH 1/2	0.616	0.616	0.607		0.620	0.632	0.615	
Average Delta H:	Inch HOH	1.355	1.378	1.303	1.345	1.273	1.347	1.275	1.298
Maximum Run Vacuum:	Inch Hg	10.0	7.0	6.0		9.0	10.0	9.0	
Meter Box Number:	Unity	3187	3187	3187		3188	3188	3188	
Average Meter Temp:	Degrees F	66.1	77.8	80.1		73.5	80.8	86.5	
Average Stack Temp:	Degrees F	87.4	88.6	89.9	88.6	86.4	87.9	88.4	87.6
Metered Sample Volume:	Cubic Feet	39.58	39.95	39.70		39.04	40.35	39.95	
Standard Meter Volume:	Cubic Feet	39.97	39.47	39.05		39.90	40.69	39.86	
Moisture Measured:	%	0.0504	0.0552	0.0545		0.0541	0.0498	0.0514	
Moisture Saturation:	%	0.0435	0.0451	0.0470		0.0420	0.0441	0.0448	
Moisture Used for Calculations:	%	0.0435	0.0451	0.0470	0.0452	0.0420	0.0441	0.0448	0.0436
Pitot Coefficient:	Unity	0.84	0.84	0.84		0.84	0.84	0.84	
Nozzle Diameter:	Inch	0.248	0.248	0.248		0.248	0.248	0.248	
Stack Area:	Square Feet	7.07	7.07	7.07		7.07	7.07	7.07	
Traverse Points:	Unity	24	24	24		24	24	24	
Sampling Time:	Minutes	60	60	60		60	60	60	
Stack Gas Molecular Weight:	lb/lb-mol	28.492	28.474	28.453		28.508	28.486	28.477	
Actual Stack Velocity:	Feet/sec	35.325	35.392	34.935	35.217	35.470	36.213	35.305	35.663
Actual Stack Gas Flow:	ACFM	14974	15003	14809	14929	15036	15351	14966	15118
Dry Standard Stack Gas Flow:	DSCFM	13912	13885	13647	13815	14039	14263	13881	14061
Isokinetic Rate:	%	100.94	99.86	100.52		99.84	100.23	100.88	
Fluoride Emission:	lb/day	18.37	10.20	7.26	11.94	13.87	40.26	44.62	32.92
	lb/hr	0.77	0.42	0.30		0.58	1.68	1.86	
Particulate Emission:	lb/day	91.41	56.13	30.60	59.38	115.97	196.90	205.91	172.93
	lb/hr	3.81	2.34	1.27		4.83	8.20	8.58	
Feed Rate:	tph				7.00				10.00
Input P2O5 rate:	P2O5 tph				2.39				3.45
Heat input:	mmBtu/hr				48.89				32.10
Fluoride allowable:	lb/hr				0.091				0.131
Average Fluoride:	lb/hr				0.50				1.37
PM allowable:	lb/hr				3.59				5.18
Average PM:	lb/hr				2.47				7.21

Test condition or description:		Test runs done during periods of stable operation to establish base levels.		Test runs done with variations in water used prior to packed scrubber. Flow rate to transition duct was varied.				
		For Calc P2O5		Direct	Direct		Redirect	Redirect
				High	Low	Flow	Low	High
Parameter	Unit	%HOH	8.17	Run 1	Run 2		Run 1	Run 2
		%P	16.34					
Date:		12/15/00	12/20/00	01/16/01	01/16/01		01/17/01	01/17/01
Time Start:		10:00	13:50	13:25	1405		10:00	10:51
Time End:		10:30	14:20	1355	1435		10:30	11:21
Barometric Pressure:	Inch Hg	30.32	30.22	30.09	30.09		30.13	30.13
Static Pressure:	Inch H2O	0.33	0.33	0.30	0.30		0.30	0.30
Stack Pressure:	Inch Hg	30.344	30.244	30.112	30.112		30.152	30.152
Average Sqrt Delta P:	Inch HOH 1/2	0.663	0.640	0.615	0.633		0.658	0.652
Average Delta H:	Inch HOH	1.368	1.500	1.298	1.363		1.486	1.464
Maximum Run Vacuum:	Inch Hg	9.0	9.0	6.0	6.0		7.0	8.0
Meter Box Number:	Unity	3188	3188	3188	3188		3188	3188
Average Meter Temp:	Degrees F	77.4	72.2	81.6	83.9		75.2	83.0
Average Stack Temp:	Degrees F	105.4	84.1	96.5	96.9		95.8	97.4
Metered Sample Volume:	Cubic Feet	19.93	20.21	19.46	20.03		20.77	20.92
Standard Meter Volume:	Cubic Feet	20.34	20.76	19.56	20.04		21.15	21.00
Moisture Measured:	%	0.0496	0.0323	0.0668	0.0733		0.0549	0.0614
Moisture Saturation:	%	0.0749	0.0390	0.0577	0.0585		0.0565	0.0593
Moisture Used for Calculations:	%	0.0496	0.0323	0.0577	0.0585		0.0549	0.0593
Pitot Coefficient:	Unity	0.84	0.84	0.84	0.84		0.84	0.84
Nozzle Diameter:	Inch	0.248	0.248	0.25	0.25		0.25	0.25
Stack Area:	Square Feet	7.07	7.07	7.07	7.07		7.07	7.07
Traverse Points:	Unity	12	12	12	12		12	12
Sampling Time:	Minutes	30	30	30	30		30	30
Stack Gas Molecular Weight:	lb/lb-mol	28.425	28.615	28.336	28.328		28.367	28.319
Actual Stack Velocity:	Feet/sec	38.558	36.431	35.649	36.742		38.063	37.838
Actual Stack Gas Flow:	ACFM	16345	15443	15112	15575		16135	16039
Dry Standard Stack Gas Flow:	DSCFM	14712	14660	13596	13992		14598	14402
Isokinetic Rate:	%	97.13	99.52	99.45	99.04		100.19	100.83
Fluoride Emission:	lb/day	16.23	29.54	12.83	12.86		27.70	41.29
	lb/hr	0.68	1.23	0.53	0.54		1.15	1.72
Particulate Emission:	lb/day	127.11	150.93	99.24	80.82		137.25	194.89
	lb/hr	5.30	6.29	4.13	3.37		5.72	8.12
Feed Rate:	tph	10.5	10.75	10.25	10.25		10.5	10.5
Input P2O5 rate:	P2O5 tph	3.61	3.70	3.52	3.52		3.61	3.61
Heat input:	mmBtu/hr							
Fluoride allowable:	lb/hr	0.137	0.140	0.134	0.134		0.137	0.137
Average Fluoride:	lb/hr	0.68	1.23	0.53	0.54		1.15	1.72
PM allowable:	lb/hr	5.41	5.54	5.28	5.28		5.41	5.41
Average PM:	lb/hr	5.30	6.29	4.13	3.37		5.72	8.12

Test condition or discription:		Test runs done with steam addition prior to packed scrubber. Source of pond water to spray tower was varied.					Pre test before use as dryer.			
		Redirect	Redirect	pond water	Direct	Direct	Direct	Direct	Direct	
		Off	On	steam	Off	On				
Parameter	Unit	Run 1	Run 2		Run 1	Run 2	Run 1	Run 2	Run 3	Average
Date:		05/03/01	05/03/01		05/03/01	05/03/01	05/11/01	05/11/01	05/11/01	
Time Start:		840	955		1130	1220	923	1120	1306	
Time End:		910	1025		1200	1250	1026	1222	1408	
Barometric Pressure:	Inch Hg	30.27	30.27		30.27	30.27	30.17	30.17	30.16	
Static Pressure:	Inch H2O	0.32	0.32		0.32	0.32	-0.2	-0.18	-0.23	
Stack Pressure:	Inch Hg	30.294	30.294		30.294	30.294	30.16	30.16	30.14	
Average Sqrt Delta P:	Inch HOH 1/2	0.636	0.617		0.612	0.625				
Average Delta H:	Inch HOH	1.433	1.385		1.407	1.373				
Maximum Run Vacuum:	Inch Hg	11.0	10.0		8.0	7.0				
Meter Box Number:	Unity	3187	3187		3187	3187				
Average Meter Temp:	Degrees F	73.4	79.4		82.0	83.0	84.2	91.2	95	
Average Stack Temp:	Degrees F	94.0	96.2		95.0	97.9	101.2	100.5	101.8	101.1667
Metered Sample Volume:	Cubic Feet	20.42	20.02		19.93	20.25	38.298	39.954	39.859	
Standard Meter Volume:	Cubic Feet	20.63	20.00		19.82	20.10	37.488	38.623	38.249	
Moisture Measured:	%	0.0430	0.0411		0.0493	0.0576				
Moisture Saturation:	%	0.0532	0.0568		0.0548	0.0599				
Moisture Used for Calculations:	%	0.0430	0.0411		0.0493	0.0576	5.8	5.9	5.7	5.8
Pitot Coefficient:	Unity	0.84	0.84		0.84	0.84	0.84	0.84	0.84	
Nozzle Diameter:	Inch	0.25	0.25		0.25	0.25	0.249	0.249	0.249	
Stack Area:	Square Feet	7.07	7.07		7.07	7.07	7.07	7.07	7.07	
Traverse Points:	Unity	12	12		12	12				
Sampling Time:	Minutes	30	30		30	30	60	60	60	
Stack Gas Molecular Weight:	lb/lb-mol	28.497	28.518		28.429	28.337				
Actual Stack Velocity:	Feet/sec	36.569	35.532		35.283	36.170	34.91	36.13	36.1	
Actual Stack Gas Flow:	ACFM	15501	15062		14956	15332	14806	15323	15311	15146.67
Dry Standard Stack Gas Flow:	DSCFM	14314	13883		13696	13845	13221	13691	13527	13479.67
Isokinetic Rate:	%	99.67	99.62		100.04	100.39	98.8	98.3	98.6	
Fluoride Emission:	lb/day	16.34	15.34		10.26	9.34				
	lb/hr	0.68	0.64		0.43	0.39	0.38	0.59	0.68	0.55
Particulate Emission:	lb/day	67.55	79.25		51.30	52.65				
	lb/hr	2.81	3.30		2.14	2.19	2	2.7	1.9	2.2
Feed Rate:	tph	8.5	8.5		8.5	8.5				8.4
Input P2O5 rate:	P2O5 tph	2.95	2.95		2.95	2.95				2.90
Heat input:	mmBtu/hr									43
Fluoride allowable:	lb/hr	0.112	0.112		0.112	0.112				0.110
Average Fluoride:	lb/hr	0.68	0.64		0.43	0.39				0.54
PM allowable:	lb/hr	4.43	4.43		4.43	4.43				4.35
Average PM:	lb/hr	2.81	3.30		2.14	2.19				2.20

Test condition or description:		Used as dryer.				
			Direct	Direct	Direct	
Parameter	Unit	Run 1	Run 2	Run 3	Average	
Date:		05/24/01	05/24/01	05/24/01		
Time Start:		1122	1247	1420		
Time End:		1227	1356	1527		
Barometric Pressure:	Inch Hg	30.27	30.27	30.27		
Static Pressure:	Inch H2O	0.11	0.11	0.11		
Stack Pressure:	Inch Hg	30.27809	30.27809	30.27809		
Average Sqrt Delta P:	Inch HOH 1/2	0.337016	0.33067	0.308012		
Average Delta H:	Inch HOH	2.129167	2.083333	1.729167		1.980556
Maximum Run Vacuum:	Inch Hg	15	14	9		
Meter Box Number:	Unity	3188	3188	3188		
Average Meter Temp:	Degrees F	78.58333	84.91667	89.27083		
Average Stack Temp:	Degrees F	94.66667	94.79167	95.08333		94.84722
Metered Sample Volume:	Cubic Feet	48.747	48.689	45.94		
Standard Meter Volume:	Cubic Feet	50.57048	49.91772	46.68599		
Moisture Measured:	%	0.051324	0.052804	0.050381		
Moisture Saturation:	%	0.054287	0.054496	0.054987		
Moisture Used for Calculations:	%	0.051324	0.052804	0.050381		0.051503
Pitot Coefficient:	Unity	0.84	0.84	0.84		
Nozzle Diameter:	Inch	0.382	0.382	0.382		
Stack Area:	Square Feet	7.065	7.065	7.065		
Traverse Points:	Unity	24	24	24		
Sampling Time:	Minutes	60	60	60		
Stack Gas Molecular Weight:	lb/lb-mol	28.40603	28.38979	28.41637		
Actual Stack Velocity:	Feet/sec	19.43532	19.07694	17.76613		18.75946
Actual Stack Gas Flow:	ACFM	8238.632	8086.713	7531.061		7952.135
Dry Standard Stack Gas Flow:	DSCFM	7528.826	7376.803	6883.883		7263.171
Isokinetic Rate:	%	99.46086	100.2006	100.4236		
Fluoride Emission:	lb/day	4.02	4.31	4.13		
	lb/hr	0.17	0.18	0.17		
Particulate Emission:	lb/day	47.5	46.4	52.7		
	lb/hr	1.98	1.93	2.20		
Feed Rate:	tph					31.5
Input P2O5 rate:	P2O5 tph					11.1
Heat input:	mmBtu/hr					4.6
Fluoride allowable:	lb/hr					0.42
Average Fluoride:	lb/hr					0.17
PM allowable:	lb/hr					16.65
Average PM:	lb/hr					2.04

ATTACHMENT 3										
IMC MULTIFOS KILN C TEST SUMMARY										
Scenario	Description	P2O5 input	Fluoride Emissions			Fluoride Emissions			MAX	MAX
			Run 1	Run 2	Run 3	Run 1	Run 2	Run 3		
		tph	lb/hr	lb/hr	lb/hr	lb/ton P2O5	lb/ton P2O5	lb/ton P2O5	lb/hr	lb/ton P2O5
1	Initial test	2.05	0.32	0.59	0.44	0.16	0.29	0.21	0.59	0.29
2	Second test	2.59	0.73	0.63	0.37	0.28	0.24	0.14	0.73	0.28
3	Dried feed	3.73	0.37	0.62	0.88	0.10	0.17	0.24	0.88	0.24
4	Caustic on	2.43	0.68	0.4	0.61	0.28	0.16	0.25	0.68	0.28
5	Caustic off	2.39	0.77	0.42	0.3	0.32	0.18	0.13	0.77	0.32
6	Fresh water to demist	3.45	0.58	1.68	1.86	0.17	0.49	0.54	1.86	0.54
7	Base 1	3.61	0.68	NA	NA	0.19	NA	NA	0.68	0.19
7	Base 2	3.7	1.23	NA	NA	0.33	NA	NA	1.23	0.33
8	Source and flow changes	3.52	0.53	0.54	NA	0.15	0.15	NA	0.54	0.15
8	Source and flow changes	3.61	1.15	1.72	NA	0.32	0.48	NA	1.72	0.48
9	steam/water changes (1)	2.95	0.68	0.64	NA	0.23	0.22	NA	0.68	0.23
9	steam/water changes (1)	2.95	0.43	0.39	NA	0.15	0.13	NA	0.43	0.15
10	Pre-test for dryer use	2.9	0.38	0.59	0.68	0.13	0.20	0.23	0.68	0.23
11	Use as dryer	NA	NA	NA	NA	NA	NA	NA	0	0.00
MAXIMUM									1.86	0.54
SUGGESTED PERMIT LIMIT		9.5							5.7	0.6

NOTE: (1) Steam rates were between 8 and 10 pounds per hour.

**ATTACHMENT 4**  
**P.E. CERTIFICATION**

4. Professional Engineer Statement:

*I, the undersigned, hereby certify, except as particularly noted herein\*, that:*

*(1) To the best of my knowledge, there is reasonable assurance that the air pollutant emissions unit(s) and the air pollution control equipment described in this Application for Air Permit, when properly operated and maintained, will comply with all applicable standards for control of air pollutant emissions found in the Florida Statutes and rules of the Department of Environmental Protection; and*

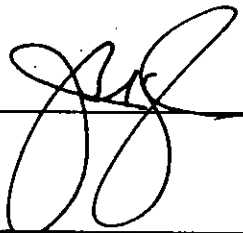
*(2) To the best of my knowledge, any emission estimates reported or relied on in this application are true, accurate, and complete and are either based upon reasonable techniques available for calculating emissions or, for emission estimates of hazardous air pollutants not regulated for an emissions unit addressed in this application, based solely upon the materials, information and calculations submitted with this application.*

*If the purpose of this application is to obtain a Title V source air operation permit (check here [ ], if so), I further certify that each emissions unit described in this Application for Air Permit, when properly operated and maintained, will comply with the applicable requirements identified in this application to which the unit is subject, except those emissions units for which a compliance schedule is submitted with this application.*

*If the purpose of this application is to obtain an air construction permit for one or more proposed new or modified emissions units (check here [ X ], if so), I further certify that the engineering features of each such emissions unit described in this application have been designed or examined by me or individuals under my direct supervision and found to be in conformity with sound engineering principles applicable to the control of emissions of the air pollutants characterized in this application.*

*If the purpose of this application is to obtain an initial air operation permit or operation permit revision for one or more newly constructed or modified emissions units (check here [ ], if so), I further certify that, with the exception of any changes detailed as part of this application, each such emissions unit has been constructed or modified in substantial accordance with the information given in the corresponding application for air construction permit and with all provisions contained in such permit.*

Signature

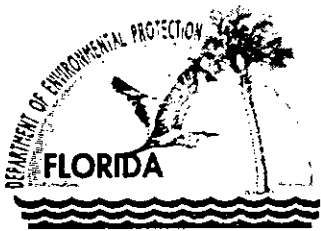


(seal)

Date

8/8/02

\* Attach any exception to certification statement.



Jeb Bush  
Governor

# Department of Environmental Protection

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

David B. Struhs  
Secretary

May 22, 2002

## CERTIFIED MAIL – RETURN RECEIPT REQUESTED

Mr. John B. Koogler, Ph.D., P.E.  
Koogler & Associates Environmental Services  
4014 N.W. 13<sup>th</sup> Street  
Gainesville, FL 32609

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

Dear Mr. Koogler:

The Department received additional information on March 27, 2002 in response to the request for information letter dated December 7, 2001. Additionally, a waiver of the 30-day review period was received granting the 30-day review period to be extended to May 31, 2002.

The cost proposal submitted by Penn Pro again includes installing Kimre panels in the existing scrubber. It then adds the additional amount required for installation of a venturi scrubber upstream of the existing cross-flow scrubber. The Department is interested in the cost analysis under the scenario of using the existing cross flow scrubber (without Kimre panels) and installing a venturi scrubber upstream of the cross flow scrubber. The cost proposal also indicates that the cost estimate is attached, but the detailed breakdown of the total cost was not included with the proposal.

The Department in the previous request for information letter had made reference to some special testing that IMC was going to conduct in reducing fluoride emissions in the existing system. The two possible approaches were: 1) the source of pond water for the quench tower and the cross flow scrubber can be changed and 2) steam can be introduced in the transition section in order to retard any potential evaporation of the pond water. This testing was supposed to be completed by June 1, 2001, as indicated in IMC's letter to the Department of May 11, 2001. Please submit the results of the testing, and if the testing has not been completed, indicate the reasons for the delay.

Additionally, submit an acceptable BACT limit to the applicant based on all the tests conducted on C Kiln from the initial test until present time. All the calculations in arriving at that BACT limit should be shown in detail.

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

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Mr. John B. Koogler  
Page 2  
May 22, 2002

applies to responses to Department requests for additional information of an engineering nature. Permit applicants are advised that Rule 62-4.055(1), F.A.C. now requires applicants to respond to requests for information within 90 days.

If you have any questions regarding this matter, please contact me at 850/921-9528.

Sincerely,

A handwritten signature in black ink, appearing to read "Syed Arif". The signature is fluid and cursive, with the first name "Syed" and last name "Arif" clearly distinguishable.

Syed Arif, P.E. II  
New Source Review Section

cc: Dave Turley, IMC  
Bill Thomas, DEP-SWD

SENDER: COMPLETE THIS SECTION	COMPLETE THIS SECTION ON DELIVERY	
<ul style="list-style-type: none"> <li>Complete items 1, 2, and 3. Also complete item 4 if Restricted Delivery is desired.</li> <li>Print your name and address on the reverse so that we can return the card to you.</li> <li>Attach this card to the back of the mailpiece, or on the front if space permits.</li> </ul>	A. Received by (Please Print Clearly) <i>Elena Hill</i>	B. Date of Delivery <i>5/24/92</i>
1. Article Addressed to:  Koogler, Ph.D., P.E. Koogler & Associates Environmental Services 4014 NW 13th Street Gainesville, FL 32609	C. Signature <i>Elena Hill</i>	<input type="checkbox"/> Agent <input type="checkbox"/> Addressee
	D. Is delivery address different from item 1? <input type="checkbox"/> Yes If YES, enter delivery address below: <input type="checkbox"/> No	
	3. Service Type <input checked="" type="checkbox"/> Certified Mail <input type="checkbox"/> Express Mail <input type="checkbox"/> Registered <input type="checkbox"/> Return Receipt for Merchandise <input type="checkbox"/> Insured Mail <input type="checkbox"/> C.O.D.	
	4. Restricted Delivery? (Extra Fee) <input type="checkbox"/> Yes	

7001 0320 0001 3692 8772

PS Form 3811, July 1999

Domestic Return Receipt

102595-00-M-0952

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7001 0320 0001 3692 8772

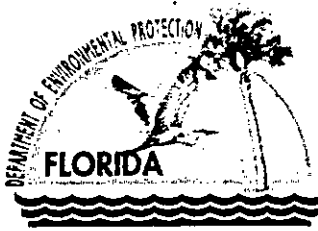
Postage	\$	Postmark Here
Certified Fee		
Return Receipt Fee (Endorsement Required)		
Restricted Delivery Fee (Endorsement Required)		
<b>Total Postage &amp; Fees</b>	<b>\$</b>	

Sent To: *John B. Koogler*

Street, Apt. No.,  
or PO Box: *4014 NW 13th St*

City, State, ZIP+4: *Gainesville, FL 32609*

PS Form 3800, January 2001 See Reverse for Instructions



Jeb Bush  
Governor

# Department of Environmental Protection

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

David B. Struhs  
Secretary

March 26, 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)  
IMC Phosphates MP Inc. (New Wales) - Kiln C Permit Extension

Dear Dr. Koogler:

The Department has reviewed your letter of March 10, 2002 on behalf of IMC Phosphates MP Inc. requesting an extension of the expiration date of the above referenced permit from March 31, 2002 through December 31, 2002.

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 **December 31, 2002** 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 new requested fluoride emission limit (permit modification under review) is justified. 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

*for*   
Howard L. Rhodes, Director  
Division of Air Resources  
Management

#### CERTIFICATE OF SERVICE

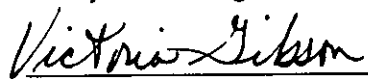
The undersigned duly designated deputy agency clerk hereby certifies that this PERMIT MODIFICATION was sent by certified mail (\*) and copies were mailed by U.S. Mail before the close of business on 3/26/02 to the person(s) listed:

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.

 March 26, 2002  
(Clerk) (Date)

SENDER: COMPLETE THIS SECTION	COMPLETE THIS SECTION ON DELIVERY
<ul style="list-style-type: none"> <li>Complete items 1, 2, and 3. Also complete item 4 if Restricted Delivery is desired.</li> <li>Print your name and address on the reverse so that we can return the card to you.</li> <li>Attach this card to the back of the mailpiece, or on the front if space permits.</li> </ul>	<p>A. Received by (Please Print Clearly) <i>Elena Hill</i>      B. Date of Delivery <i>7/28</i></p>
<p>1. Article Addressed to:</p> <p>John Koogler, Ph.D., P.E.          Koogler and Associates          Environmental Services          4014 NW 13 St.          Gainesville, FL 32609</p>	<p>C. Signature <i>Elena Hill</i>      <input type="checkbox"/> Agent  <input checked="" type="checkbox"/> Addressee</p>
<p>2. <u>7001 0320 0001 3692 9083</u></p>	<p>D. Is delivery address different from item 1?      <input type="checkbox"/> Yes          If YES, enter delivery address below:      <input type="checkbox"/> No</p>
<p>PS Form 3811, July 1999</p>	<p>3. Service Type  <input checked="" type="checkbox"/> Certified Mail      <input type="checkbox"/> Express Mail  <input type="checkbox"/> Registered      <input type="checkbox"/> Return Receipt for Merchandise  <input type="checkbox"/> Insured Mail      <input type="checkbox"/> C.O.D.</p> <p>4. Restricted Delivery? (Extra Fee)      <input type="checkbox"/> Yes</p>

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Postage	\$	Postmark Here
Certified Fee		
Return Receipt Fee <small>(Endorsement Required)</small>		
Restricted Delivery Fee <small>(Endorsement Required)</small>		
<b>Total Paid</b>		

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

PS Form 3800, January 2001
See Reverse for Instructions



**KOOGLER & ASSOCIATES**  
**ENVIRONMENTAL SERVICES**

4014 NW THIRTEENTH STREET  
GAINESVILLE, FLORIDA 32609  
352/377-5822 ■ FAX/377-7158

KA 124-00-05

January 23, 2002

**RECEIVED**

JAN 25 2002

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 Extension  
File No. 1050059-033-AC, PSD-FL-244

+034

Dear Mr. Arif:

This is a follow up to your conversation with Pradeep Raval this week regarding an extension of the above referenced permit for an additional period of 9 months to resolve the remaining technical issues associated with the project. The time extension will also allow FDEP to complete the review regarding permit revision and for IMC to submit a timely application for the Title V permit revision.

It is requested that FDEP revise the permit expiration date from March 31 to December 31, 2002.

It is our understanding that there is no applicable fee associated with this request.

If you have any questions, please call Pradeep Raval or me.

Very truly yours,

KOOGLER & ASSOCIATES

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

Par.

c: C. Dave Turley, IMC



Jeb Bush  
Governor

# Department of Environmental Protection

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

David B. Struhs  
Secretary

December 7, 2001

CERTIFIED MAIL – RETURN RECEIPT REQUESTED

Mr. John B. Koogler, Ph.D., P.E.  
Koogler & Associates Environmental Services  
4014 N.W. 13<sup>th</sup> Street  
Gainesville, FL 32609

Re: IMC Phosphates MP, Inc. (New Wales)  
DEP File No. 1050059-033-AC (PSD-FL-244)A  
Multifos Plant – Kiln C Permit Revision

Dear Mr. Koogler:

The Department reviewed your letter dated November 9, 2001 in which you submitted a cost proposal on installation of a venturi scrubber as part of the Kiln C scrubbing system.

The cost proposal submitted by Penn Pro is ambiguous as it uses the cost estimate submitted earlier for replacement with a Kimre Scrubber. It then adds the additional amount required for installation of a venturi scrubber. The attached letter of Penn Pro indicates that IMC would re-use the existing packing in the cross flow scrubber, and also mentions on the following page of installing the monorail system to pull the Kimre panels. The Department is interested of cost analysis under the scenario of using the existing cross flow scrubber and installing a venturi scrubber upstream of the cross flow scrubber. Please indicate if the cost analysis submitted represents this scenario, and if it does, why was the cost data used as provided for the Kimre Scrubber.

The Department in extending the expiration date of the Kiln C construction permit to March 31, 2002 accepted two approaches as possible methods to further reduce fluoride emissions in the existing system: 1) the source of pond water for the quench tower and the cross flow scrubber can be changed and 2) steam can be introduced in the transition section in order to retard any potential evaporation of the pond water. This testing was supposed to be completed by June 1, 2001, as indicated in IMC's letter to the Department of May 11, 2001. Please submit the results of the testing, and if the testing has not been completed, indicate the reasons for the delay.

Additionally, submit a detailed summary of all the tests conducted on C Kiln from the initial test until present time. The summary should include but not be limited to the date of the test, production rate of the kiln, emission results etc.

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

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Mr. John B. Koogler  
Page 2  
December 7, 2001

applies to responses to Department requests for additional information of an engineering nature. Permit applicants are advised that Rule 62-4.055(1), F.A.C. now requires applicants to respond to requests for information within 90 days.

If you have any questions regarding this matter, please contact Syed Arif, P.E. at 850/921-9528.

Sincerely,

A handwritten signature in black ink, appearing to read 'A. A. Linero', written in a cursive style.

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

cc: Dave Turley, IMC  
Bill Thomas, DEP-SWD

SENDER: COMPLETE THIS SECTION	COMPLETE THIS SECTION ON DELIVERY	
<ul style="list-style-type: none"> <li>Complete items 1, 2, and 3. Also complete item 4 if Restricted Delivery is desired.</li> <li>Print your name and address on the reverse so that we can return the card to you.</li> <li>Attach this card to the back of the mailpiece, or on the front if space permits.</li> </ul>	A. Received by (Please Print Clearly) <i>Julie Muller</i>	B. Date of Delivery 12/14/11
1. Article Addressed to:  Mr. John B. Koogler, Ph.D., P.E. Koogler & Associates Environmental Services 4014 N.W. 13th St. Gainesville, FL 32609	C. Signature <input checked="" type="checkbox"/> <i>Julie Muller</i>	
2. Article Number (Copy from service label) 7000 2870 0000 7028 3253	D. Is delivery address different from item 1? If YES, enter delivery address below: <ul style="list-style-type: none"> <li><input type="checkbox"/> Yes</li> <li><input type="checkbox"/> No</li> </ul>	
PS Form 3811, July 1999	3. Service Type <input checked="" type="checkbox"/> Certified Mail <input type="checkbox"/> Express Mail <input type="checkbox"/> Registered <input type="checkbox"/> Return Receipt for Merchandise <input type="checkbox"/> Insured Mail <input type="checkbox"/> C.O.D.	4. Restricted Delivery? (Extra Fee) <input type="checkbox"/> Yes
Domestic Return Receipt <span style="float: right;">102595-99-M-1789</span>		

U.S. Postal Service <b>CERTIFIED MAIL RECEIPT</b> (Domestic Mail Only; No Insurance Coverage Provided)		
7000 2870 0000 7028 3253		
Postage	\$	Postmark Here
Certified Fee		
Return Receipt Fee (Endorsement Required)		
Restricted Delivery Fee (Endorsement Required)		
Total Postage & Fees	\$	
Sent To		
John B. Koogler		
Street, Apt. No., or PO Box No. 4014 NW 13th Street		
City, State, ZIP+4 Gainesville, FL 32609		
PS Form 3800, May 2000		See Reverse for Instructions



**KOOGLER & ASSOCIATES**

**ENVIRONMENTAL SERVICES**

4014 NW THIRTEENTH STREET  
GAINESVILLE, FLORIDA 32609  
352/377-5822 • FAX/377-7158

KA 124-00-05

November 9, 2001

**RECEIVED**

NOV 14 2001

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-244A  
033

Dear Mr. Arif:

This is in response to your request for information, on installation of a venturi scrubber as part of the Kiln C scrubbing system, with regards to the above referenced project.

The installation of a venturi scrubber upstream of the packed scrubber would likely result in lower particulate matter emissions. However, this scrubbing system arrangement would not be able to eliminate any pond water over-spray from the packed scrubber that would contribute to the higher total fluoride emissions. A cost evaluation of this scrubbing arrangement is enclosed. The cost-benefit analysis indicates that this alternative is cost prohibitive, based on FDEP BACT criteria.

If you have any questions, please call Pradeep Raval or me.

Very truly yours,

KOOGLER & ASSOCIATES

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

Par.  
encl.

c: C. Dave Turley, IMC

REVISED SCRUBBING SYSTEM COST ANALYSIS  
IMC New Wales – Multifos Kiln C Scrubbing System

The estimated cost, associated with installation of the scrubbing system discussed with FDEP that also includes a venturi scrubber upstream of the packed scrubber, is summarized below.

Total Installed Cost, as revised:		= \$839,000
Direct Annual Cost	Labor	= \$ 28,800
	Maintenance	= \$ 54,000
	Incremental Optg. Costs	= \$126,000
	Total DC	= \$208,800
Indirect Annual Cost	(0.1715 TCI, EPA combined factor) (includes capital recovery at 15 year life, 10% int.)	= \$143,900
Total Annual Cost	(DC + IC)	= \$352,700

Based on the above annual cost, the cost of fluoride control can be estimated with a conservative assumption that all fluorides from the existing scrubber, of 4.4 tpy (requested allowable rate), are captured.

Annual Cost of fluoride control      (\$352,700 / 4.4 tpy)      = \$ 80,200/ton

The revised cost estimate includes the ductwork and scrubber body changes to withstand the new suction conditions. This alternative is rejected as BACT based on the above control cost that far exceeds \$10,000 per ton fluoride controlled. The estimated control costs would be much higher if the loss of plant production, due to plant downtime associated with equipment installation, was included in the above analysis.

4. Professional Engineer Statement:

*I, the undersigned, hereby certify, except as particularly noted herein\*, that:*

*(1) To the best of my knowledge, there is reasonable assurance that the air pollutant emissions unit(s) and the air pollution control equipment described in this Application for Air Permit, when properly operated and maintained, will comply with all applicable standards for control of air pollutant emissions found in the Florida Statutes and rules of the Department of Environmental Protection; and*

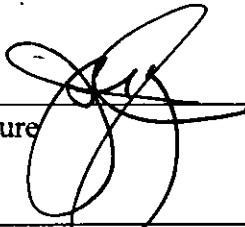
*(2) To the best of my knowledge, any emission estimates reported or relied on in this application are true, accurate, and complete and are either based upon reasonable techniques available for calculating emissions or, for emission estimates of hazardous air pollutants not regulated for an emissions unit addressed in this application, based solely upon the materials, information and calculations submitted with this application.*

*If the purpose of this application is to obtain a Title V source air operation permit (check here [  ], if so), I further certify that each emissions unit described in this Application for Air Permit, when properly operated and maintained, will comply with the applicable requirements identified in this application to which the unit is subject, except those emissions units for which a compliance schedule is submitted with this application.*

*If the purpose of this application is to obtain an air construction permit for one or more proposed new or modified emissions units (check here [  ], if so), I further certify that the engineering features of each such emissions unit described in this application have been designed or examined by me or individuals under my direct supervision and found to be in conformity with sound engineering principles applicable to the control of emissions of the air pollutants characterized in this application.*

*If the purpose of this application is to obtain an initial air operation permit or operation permit revision for one or more newly constructed or modified emissions units (check here [  ], if so), I further certify that, with the exception of any changes detailed as part of this application, each such emissions unit has been constructed or modified in substantial accordance with the information given in the corresponding application for air construction permit and with all provisions contained in such permit.*

Signature



(seal)

Date

11/9/01

\* Attach any exception to certification statement.

This is to certify our letters to FDEP dated 8/22/01 and 11/09/01.



# **PENN PRO**

**CAD Design & Technical Services**

Mr. George Bien  
IMC Phosphates  
P.O. Box 2000  
Mulberry, FL 33860-100

10/11/01

**REF: PENN PRO estimate for "C" Kiln Fluorine Scrubber Replacement  
Revision 2**

**I have completed the revised order of magnitude cost estimate for "C" Kiln Fluorine Scrubber replacement with a DR Technology Venturi scrubber.**

**The DR Technology Venturi Scrubber data was provided to PENN PRO by IMC and reviewed with Richard Swartz at DR technology by me. Richard advised me that the existing SO2 scrubber can be used "as is" with the new operating and fan conditions.**

**This should be verified in writing by DR technology should this project proceed before finalizing the capital cost. I have not included any funds for any SO2 scrubber modifications.**

**In addition, the existing pond water supply has been deemed sufficient for the new scrubber conditions by IMC. The existing "hot" system will be converted to a "cold" system as we discussed. PENN PRO has not checked this system. Funds for the piping modifications are included in the estimate.**

**I faxed the scrubber fan data for the new conditions, provided by you, to Robinson Fan, Pete Beringer. His reply indicates that a new fan will be required with the new conditions. I have attached the revised fan curve proposal provided by Robinson Fan. This is just a preliminary review by Robinson Fan. If the project does become a reality; the local office will have the factory engineers run the calculations for official verification. A new 250 HP motor will be required as well as foundation modifications.**

**The Cross Flow Scrubber body will need to be replaced to withstand the new suction conditions as well as the modifications for inlet ductwork to the venturi.**

**I have also assumed that IMC would re-use the existing packing in the new scrubber body.**

**I have based the revised estimate on a compressed schedule for Kiln downtime.**

The estimate of Kiln downtime is 3 weeks on a premium time basis. The job will require 2-3 weeks before to prep and start electrical and piping additions and 1-2 weeks after to install the monorail system to pull the Kimre panels. This is field time only.

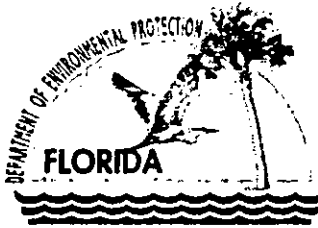
The estimated cost for this project is \$ ~~565,000.00~~  
*\$837,000*

If you have any questions, please call

Sincerely

Robert A. Herz, P.E.  
Project Manager





Jeb Bush  
Governor

# Department of Environmental Protection

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

David B. Struhs  
Secretary

September 10, 2001

CERTIFIED MAIL – RETURN RECEIPT REQUESTED

Mr. John B. Koogler, Ph.D., P.E.  
Koogler & Associates Environmental Services  
4014 N.W. 13<sup>th</sup> Street  
Gainesville, FL 32609

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

Dear Mr. Koogler:

The Department reviewed your letter dated August 22, 2001 in which you submitted a cost proposal on installation of Kimre packing as an alternative for Kiln C scrubbing system.

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. Please resubmit the letter with a P.E. seal for the cost analysis data submitted with your letter.

Additionally, provide cost analysis in terms of \$/ton of fluoride control if a venturi scrubber is installed for particulates fluoride control upstream of the existing cross-flow scrubber. Please provide the vendor information that will be contacted in getting this cost analysis.

If there any questions on the above matter, please contact me at 850-921-9528.

Sincerely,

Syed Arif, P.E. II  
New Source Review Section

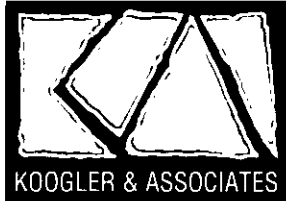
cc: Dave Turley, IMC

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KOOGLER & ASSOCIATES  
ENVIRONMENTAL SERVICES  
4014 NW THIRTEENTH STREET  
GAINESVILLE, FLORIDA 32609  
352/377-5822 ■ FAX/377-7158

KA 124-00-05

August 22, 2001

RECEIVED

AUG 24 2001

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-244A  
033

Dear Mr. Arif:

This is in response to your request for information, on installation of Kimre packing as an alternative for Kiln C scrubbing system, with regards to the above referenced project.

A cost proposal on the Kimre packing alternative is enclosed. The attached cost-benefit analysis indicates that this alternative is cost prohibitive, based on FDEP BACT criteria.

If you have any questions, please call Pradeep Raval or me.

Very truly yours,

KOOGLER & ASSOCIATES

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

Par.  
encl.

c: C. Dave Turley, IMC  
B. Thomas, SWD ✓  
D. Warden, EPA ✓  
D. Bennett, NPS ✓

KIMRE PACKING COST ANALYSIS  
 IMC New Wales – Multifos Kiln C Scrubbing System

The estimated cost associated with installation of a scrubber equipped with three-stage Kimre packing, is summarized below.

Total Installed Cost:		= \$565,000
Direct Annual Cost	Labor	= \$ 28,800
	Maintenance	= \$ 54,000
	Incremental Optg. Costs	= \$100,000
	Total DC	= \$182,800
Indirect Annual Cost	(0.1715 TCI, EPA combined factor) (includes capital recovery at 15 year life, 10% int.)	= \$ 96,900
Total Annual Cost	(DC + IC)	= \$279,700

Based on the above annual cost, the cost of fluoride control can be estimated with a conservative assumption that all fluorides from the existing scrubber, of 4.4 tpy (requested allowable rate), are captured.

Annual Cost of fluoride control	(\$279,700 / 4.4 tpy)	= \$ 63,600/ton
---------------------------------	-----------------------	-----------------

This alternative is rejected as BACT based on the above control cost which far exceeds \$10,000 per ton fluoride controlled. The estimated control costs would be much higher if the loss of plant production, due to plant downtime associated with equipment installation, was included in the above analysis.



**PENN PRO**

**CAD Design & Technical Services**

Mr. George Bien  
IMC Phosphates  
P.O. Box 2000  
Mulberry, FL 33860-100

8/15/01

REF: PENN PRO estimate for "C" Kiln Fluorine Scrubber Replacement  
Revision 1

I have completed the revised order of magnitude cost estimate for "C" Kiln Fluorine Scrubber replacement with a Kimre Scrubber.

The Kimre Scrubber data was provided to PENN PRO by IMC.

In addition, the existing pond water supply has been deemed sufficient for the new scrubber conditions by IMC. PENN PRO has not checked this system.

I faxed the scrubber fan data for the new conditions, provided by you, to Robinson Fan. Pete Beringer. His reply indicates that the fan will operate with the new conditions without any modifications and with the existing motor. I have attached the revised fan curve provided by Robinson Fan. This is just a preliminary review by Robinson Fan. If the project does become a reality, the local office will have the factory engineers run the calculations for official verification.

At your request I have revised the estimate to include a parallel set of stages to permit removal and replacement of panels "on the run". Kimre contacted me after your call to them and asked for additional clarification. Before IMC commits to this design, a meeting with Kimre is advisable. It is their preliminary opinion that each stage can be removed and replaced "on the run" without a parallel stage and still remain in compliance with emissions.

I have also revised the estimate to compress the Kiln downtime.

The estimate of Kiln downtime is 2 weeks on a premium time basis. The job will require 1-2 weeks before to prep and start electrical and piping additions and 1-2 weeks after to install the monorail system to pull the Kimre panels. This is field time only.

The estimated cost for this project is \$ 565,000.00



**KOGLER & ASSOCIATES**

**ENVIRONMENTAL SERVICES**  
4014 NW THIRTEENTH STREET  
GAINESVILLE, FLORIDA 32609  
352/377-5822 ▪ FAX/377-7158

KA 124-00-05

July 31, 2001

**RECEIVED**

AUG 01 2001

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 Permit Revision  
FDEP File No. 1050059-033-AC

Dear Mr. Arif:

It is our understanding, based on your telephone conversation with Pradeep Raval, that FDEP's review of the above referenced application will commence upon our submittal of additional information regarding the scrubbing system. This information is expected to be submitted for your review by August 27, 2001.

If you have any questions, please call Pradeep Raval or me.

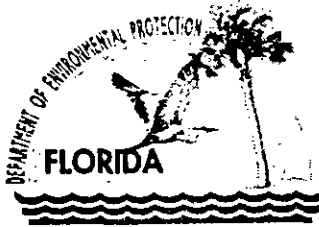
Very truly yours,

KOGLER & ASSOCIATES

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

JBK:par

c: C. Dave Turley, IMC



Jeb Bush  
Governor

# Department of Environmental Protection

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

David B. Struhs  
Secretary

July 26, 2001

CERTIFIED MAIL - RETURN RECEIPT REQUESTED

Mr. M. A. Daigle, General Manager  
IMC Phosphates Company  
P.O. Box 2000  
Mulberry, FL 33860-1100

Re: Extension Request/DEP File No. 1050059-033-AC (PSD-FL-244)A

Dear Mr. Daigle:

The Department reviewed your request dated January 30, 2001 to extend the expiration date of the construction permit from March 31, 2001 to March 31, 2002. We also reviewed the additional information in your letter dated May 11, 2001.

Per Rule 62-4.080(3), F.A.C., an extension for a construction permit shall be granted if the applicant can demonstrate reasonable assurances that upon completion, the extended permit will comply with the standards and conditions required by applicable regulation.

We understand that fluoride emissions were in excess of permitted limits during initial testing and that the company is investigating the causes. Two approaches have been identified as possible methods to further reduce fluoride emissions in the existing system: 1) The source of pond water for the quench tower and the cross-flow scrubber can be changed and 2) steam can be introduced in the transition section in order to retard any potential evaporation of the pond water. We also understand that a proposal from Kimre has been received which proposes to replace the packing in the cross-flow scrubber with four pads in order to control the fine particulate. This will require the retrofitting of the scrubber body to accommodate the new pads.

The expiration date of the permit is hereby extended through March 31, 2002 for the purposes of completing the improvements mentioned in the May 11 letter and to demonstrate compliance with the 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.

A copy of this letter shall be filed with the referenced permit and shall become part of the permit. 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

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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 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.

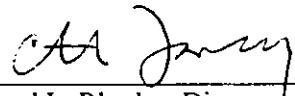
The Department will grant a variance or waiver when the petition demonstrates both that the application of the rule would create a substantial hardship or violate principles of fairness, as each of those terms is defined in Section 120.542(2) F.S., and that the purpose of the underlying statute will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

  
for 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 7/27/01 to the person(s) listed:

M. A. Daigle, IMC Phosphates Company\*  
Bill Thomas, DEP SWD  
Gregg Worley, EPA  
John Bunyak, NPS  
John Koogler, Ph.D., P.E. Koogler & Associates

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.

  
(Clerk) 7/27/01  
(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.

Article Addressed to:  
  
M.A. Daigle, General Mgr.  
Phosphates Company  
Box 2000  
Mulberry, FL 33860-1100

0600 0026  
4129 9228

Article Number (Copy from service label)  
00 0600 0026 4129 9228

**COMPLETE THIS SECTION ON DELIVERY**

A. Received by (Please Print Clearly) *D. Jennings* B. Date of Delivery *7-30-01*

C. Signature *[Signature]*  Agent  Addressee

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

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

4. Restricted Delivery? (Extra Fee)  Yes

Form 3811, July 1999

Domestic Return Receipt

102595-99-M-1789

**U.S. Postal Service  
CERTIFIED MAIL RECEIPT  
(Domestic Mail Only; No Insurance Coverage Provided)**

7000 0600 0026 4129 9228

[Redacted area]

Postage	\$	Postmark Here
Certified Fee		
Return Receipt Fee (Endorsement Required)		
Restricted Delivery Fee (Endorsement Required)		
<b>Total Postage &amp; Fees</b>	\$	

Recipient's Name (Please Print Clearly) (to be completed by mailer)  
Mr. M.A. Daigle, Gen. Mgr.  
Street, Apt. No., or PO Box No.  
PO Box 2000  
City, State, ZIP+4  
Mulberry, FL 33860-1100

PS Form 3800, February 2000

See Reverse for Instructions



IMC Phosphates Company  
P. O. Box 2000  
Mulberry, Florida 33860-1100  
863.428.2500

**Certified Mail 7099 3220 0007 3011 8392**  
**Return Receipt Requested**

May 11, 2001

**RECEIVED**

MAY 16 2001

BUREAU OF AIR REGULATION

Mr. A. A. Linero, P.E.  
Administrator, New Source Review Section  
Bureau of Air Regulation  
Florida Department of  
Environmental Protection  
2600 Blair Stone Road MS 5505  
Tallahassee, Florida 32399-2400

**RE: Construction Permit Extension Response**  
**Permit No. 1050059-024-AC (PSD-FL-244)A**  
**AIRS No. 1050059 033**  
**Emissions Units Nos. 074, 075 and 076**  
**New Wales Plant**

Dear Mr. Linero:

This letter is in response to your letter of April 4, 2001, which requested additional information related to IMC Phosphates' request to extend the expiration date of the Multifos Kiln C construction permit. The responses follow:

1. **List the tasks that were completed as identified in your letter dated August 28, 2000, a copy of which is attached. List any additional tasks to be performed to achieve "normal operating conditions" and the approximate dates for completing those tasks.**

The status of the tasks in the referenced letter is as follows:

- 1.A. A summary of actions was attached.
- 1.B. The new burner was evaluated and was found to operate similar to the burners of the A and B Kilns.
- 1.C. Instrumentation to monitor volumetric flow through the kiln was to be installed to improve combustion control for the burner. This task was not completed because the CO analyzer that had been installed proved to be sufficient to achieve adequate combustion control.

- 1.D. Operating procedures for kiln combustion control were developed based on the carbon monoxide monitoring instrumentation. Fuel usage rate for C kiln is now comparable to that of A or B kilns.
- 2.A. C Kiln was used for drying mixed feed for A and B Kilns. This is the basis for the request for the current authorization for use of a kiln as a dryer to further evaluate this improvement to operation of the kilns in general.
- 2.B. No specific testing was conducted as indicated. The primary focus of attention was on the "normal" operation of the kiln for extended periods. The attached operating history provides a description of these efforts.
- 2.C. The fluoride testing that had been done accompanied the application.
2. **Identify additional production and emission testing that needs to be conducted and provide estimated dates for completion of those tasks.**
  - A. Two approaches have been identified as possible methods to further reduce fluoride emissions in the existing system: 1) The source of pond water for the quench tower and the cross-flow scrubber can be changed and 2) steam can be introduced in the transition section in order to retard any potential evaporation of the pond water. These approaches will be evaluated using a statistically designed testing protocol to compare the impact of these changes. This testing will be completed by June 1. Pending the results, subsequent emission testing will be undertaken to confirm the findings and will be conducted separately or included with that required in item B.
  - B. The first production test using one kiln to dry the mixed feed will be conducted beginning on May 14. This is the test authorized pursuant to the Department's letter dated March 13. If additional testing is indicated, tests will be scheduled at that time.
  - C. During the operation of C Kiln for approximately the last 5 months, a problem has developed in the SO<sub>2</sub> Scrubber. Plugging of the demist section has become extensive. Plugging with particulate matter may result from some type of chemical reaction which leads to the formation of fine material that is not removed by the packed scrubbers. Efforts to improve this situation will be attempted in the next three months.
  - D. A proposal from Kimre has been received which proposes to replace the packing in the cross-flow scrubber with four pads in order to control the fine particulate. This will require the retrofitting of the scrubber body to accommodate the new pads. This proposal will be evaluated by June 1.

The A and B Kiln scrubber demist sections have been fitted with a recirculating caustic solution system as required by the permit. Due to the entrained pond water from the main scrubber packing, the sections are subject to severe plugging. The attached pictures show this plugging of

Mr. A. A. Linero, PE

May 11, 2001

Page 3


the demist packing. Although not accepted by the Department, the original IMC proposal for this system was to introduce the solution through duct sprays and to recirculate using duct drains. At this point, IMC requests reconsideration of this approach. A sketch is attached which shows this configuration for SO<sub>2</sub> scrubbing. An operating history provides a description of these problems for the A and B Kiln scrubbers.

**3. Provide a statement (and basis for believing) that the facility will comply with applicable regulation.**

Based on the compliance testing conducted on the new kiln, the emission limits of the construction permit will be met with the exception of the fluoride limit of 0.038 lb./ton P205. From the compliance tests that have been conducted on this kiln, the fluoride emissions have been found to be located primarily in the probe/filter portion of the sampling train. This indicates that the fluoride is a liquid, solid, or both. As the Department is aware, the design of the scrubbing system was based on the fluoride being in a gaseous form. The purpose of the revised permit application and request for the extension to the expiration date is to review this fluoride limit. IMC has proposed that the limit be increased.

Thank you for your attention to this matter. If you have any questions, please contact P.A. Steadham at 863/428-7106 or C.D. Turley at 863/428-7153.

Sincerely,



M. A. Daigle  
General Manager  
New Wales Plant

MAD:oan

Q:\CDT\KILNC08.doc

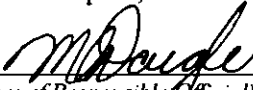
cc: J. R. Gruber  
P. A. Steadham  
G. J. Kissel, FDEP Tampa  
Koogler and Associates, Inc.

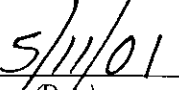


**IMC Phosphates Company**  
P. O. Box 2000  
Mulberry, Florida 33860-1100  
863.428.2500

## CERTIFICATION BY RESPONSIBLE OFFICIAL

Based on information and belief formed after reasonable inquiry, I certify that all statements made in this report, including any attachments, are true, accurate and complete.

  
\_\_\_\_\_  
(Signature of Responsible Official)

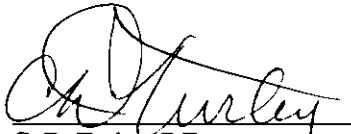
  
\_\_\_\_\_  
(Date)

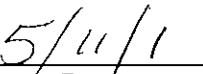
Name: M. A. Daigle

Title: General Manager, New Wales

## 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



### **Current Operating History for Kiln C.**

The "C" Kiln was shut down November 8, 2000 for brick repair. During this shutdown the chevrons in the SO<sub>2</sub> scrubber were hydroblasted to remove buildup. The kiln was re-started on November 24, 2000.

The SO<sub>2</sub> scrubber operated without problems until December 26, 2000, when again problems were encountered with plugging of the packing and chevrons. The rate on the kiln was restricted on numerous occasions due to plugging.

The shift supervisors log book shows almost daily notations of having to wash the packing and chevrons on the SO<sub>2</sub> scrubber to lower the pressure drop on this system to maintain an adequate draft on the kiln from January 11, 2001 until April 18, 2001.

The SO<sub>2</sub> scrubber packing and chevrons were hydroblasted again on April 18, 2001.

The packing and chevrons have been washed once per week since the last hydroblasting to control pressure drop on the scrubber.

### **Current Operating History for Kilns A and B**

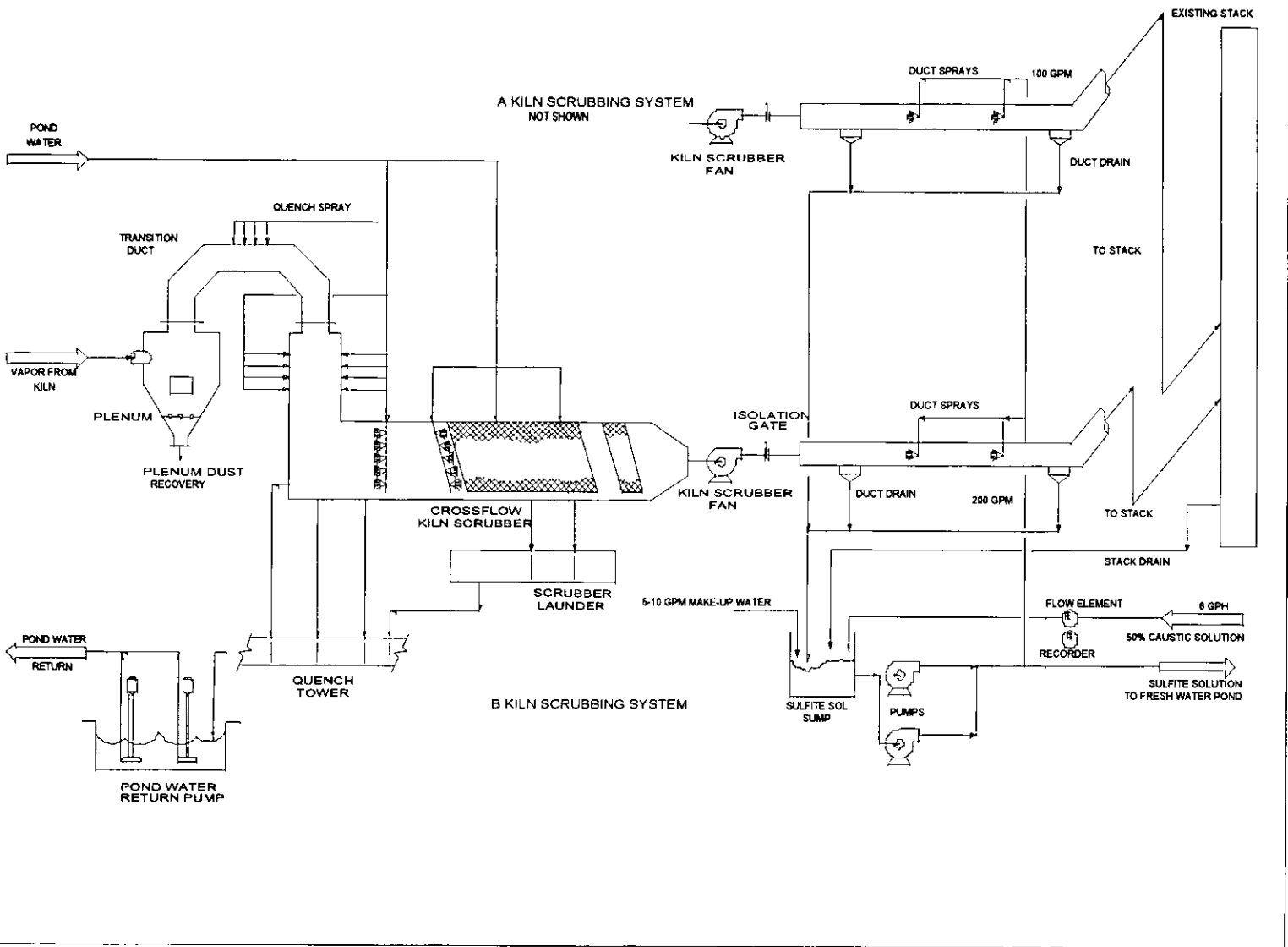
The "A" Kiln started having problems with plugging in the demist section on December 21, 2000. The longest period of operation without having to wash the demist section was three days from December 21, 2000 until February 14, 2001. From Jan. 24, 2001 until February 14, 2001 the demist section was washed and rodded at least two times per day to maintain an adequate pressure drop on the system.

The demist packing was changed on "A" scrubber on February 14, 2001. The packing had to be jackhammered out due to the plugging. The kiln was down for 10 hours to remove the packing and buildup from the demist section.

The kiln operated until March 3, 2001 with no additional cleaning needed in the demist section packing. From March 3, 2001 until April 24, 2001 the packing in the demist section required washing at intervals of three to seven days to maintain adequate pressure drop. On April 24, 2001 we started having to wash the packing every day. The kiln was shut down again on May 7, 2001 and the demist section packing and buildup were hydroblasted from the scrubber. New packing was added to the scrubber demist section.

The "B" Kiln demist section packing has not given as much trouble as the "A" Kiln. The demist section packing has had to be washed and rodded two to three times per week since January 6, 2001. This continued until April 18, 2001. Since April 18, 2001 the demist packing has had to be washed and rodded daily. The kiln was shut down May 4, 2001, and the demist section packing and buildup were hydroblasted from the scrubber. New packing was added to the demist section.

Original Proposal for SO<sub>2</sub> Scrubbing at A and B Scrubbers.

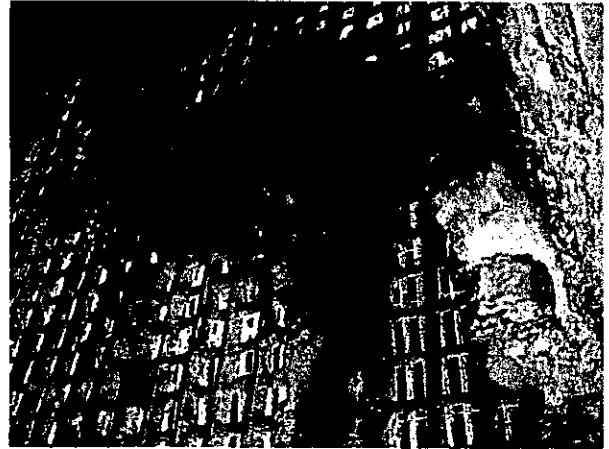


PREPARED: CDT	TITLE: PROPOSED MULTIFLOES KILN C	IMC-AGRIGO CO.
DATE: 11/13/97	MODIFICATIONS TO A&B SCRUBBER SYSTEMS	NEW WALES
REVISED: 8/25/98	SCALE: NONE	FILE: KILN02
		DRAWING NO.: L9

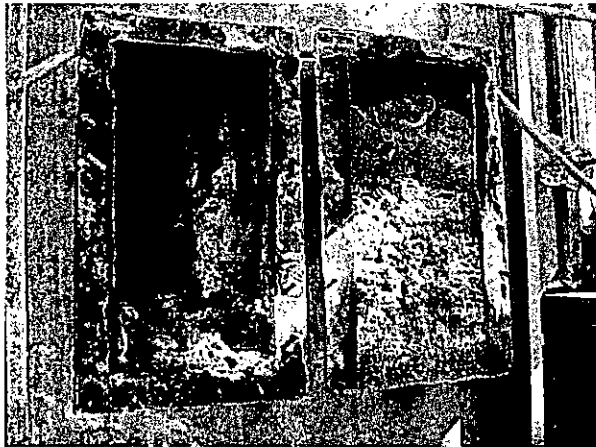
## A Scrubber Demist Section Plugging



**Packing From Demist Section**



**Build up in Demist Section**



**Demist Section**





Jeb Bush  
Governor

# Department of Environmental Protection

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

David B. Struhs  
Secretary

April 4, 2001

CERTIFIED MAIL - RETURN RECEIPT REQUESTED

Mr. M. A. Daigle, General Manager  
IMC Phosphates Company  
P.O. Box 2000  
Mulberry, FL 33860-1100

Re: Extension Request/DEP File No. 1050059-033-AC (PSD-FL-244)**A**

Dear Mr. Daigle:

The Department reviewed your request dated January 30, 2001 to extend the expiration date of the construction permit from March 31, 2001 to March 31, 2002. A similar request was submitted to the Department in July 2000, and the construction permit was extended for a period of six months. The reasons given for this extension request are similar to the previous request, in particular problems with startup of Multifos Kiln C.

Per Rule 62-4.080(3), F.A.C., an extension for a construction permit shall be granted if the applicant can demonstrate reasonable assurances that upon completion, the extended permit will comply with the standards and conditions required by applicable regulation.

We already have fairly extensive information about the facility and the control equipment. To complete the reasonable assurance requirement allowing extension of the permit, please submit the following information:

1. List the tasks that were completed as identified in your letter dated August 28, 2000, a copy of which is attached. List any additional tasks to be performed to achieve "normal operating conditions" and the approximate dates for completing those tasks.
2. Identify additional production and emission testing that needs to be conducted and provide estimated dates for completion of those tasks.
3. Provide a statement (and basis for believing) that the facility will comply with applicable regulation.

According to Rule 62-4-080(3), the permit will remain in effect until the Department takes final action. Permit applicants are advised that Rule 62-4.055(1), F.A.C. now requires applicants to respond to requests for information within 90 days. If you have any questions regarding this matter, please call Syed Arif, P.E. at 850/921-9528.

Sincerely,

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

Cc: Bill Thomas, DEP SWD  
John Koogler, P.E., Koogler & Associates

"More Protection, Less Process"

Printed on recycled paper.



**IMC**

**RECEIVED**

AUG 31 2000

BUREAU OF AIR REGULATION

CERTIFIED MAIL 7099 3400 0005 0929 3835  
RETURN RECEIPT REQUESTED

August 28, 2000

A. A. Linero, P.E.  
Administrator, New Source Review Section  
Bureau of Air Regulation  
Florida Department of  
Environmental Protection  
Southwest District  
2600 Blair Stone Road MS 5505  
Tallahassee, Florida 32399-2400

RE: Construction Permit Extension Request  
Permit No. 1050059-~~024~~-AC (PSD-FL-244) **A**  
AIRS No. 1050059 **033**  
Emissions Units Nos. 074, 075 and 076  
New Wales Plant

Dear Mr. Linero:

This letter is in response to your letter of August 7, 2000, which requested additional information related to IMC Phosphates' request to extend the Mulifos Kiln C construction permit. Because of market conditions, the Company has suspended operation of C Kiln for approximately three months. The responses follow:

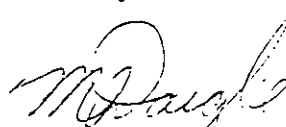
1. List the tasks to be performed to achieve "normal operating conditions" and the approximate dates for completing those tasks.
  - A. A summary of actions taken to-date is attached.
  - B. A new burner was installed on June 27, 2000 and required adjustments to optimize the flame shape. This task has been completed and must be evaluated once the kiln resumes operation. This configuration is now similar to that of the A and B Kilns.
  - C. Instrumentation to monitor volumetric flow through the kiln will be installed and is needed to improve combustion control for the burner. This task will be completed by December 1, 2000.

- D. Operating procedures for kiln combustion control must be developed based on the recently installed carbon monoxide monitoring instrumentation. This task will begin once the kiln resumes operation. To this point, the sustained fuel usage rate for the new kiln has not been comparable to that of the existing kilns.
2. Identify additional production and emission testing that needs to be conducted and provide estimated dates for completion of those tasks.
- A. Testing to improve the quality of the mixed feed to the kilns will be conducted. This will involve operation of the C Kiln on a non-continuous basis for up to four weeks to reduce the free moisture content of the mixed feed.
- B. Not all possible improvements have been identified and as testing progresses, additional action items may be developed. Testing will begin December 1, 2000 depending on kiln operation.
- C. Additional fluoride testing will need to be conducted to address the problem identified in the response to the Department's question below.
3. Provide a statement (and basis for believing) that the facility will comply with applicable regulation.

Based on the compliance testing conducted on the new kiln, the emission limits of the construction permit will be met with the exception of the fluoride limit of 0.038 lb/ton  $P_2O_5$ . From the two compliance tests that have been conducted on this kiln, the fluoride emissions have been found to be located primarily in the probe/filter portion of the sampling train. This indicates that the fluoride is a liquid, solid, or both. As the Department is aware, the design of the scrubbing system was based on the fluoride being in a gaseous form. These compliance test reports are being finalized and will be submitted under separate cover.

Thank you for your attention to this matter. If you have any questions, please contact P.A. Steadham at 863-428-7106 or C.D. Turley at 863-428-7153.

Sincerely,

  
M. A. Daigle  
General Manager  
New Wales Plant

MAD:oan

Attachment (1 copy)

*[Handwritten notes and signatures]*

### Summary of Tasks Completed on C-Kiln

This is a summary of actions taken to achieve "normal operation" of C-Kiln over the period from start up in October 1999 through shutdown in August 2000.

1. November 1999 - installed air dump on primary air to keep from blowing flame out on start-up.
2. December 1999 - installed Pillard type gas nozzle in burner to lengthen flame.
3. March 2000 - corrected primary air flow and burner steam flow instrument calibrations.
4. March 2000 - purchased portable combustion analyzer to fine tune burner operation.
5. April 2000 - reinstalled Svedala burner. Svedala field service engineer visited plant for 3 days to optimize burner. Burner had been set for low firing rate. In addition, balance of primary to secondary air was incorrect and was properly adjusted.
6. April 2000 - reinstalled Pillard type gas nozzle. The bushy flame pattern with Svedala burner washed out refractory in burner zone, requiring replacement.
7. April 2000 - switched to high pressure steam over concerns with fluctuating steam quality using low pressure steam.
8. April 2000 - verified kiln slope was correct.
9. May 2000 - repositioned both the oxygen sample tube and temperature probe in the feed end of the kiln.
10. June 2000 - installed Pillard burner to improve flame length. Better than Svedala burner but still not as long as A/B. Ring formation near burning zone continued to affect rates.
11. July 2000 - replaced missing distribution cone on Pillard burner to increase flame length similar to A/B.
12. August 2000 - installed on-line CO analyzer for improved combustion control.

SENDER: COMPLETE THIS SECTION	COMPLETE THIS SECTION ON DELIVERY	
<ul style="list-style-type: none"> <li>Complete items 1, 2, and 3. Also complete item 4 if Restricted Delivery is desired.</li> <li>Print your name and address on the reverse so that we can return the card to you.</li> <li>Attach this card to the back of the mailpiece, or on the front if space permits.</li> </ul>	A. Received by (Please Print Clearly)	B. Date of Delivery 4-9-01
	C. Signature x <i>D. Daigle</i>	
1. Article Addressed to:  Mr. M.A. Daigle, General Manager IMC Phosphates Company PO Box 2000 Mulberry, FL 33860-1100	<input type="checkbox"/> Agent <input type="checkbox"/> Addressee <input type="checkbox"/> Yes <input type="checkbox"/> No	
2. Article 70¢	D. Is delivery address different from item 1? If YES, enter delivery address below:	
PS For	3. Service Type <input checked="" type="checkbox"/> Certified Mail <input type="checkbox"/> Express Mail <input type="checkbox"/> Registered <input type="checkbox"/> Return Receipt for Merchandise <input type="checkbox"/> Insured Mail <input type="checkbox"/> C.O.D.	
	4. Restricted Delivery? (Extra Fee) <input type="checkbox"/> Yes	
	PS Form 3800-M-0952	

U.S. Postal Service CERTIFIED MAIL RECEIPT (Domestic Mail Only; No Insurance Coverage Provided)		
Article Sent To:		
Postage	\$	<i>IMC Phosphates</i> Postmark Here
Certified Fee		
Return Receipt Fee (Endorsement Required)		
Restricted Delivery Fee (Endorsement Required)		
<b>Total Postage &amp; Fees</b>	\$	
Name (Please Print Clearly) (to be completed by mailer) Mr. M.A. Daigle, Gen. Mgr.		
Post Office, No. or Box No. PO Box 2000		
City, State, ZIP+4 Mulberry, FL 33860-1100		
PS Form 3800, July 1999		See Reverse for Instructions

7099 3400 0000 1450 3245



# Department of Environmental Protection

Jeb Bush  
Governor

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

David B. Struhs  
Secretary

March 13, 2001

CERTIFIED MAIL - RETURN RECEIPT REQUESTED

Mr. M. A. Daigle  
General Manager  
New Wales Plant  
IMC Phosphates Company  
P.O. Box 2000  
Mulberry, FL 33860-1100

RE: DEP File No.: 1050059-033-AC  
Test-Authorization  
New Wales Plant  
Emissions Units 036, 074, 075, 076  
Permit Nos: 1050059-024-AC/PSD-FL-244 and 1050059-014-AV

033

244A

Dear Mr. Daigle:

On February 5, 2001, the Department received your permit application for various authorizations from the Department's New Source Review Air Permitting Section. This Notice of Authorization applies to the operation of one kiln at a time as a dryer for mixed feed for the purpose of performance testing. IMC indicated that the dried material from that kiln would feed the other two kilns. The performance testing will be for three periods of three weeks each under this authorization. During all remaining periods, the kilns will operate normally or be down.

The present permit allows A or B Kilns to process mixed feed at a maximum rate of 15 tons/hr, C Kiln to process mixed feed at a maximum rate of 25 tons/hr and each kiln at a maximum heat input of 56 MMBTU/hr. This authorization allows any one kiln at a time to process 40 tons/hr of mixed feed, at a maximum heat input of 20 MMBTU/hr. IMC has indicated that operating temperatures are approximately 2800°F when operating as a kiln and approximately 200°F when operating as a dryer.

Based on the information provided by IMC, the Department hereby grants your request to operate one kiln at a time as a dryer with the following stipulations. Note that this authorization is only applicable to this plant and project. This authorization does not allow the permittee to use this process to debottleneck the process or exceed any applicable permit limits. Also, this authorization does not allow the permittee to circumvent any air pollution control device, or allow the emissions of air pollutants without the applicable air pollution control device operating properly [Rule 62-210.650, F.A.C.].

Screening to determine whether future operation of a kiln as a dryer constitutes a modification subject to a review for Prevention of Significant Deterioration (PSD) shall be performed in accordance with Chapter 403, F.S., Chapters 62-210 through 62-297 and 62-4, F.A.C., and Title 40, Code of Federal Regulations (CFR). The performance test results along with any modification application to allow permanent operation of any kiln as a dryer shall be reviewed by the Department's Bureau of Air Regulation (BAR) and interested agencies (i.e., DEP Southwest District Office, U.S. EPA, U.S. Fish and Wildlife Service, National Park Service, etc.)

The tests shall be subject to the following conditions:

1. Unless otherwise specified in this authorization, all conditions of permits 1050059-024-AC (PSD-FL-244) and 1050059-014-AV shall remain in effect.
2. This authorization allows any one of the kilns at a time, A, B or C, to operate as a dryer and the other two as kilns. The record log for the unit shall include the method of operation as well as the date and time the operation method began and ended.
3. When operating as a dryer, the maximum fuel-firing rate for the kiln shall not exceed 20 MMBTU/hr, on a daily average basis, calculated as heat input divided by hours fired.
4. IMC shall maintain records of material throughput for A, B, and C Kilns, mixed feed preparation section, and product handling operations. IMC shall record and maintain records of the operating temperature of A, B, and C Kilns. IMC shall record and maintain records of the fuel-firing rate when operating in either the kiln or dryer mode.
5. IMC shall comply with all emissions limitations for A, B, and C Kilns as well as all associated equipment.
6. IMC shall not exceed the permitted hourly throughput rate (tons/hour) for A, B, and C Kilns, total annual production rate of A and B Kilns, nor the annual input rate to C Kiln when used as a kiln. The kiln used as a dryer shall not exceed an input rate of 40 tons/hr.
7. Initial baseline testing shall be performed with the three kilns operating under normal conditions. The A and B kilns shall be operating at permitted capacity. Permitted capacity is defined as 90-100 percent of the maximum operating rate allowed by the permit. C Kiln shall be operated at the maximum possible permitted rate. Two tests under baseline conditions shall be performed. A and B kilns shall be tested for particulate matter (PM), fluorides (F) and visible emissions (VE). C kiln shall be tested for PM, F, VE and sulfur dioxide (SO<sub>2</sub>).
8. This authorization permits the performance testing of using one kiln (A or B or C) as a dryer for mixed feed to the A and/or B kilns operating at permitted capacity as kilns or to C kiln operating at the same rate as tested under baseline conditions. The performance test shall be no longer than three weeks in duration. Three such performance tests are permitted.
9. IMC shall conduct testing for PM, F and VE for A and B kilns and PM, F, VE and SO<sub>2</sub> for C kiln after the kilns have reached stable operating conditions when operating as a dryer during the performance testing. Accordingly, the normal sampling locations, at the stacks, shall be used for the testing.
10. The methodology described in 40 CFR 60, Appendix C shall be used to determine whether a physical or operational change to an existing facility resulted in an increase in the emission rate to the atmosphere under the two different operating conditions (performance vs. baseline). The comparison will form the basis of a PSD applicability determination pursuant to 40 CFR 52.21.
11. IMC shall notify the Department, prior to the date that the baseline test and the performance test will begin, of the date, time, and place of each test and test contact person who will be responsible for coordinating the tests.
12. IMC shall conduct the performance test in accordance with the test methods indicated in permit Nos. 1050059-024-AC/PSD-FL-244 and 1050059-014-AV at normal sampling locations.
13. IMC shall file a report with the Department on the results of the baseline and performance tests.
  - a. The required test report shall be filed with the Department as soon as practical but no later than 45 days after the last sampling run of each test is completed.
  - b. The report shall provide sufficient detail on the emissions unit tested (at a minimum, the "Project", "Facility ID" and "Emissions Unit ID"), the test procedures used to allow the Department to determine if the test report

was properly conducted and the test results properly computed. Testing procedures shall be consistent with the requirements of Rule 62-297.310(7), F.A.C.

14. Failure to submit the rates and actual operating conditions as well as identify the method of operation of each kiln in the test report may invalidate the performance test and fail to provide reasonable assurance of compliance. [Rules 62-297.31.0(8) and 62--4.070(3). F.A.C.]
15. This authorization shall expire on September 30, 2001.

A copy of this letter shall be filed with the referenced permit and shall become part of the permit.

A person whose substantial interests are affected by this authorization may petition for an administrative proceeding (hearing) under Sections 120.569 and 120.57, F.S. 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. 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 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, F.A.C.

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; A concise statement of the ultimate facts alleged, including the specific facts the petitioner contends warrant reversal or modification of the agency's action; and
- (e) A statement of 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, F.A.C.

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 authorization. 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.



Mr. M. A. Daigle  
March 13, 2001  
Page 4 of 5

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 EPA and by the person under the Clean Air Act unless and until Administrator separately approves any variance or waiver in accordance with the procedures of the federal program.

This "Authorization" is final and effective on the date filed with the Clerk of the Department unless a timely petition for an administrative hearing is filed pursuant to Sections 120.569 and 120.57, F.S. or unless a request for an extension of time in which to file a petition is filed within the time specified for filing a petition. Upon timely filing of a petition or a request for an extension of time to file the petition, this authorization will not be effective until further Order of the Department.

Any party to the Order (Authorization) has the right to seek judicial review of the Order pursuant to Section 120.68, F.S., by the filing of 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, Douglas Building, 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 of Appeal must be filed within 30 days after this Order is filed with the Clerk of the Department.

Executed in Tallahassee, Florida.

  
C. H. Fancy, P.E., Chief  
Bureau of Air Regulation

Mr. M. A. Daigle  
March 13, 2001  
Page 5 of 5

CERTIFICATE OF SERVICE

This is to certify that this NOTICE OF AUTHORIZATION was sent to the addressee by certified mail and all copies were sent by regular mail before the close of business on 3/16/01 to the listed persons, unless otherwise noted.

M. A. Daigle, IMC\*  
Bill Thomas, DEP SWD  
John Koogler, P.E., Koogler & Associates

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.

Charlotte J. Hayes  
(Clerk)

3/16/01  
(Date)

SENDER: COMPLETE THIS SECTION	COMPLETE THIS SECTION ON DELIVERY
<ul style="list-style-type: none"> <li>■ Complete items 1, 2, and 3. Also complete item 4 if Restricted Delivery is desired.</li> <li>■ Print your name and address on the reverse so that we can return the card to you.</li> <li>■ Attach this card to the back of the mailpiece, or on the front if space permits.</li> </ul>	<p>A. Received by <i>(Please Print Clearly)</i> <u>Linda Rochester</u>    B. Date of Delivery <u>3/19/01</u></p>
<p>1. Article Addressed to:</p> <p>Mr. M.A. Daigle, Gen. Mgr. New Wales Plant IMC Phosphates Company PO Box 2000 Mulberry, FL 33860-1100</p>	<p>C. Signature <u>Linda Rochester</u>    <input type="checkbox"/> Agent  <input type="checkbox"/> Addressee</p> <p>D. Is delivery address different from item 1?    <input type="checkbox"/> Yes  If YES, enter delivery address below:    <input type="checkbox"/> No</p>
<p>2. Article Number <i>(Copy from service label)</i> 7099 3400 0000 1449 2327</p>	<p>3. Service Type</p> <input checked="" type="checkbox"/> Certified Mail <input type="checkbox"/> Express Mail <input type="checkbox"/> Registered <input type="checkbox"/> Return Receipt for Merchandise <input type="checkbox"/> Insured Mail <input type="checkbox"/> C.O.D.
	<p>4. Restricted Delivery? <i>(Extra Fee)</i>    <input type="checkbox"/> Yes</p>
<p>PS Form 3811, July 1999                      Domestic Return Receipt                      102595-99-M-1789</p>	

<b>U.S. Postal Service</b> <b>CERTIFIED MAIL RECEIPT</b> <i>(Domestic Mail Only; No Insurance Coverage Provided)</i>		
<b>Article Sent To:</b> Mr. M.A. Daigle		
Postage	\$	Postmark Here
Certified Fee		
Return Receipt Fee <i>(Endorsement Required)</i>		
Restricted Delivery Fee <i>(Endorsement Required)</i>		
<b>Total Postage &amp; Fees</b>		\$
<i>Name <b>(Please Print Clearly)</b> to be completed by mailer</i> Mr. M.A. Daigle ----- <i>Street Address, No. or Post Office Box No.</i> PO Box 2000 ----- <i>City, State, ZIP+4</i> Mulberry, FL 33860-1100		
PS Form 3800, July 1999                      ; See Reverse for Instructions		

7099 3400 0000 1449 2327



**KOOGLER & ASSOCIATES**  
**ENVIRONMENTAL SERVICES**  
4014 NW THIRTEENTH STREET  
GAINESVILLE, FLORIDA 32609  
352/377-5822 • FAX/377-7158

KA 124-00-05

February 14, 2001

**RECEIVED**

FEB 16 2001

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  
FDEP File No. 1050059-033-AC

Dear Mr. Arif:

This is a follow up to your telephone conversation with Pradeep Raval regarding our request for a permit extension and revision for the above referenced project.

Enclosed is a waiver of the 30-day time limit for FDEP to review the permit application. This waiver, which expires on May 31, 2001, will allow adequate time to discuss and evaluate the information submitted to FDEP.

Regarding the extension of permit 1050059-024-AC (PSD-FL-244), it is our understanding that the permit remains valid past the current expiration date until FDEP takes action on the request, given that our request for permit extension was timely.

If you have any questions, please call Pradeep Raval or me.

Very truly yours,

KOOGLER & ASSOCIATES

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

Par.  
encl.

c: C. Dave Turley, IMC

WAIVER OF 30 DAY TIME LIMIT  
UNDER SECTIONS 120.60(2) AND 403.0876, FLORIDA STATUTES

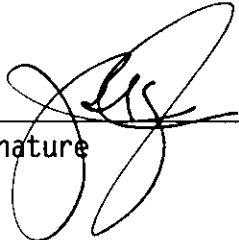
License (Permit) Application No. 1050059-033-AC

Applicant's Name: IMC Phosphates MP Inc.

With regard to the above referenced application, the applicant hereby with full knowledge and understanding of applicant's rights under Sections 120.60(2) and 403.0876, Florida Statutes, waives the right to have the application reviewed by the State of Florida Department of Environmental Protection within the 30 day time period prescribed by law. Said waiver is made freely and voluntarily by the applicant, with full knowledge, and without any pressure or coercion by anyone employed by the State of Florida Department of Environmental Protection.

This waiver shall expire on the 31st day of May, 2001.

The undersigned is authorized to make this waiver on behalf of the applicant.

  
\_\_\_\_\_  
Signature

John B. Koogler, Ph.D., P.E.  
Name, Engineer of Record