



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

KA 173-03-01

March 8, 2004

RECEIVED

MAR 11 2004

BUREAU OF AIR REGULATION

*30 day review  
NSPS Limits?*

Ms. Cindy Phillips, P.E.  
Florida Department of  
Environmental Protection  
MS 5505  
2600 Blair Stone Road  
Tallahassee, FL 32399-2400

Subject: Additional Information on Title V Permit Renewal  
US Agri-Chemicals Corporation – Bartow Facility  
DEP File No. 1050050-014-AV

Dear Ms. Phillips:

This is a follow up to your letter dated January 15, 2004, requesting additional information on the above referenced Title V renewal project.

The responses provided herein are in the format discussed with you and Bobby Bull in order to provide only the pertinent information.

- 1. Please provide reasonable assurance that the facility is not a Major Source of Hazardous Air Pollutants (HAPs).**

RESPONSE

As the fluoride emissions limit for the MAP/DAP plant is 18.29 tons per year, even using conservative EPA factors (hydrogen fluoride at 30 percent of total fluorides), the plant is below major source threshold. As the site uses a dedicated neutralized scrubber water system, HF emissions are not expected from the scrubber water system. Other HAP emissions are not expected from the site based on the materials handled and/or processed.

- 2. Please provide reasonable assurance that the facility is not subject to any National Emission Standard for Hazardous Air Pollutants (NESHAP), in particular 40 CFR63 Subparts AA and BB.**

RESPONSE

As indicated above, the source is not a major source of HAPs. Therefore, the NESHAPs do not apply.

- 3. Please provide a Compliance Assurance Monitoring (CAM) Plan for all applicable emission units for the facility.**

RESPONSE

The CAM applicability and plan information is presented in Attachment 1.

- 4. Please provide a facility plot plan for the facility. The previous application did not have the applicable attachment.**

RESPONSE

The requested facility plot plan is presented in Attachment 2.

- 5. Please provide the process flow diagram(s) for the facility.**

RESPONSE

The requested process flow diagrams are presented in Attachment 3.

- 6. Please provide the precautions to prevent emissions of unconfined particulate matter for the facility.**

RESPONSE

The list of precautions to prevent emissions of unconfined particulate matter is presented in Attachment 4.

- 7. Please provide a list of insignificant activities for the facility. The previous application did not have the applicable attachment.**

RESPONSE

The list of insignificant activities is presented in Attachment 5.

- 8. Please provide a compliance report and plan for the facility. The previous application did not have the applicable attachment.**

RESPONSE

The compliance reports summary is presented in Attachment 6.

- 9. Please provide any applicable supplementary items for each emission unit in the facility.**

RESPONSE

The supplementary pertinent information is presented in the attachments herein.

- 10. Please provide a list of any fugitive emissions from the facility.**

RESPONSE

The list of fugitive emissions summary is presented in Attachment 7.

- 11. Please provide the area map showing the facility location.**

RESPONSE

The facility location map is presented in Attachment 8.

- 12. 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.**

RESPONSE

The PE certification form is presented in Attachment 9.

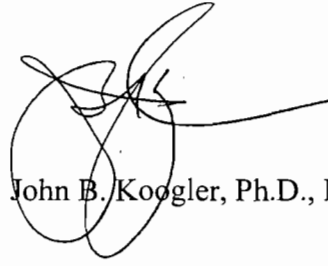
Ms. Cindy Phillips  
Florida Department of  
Environmental Protection

March 8, 2004

If you have any additional questions, please call Pradeep Raval.

Very truly yours,

KOOGLER & ASSOCIATES

A handwritten signature in black ink, appearing to read 'JBK', with a large circular flourish and a horizontal line extending to the right.

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

JBK:par  
Encl.

C: Ron Brunk, USAC

**ATTACHMENT 1**

**CAM APPLICABILITY ANALYSIS AND PLAN**

CAM APPLICABILITY DETERMINATION

UNIT	DESCRIPTION	CAM APPLIES?	RATIONALE
038	MAP/DAP Plant	YES	Scrubber emissions > 100 tpy
039	MAP/DAP Storage and Loadout	NO	No control device required for oiled product

CAM PLAN FOR MAP/DAP PLANT

The MAP/DAP Plant at USAC's Bartow Facility (EU 038) has a maximum production rate of 150 tons per hour (TPH) of product and has emissions limits for particulate matter and fluorides. The plant uses tail gas scrubbers on the dryer and reactor/granulator exhaust streams to meet these emission limits and has uncontrolled PM and F emissions greater than the major source threshold. A CAM plan is therefore required for this source for PM and F.

1. Emissions Unit Description: MAP/DAP Plant, EU 038

Applicable Regulations, Emission Limits, and Monitoring Requirements

Regulations: Permit No. AC53-145424 (PM and F), 40CFR60.222 (F)

*DAP Plants  
7/25/77*

Emissions Limits:

Particulate Matter: 38.6 lb/hr

Fluoride: 0.06 lb/ton P<sub>2</sub>O<sub>5</sub>, 4.17 lb/hr

Opacity: 20% [Rule 62-296]

Monitoring Requirements: Permit requires monitoring of raw material input, liquid flow rate and pressure drop across the scrubbing systems.

Control Technology: Emissions from the plant are controlled by two packed tail gas scrubbers in parallel.

## 2. Monitoring Approach

	Indicator No. 1	Indicator No. 2
Indicator	Pressure drop across each tail gas scrubber.	Scrubber liquid flow rate to each tail gas scrubber.
Measurement Approach	Differential pressure transducer.	micromotion flow meter.
Indicator Range	An excursion is defined as operation outside of the indicator range in the permit. Excursions trigger an inspection, corrective action, and a reporting requirement.	An excursion is defined as operation outside of the indicator range in the permit. Excursions trigger an inspection, corrective action, and a reporting requirement.
Data Representativeness	The minimum accuracy of the device is 5 percent.	The minimum accuracy of the device is 5 percent.
Verification of Operational Status	Operator check with computer alarm.	Operator check with computer alarm.
QA/QC Practices and Criteria	The differential pressure transducer is calibrated periodically.	The flow sensor is calibrated periodically.
Monitoring Frequency	The pressure drop is monitored continuously.	The scrubber liquid flow is monitored continuously.
Data Collection Procedures	Daily averages are computed.	Daily averages are computed.
Averaging Period	Daily average	Daily average

## 3. Justification

### Rationale for Selection of Performance Indicators

Based on EPA regulations and industry practice, the performance indicators selected are the tail gas scrubber liquid flow rate and pressure drop. These parameters have been widely accepted by the Department to provide reasonable assurance of proper scrubber operation and the resulting emission control.

### Rationale for Selection of Performance Indicator Ranges

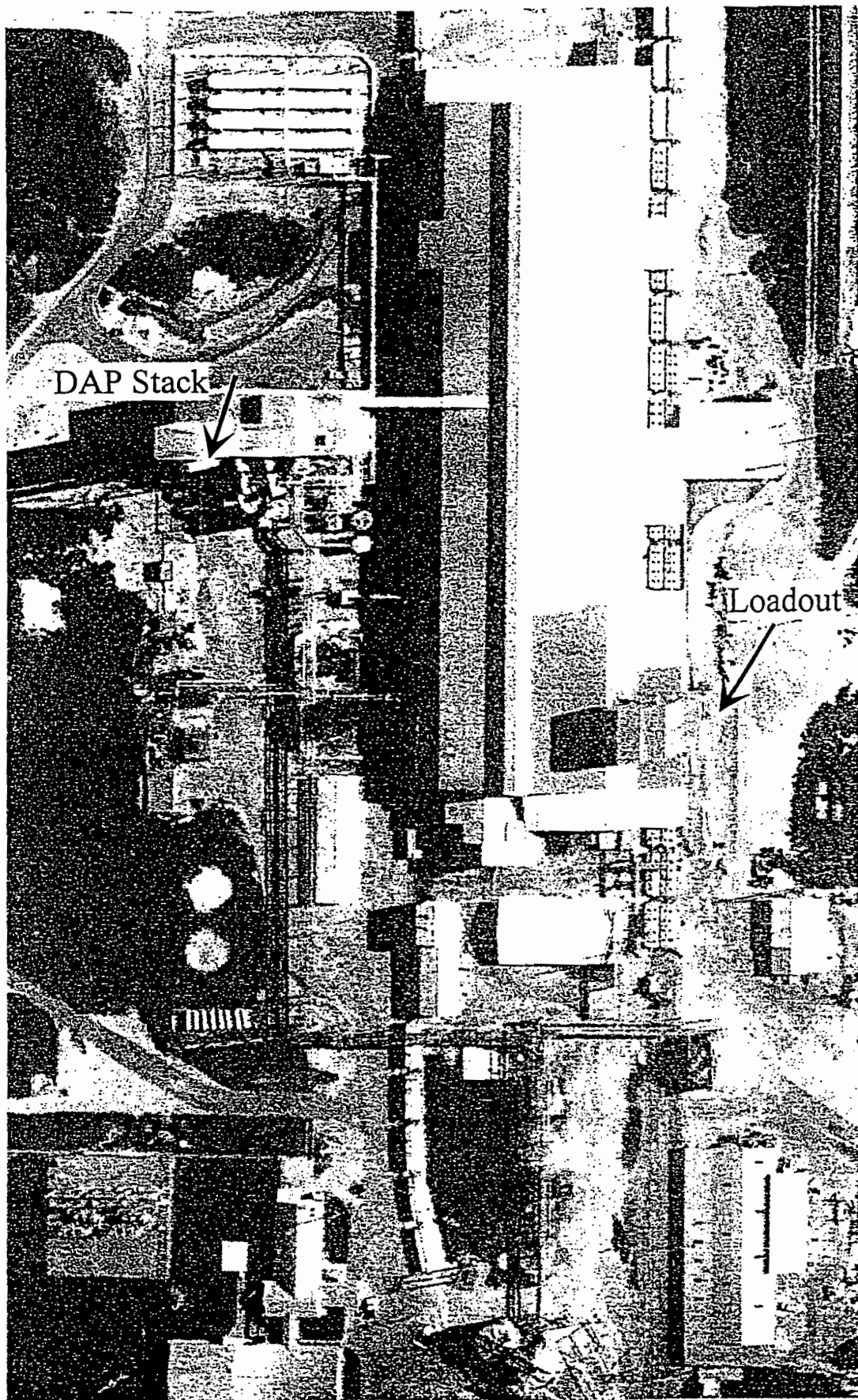
The monitoring approach is based on EPA regulations for phosphate fertilizer plants. The indicator ranges are based on historical tests which establish a range of acceptable values. An excursion is defined as operation outside of the established indicator range. If an excursion occurs, the corrective action plan will include an evaluation of the occurrence to determine cause and then determine the best course of action required to correct the situation. All excursions will be documented.

**ATTACHMENT 2**  
**FACILITY PLOT PLAN**



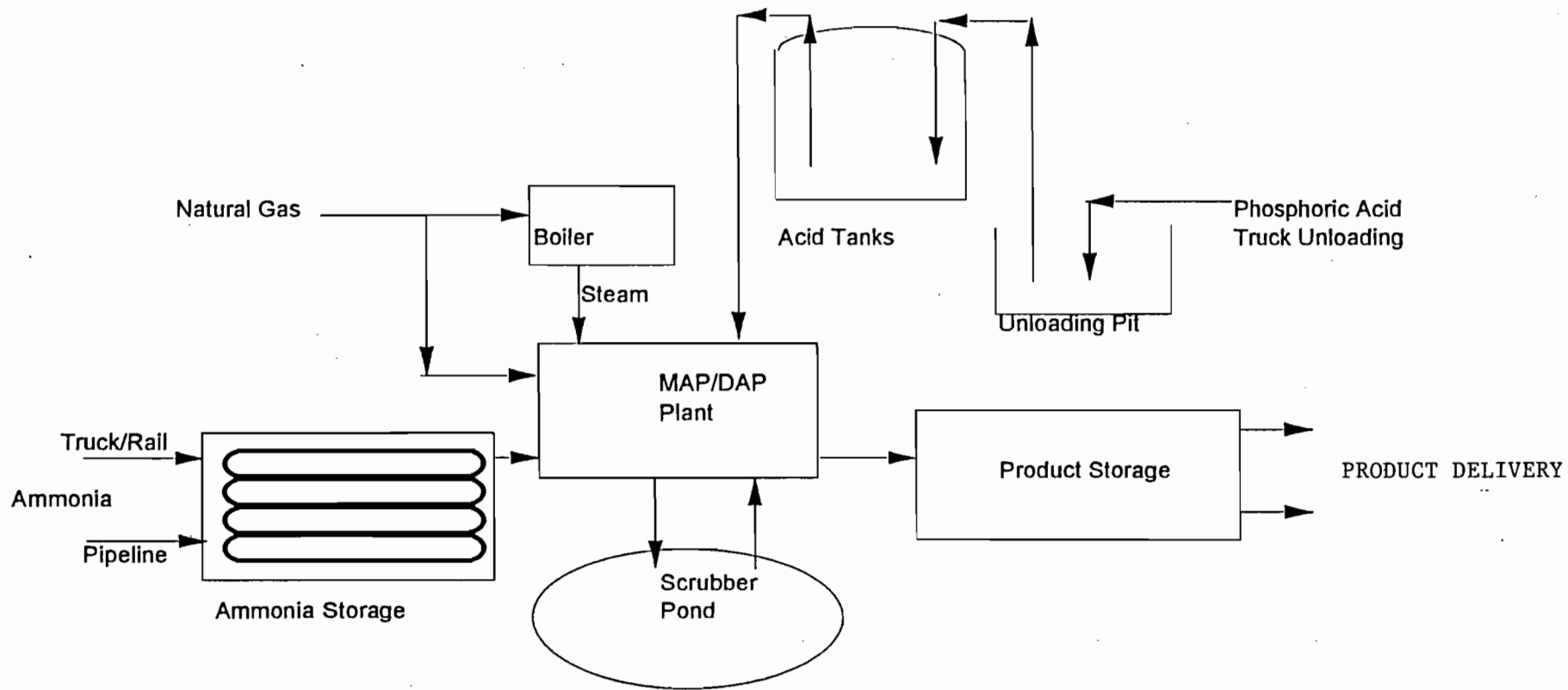
U.S. Agri-Chemicals  
Title V Facility Plot Plan

E.2. : BPL0T

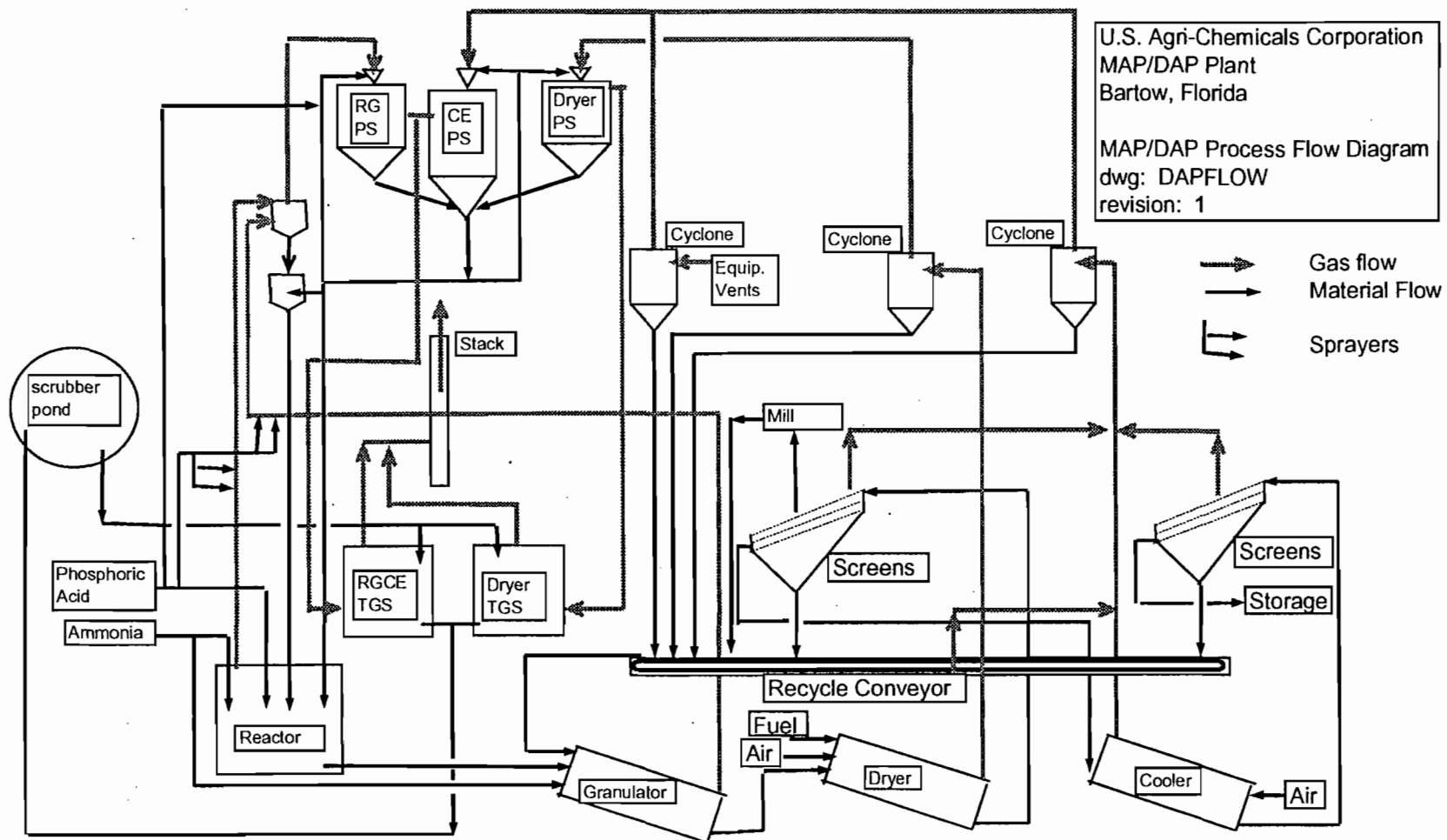


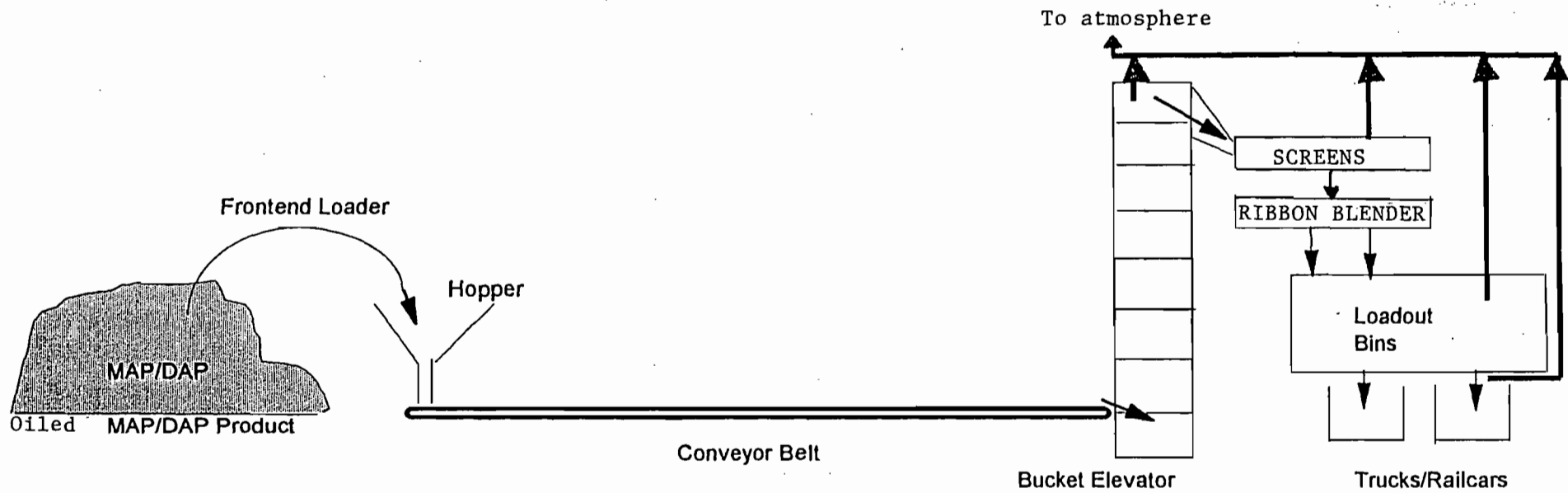
**ATTACHMENT 3**



**PROCESS FLOW DIAGRAMS**



U.S. Agri-Chemicals Corporation  
 MAP/DAP Plant  
 Bartow, Florida  
 Facility Process Flow Diagram  
 dwg: BPROC





 Gas flow  
 Material flow

U.S. Agri-Chemicals Corporation  
 MAP/DAP Plant  
 Bartow, Florida  
  
 Loadout Process Flow Diagram  
  
 dwg: LOADFLOW

**ATTACHMENT 4**

**PRECAUTIONS TO PREVENT EMISSIONS OF  
UNCONFINED PARTICULATE MATTER**

## PRECAUTIONS TO PREVENT EMISSIONS OF UNCONFINED PARTICULATE MATTER

Reasonable precautions to minimize emissions of unconfined particulate matter may include, as necessary:

- Paved roadways; application of water to unpaved roads.
- Landscaping or planting of vegetation.
- Use of enclosures and windbreaks, where practical.
- Oiling of fertilizer products to reduce dust generation.

**ATTACHMENT 5**

**LIST OF INSIGNIFICANT ACTIVITIES**



## LIST OF INSIGNIFICANT AND/OR UNREGULATED EMISSIONS UNITS FOR TITLE V PERMIT

### GENERAL FACILITY WIDE

E	abrasive cleaning - indoors
E	agricultural related activities
E	air compressors
E	air conditioners
E	air vents in compressed air systems
E	ammonia bullets, pipeline, pop off valves, flanges, truck/rail unloading, flares and chillers
CD	asbestos, waste and haz-waste removal
CD	automatic oil/lube systems for mechanical equipment and fueling operations
E	automotive, tractor, locomotives and their repair shops
E	blueprint copiers
E	building ventilation systems
E	caustic tanks/vents
E	closed containers of maintenance chemicals
CD	cold cleaning degreasers (containing heavier than air solvents)
E	construction/repair of office, storage and residential units
E	containers, reservoirs, wax and grease
GD	containers and tanks for oils
CD	cooling ponds and process water storage ponds, gypsum stacks
GD	cooling towers (no heavy metals used as antiscalants or algacides)
E	degassifiers/deaerators
CD	diesel pump motors
E	drain vents
E	drinking water treatment area and wastewater treatment plant
E	ducts, chutes, equipment maintenance
E	dumpsters, other miscellaneous waste collection and handling
GD	electric substation/electric yard
E	electric-powered vehicles
E	electrical charging systems
E	electrically heated equipment for heat treating, drying, annealing, etc.
E	equipment cleaning, including steam cleaning
E	equipment for bonding brake shoes
E	equipment of hydraulic or hydrostatic testing
E	fire training exercises
E	food preparation, handling, consumption
E	fresh water tanks/vents
E	fuel tanks and dispensors
CD	gypsum stack process water re-circulation system (ditches, ponds, spillways)
E	hand held equipment
GD	handling of baghouse materials
E	hydroblasting
E	instrument air systems/vents
CD	laboratories (quality control, analytical, metallurgical)
E	landscaping and farm equipment
GD	lime silo with baghouse
E	lime tanks/vents
E	liming station
E	liquid sampling systems
E	maintenance of facilities
E	maintenance of grounds
E	maintenance shops
E	mechanical drives/gearboxes
CD	metal shops
GD	minor fugitive leaks from process equipment
E	mobile equipment fueling operations (diesel/gasoline)
E	mobile sources, including internal combustion engines, pumps, compressors, generators, welding , etc.
E	neutralization tanks/vents
E	non process mineral spirits use
E	open containers in use
E	painting /coating of equipment, tanks and structures (less than 6 gallons per day)

CD portable kerosene space heaters  
 E pressure/steam relief valves  
 GD process water treatment and management systems  
 GD pump seals  
 E purchased non-listed chemical tanks/vents (no HAP or VOC content)  
 GD railcar/truck/tanker unloading  
 E railroad flares  
 GD raw material, reclaim/recycle material and product transfer and storage tanks  
 GD reclaimed mined areas  
 E reclaimed water tank vents  
 CD refrigeration systems  
 GD rock pile, rock hoppers, rock grinding mills  
 CD safety devices  
 CD safety klean solvent cleaners  
 E sandblasters, welding equipment, compressors, wood shop, metal shop  
 E service of air pollution control devices  
 CD space heaters  
 E steam vents/leaks  
 E storage facilities for packaged materials  
 E storage tanks and dispensers  
 GD sulfuric acid tanks/vents  
 E sweeping and general cleanup  
 E temporary use of compressors, generators, water pumps with internal combustion engines  
 GD transfer of materials on covered belt systems  
 GD transformer vault/building  
 E vacuum cleaning systems  
 GD valves and flanges (no HAP or VOC content)  
 E washing and cleaning equipment  
 E waste preparation for disposal (in closed drums or other containers, spill cleanup)  
 GD wastewater plants, water treatment area  
 CD water pumps  
 E water treatment aeration  
 E water treatment chemical tanks/totes/drums  
 GD wet limestone transfer, handling, storage  
 E woodworking shops  
 E fugitive emissions of PM/PM10, SO2, NOx, CO, VOCs, NH3 and HAPs

#### GRANULATION

GD choke feeder, covered conveyors, screening tower  
 GD chutes, conveyor and hopper  
 E coating oil tanks  
 GD cooling tower, slurry pump, scrubber sump  
 GD covered conveyor, surge bin, product screens, chute to truck/railcar  
 GD material conveyors, elevators and screens  
 E oil coating application systems  
 E pond water sumps  
 GD product recovery units  
 GD raw material, reclaim material and product storage tanks, bins and buildings  
 GD scrubber seal tanks  
 E seal oil tanks

#### NOTES:

1. E reflects items to be exempted under EPA "trivial list" criteria
2. CD reflects items to be exempted under DEP's categorical exemption criteria
3. GD reflects items to be exempted under DEP's generic exemption criteria or criteria in 62-4.040 FAC

**ATTACHMENT 6**  
**COMPLIANCE REPORT**

## COMPLIANCE REPORT & PLAN

The compliance reports have been submitted for the listed emission units as follows:

EMISSION UNIT	COMPLIANCE TEST REPORT SUBMITTED
038 MAP/DAP Plant	August 5, 2003
039 MAP/DAP Storage & Loadout	August 5, 2003

As there are no emission units out of compliance, a compliance plan is not necessary for this facility.

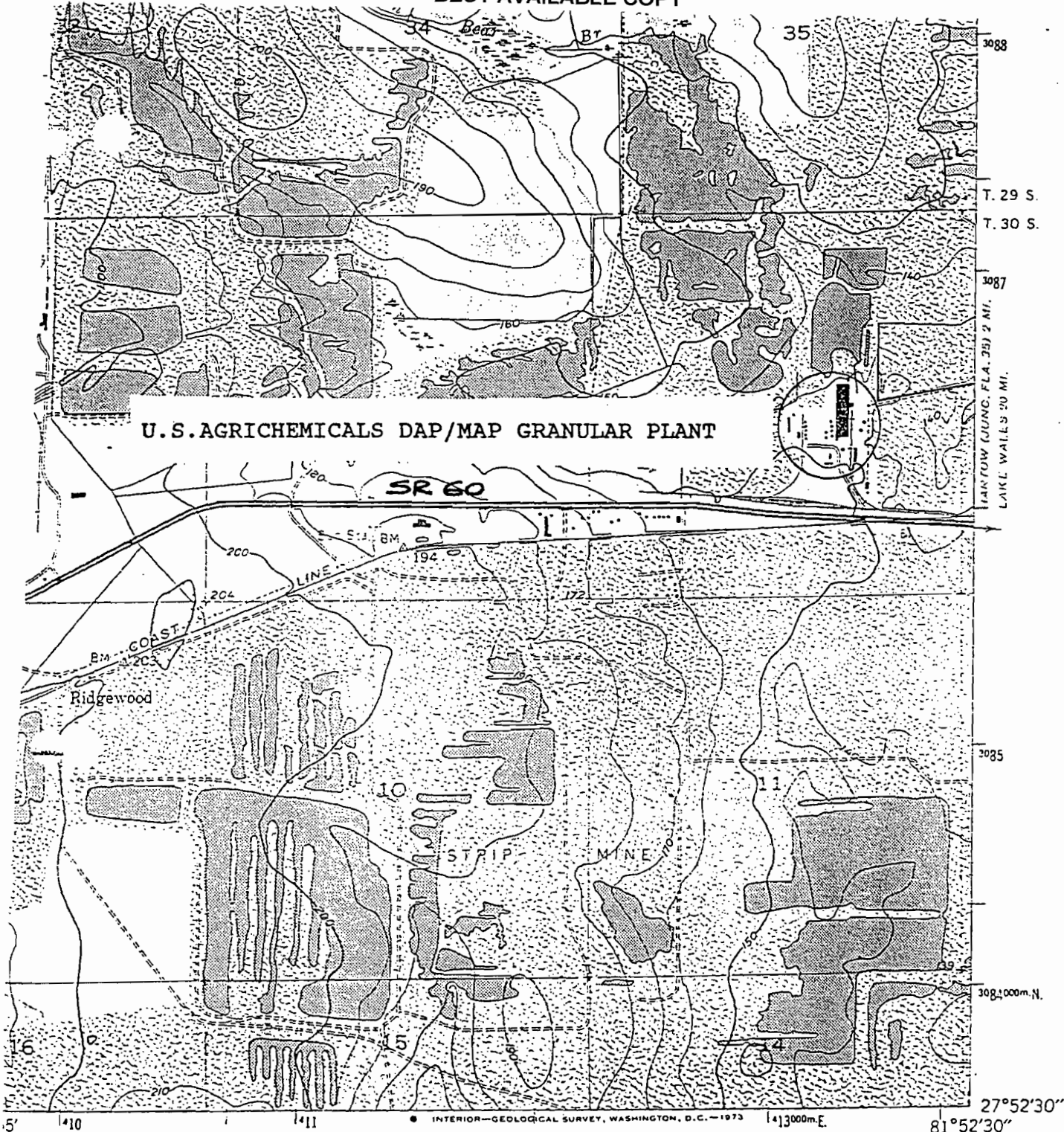
**ATTACHMENT 7**

**SUMMARY OF FUGITIVE EMISSIONS**

## FUGITIVE EMISSIONS

The phosphate fertilizer manufacturing process and associated activities result in fugitive emissions of PM/PM10, SO<sub>2</sub>, NO<sub>x</sub>, CO, VOCs, NH<sub>3</sub> and HAPs from the receiving, storage, handling, transfer and use of process, product and maintenance related materials. These fugitive emissions may occur both inside the manufacturing buildings and outside within the plant site.

**ATTACHMENT 8**  
**FACILITY LOCATION MAP**



U.S. AGRICHEMICALS DAP/MAP GRANULAR PLANT

SR 60

Ridgewood

MULBERRY MINE STRIP

3088  
T. 29 S.  
T. 30 S.  
3087  
PAN FOW (JUNC. FLA. 35) 2 MI.  
LAKE WALLS 20 MI.

3085

3081000m.N.

27°52'30"

81°52'30"

INTERIOR-GEOLOGICAL SURVEY, WASHINGTON, D.C.-1973

1:3000m.E.

(HOMELAND)  
4639 IV SE

ROAD CLASSIFICATION

- |   |               |                   |
|---|---------------|-------------------|
| HARD-SURFACE ALL WEATHER ROADS                      |               | DRY WEATHER ROADS |
| Heavy-duty  | 4 LANE 6 LANE | Improved dirt     |
| Medium-duty   | 4 LANE 6 LANE | Unimproved dirt   |
| Loose-surface, graded, or narrow hard-surface - - - |               |                   |
| □   | U. S. Route   | ○ State Route     |

U.S. Agri-Chemicals Corporation  
MAP/DAP Plant  
Bartow, Florida

Facility Location Map

dwg: BLOC

MULBERRY, FLA.  
N2752.5-W8152.5/7.5

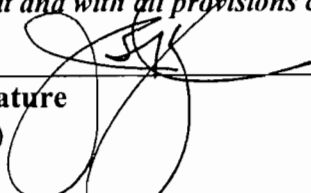
1949  
PHOTOREVISED 1972  
AMS 4639 IV NW-SERIES V847



**ATTACHMENT 9**

**P.E. AND R.O. CERTIFICATION**

Professional Engineer Certification

1. Professional Engineer Name: <b>John B. Koogler, Ph.D, P.E.</b> Registration Number: <b>12925</b>
2. Professional Engineer Mailing Address... Organization/Firm: <b>Koogler and Associates</b> Street Address: <b>4014 NW 13<sup>th</sup> Street</b> City: <b>Gainesville</b> State: <b>FL</b> Zip Code: <b>32609</b>
3. Professional Engineer Telephone Numbers... Telephone: <b>(352) 377-5822</b> ext. Fax: <b>(352) 377-7158</b>
4. Professional Engineer Email Address: <b>jkoogler@kooglerassociates.com</b>
5. Professional Engineer Statement: <i>I, the undersigned, hereby certify, except as particularly noted herein*, that:</i> <i>(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</i> <i>(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.</i> <i>(3) If the purpose of this application is to obtain a Title V air operation permit (check here <input type="checkbox"/>, 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 plan and schedule is submitted with this application.</i> <i>(4) If the purpose of this application is to obtain an air construction permit (check here <input type="checkbox"/>, if so) or concurrently process and obtain an air construction permit and a Title V air operation permit revision or renewal for one or more proposed new or modified emissions units (check here <input checked="" type="checkbox"/>, 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.</i> <i>(5) If the purpose of this application is to obtain an initial air operation permit or operation permit revision or renewal for one or more newly constructed or modified emissions units (check here <input type="checkbox"/>, 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.</i>  Signature (seal)  Date <u>3/5/04</u>

\* Attach any exception to certification statement.

**Application Responsible Official Certification**

Complete if applying for an initial/revised/renewal Title V permit or concurrent processing of an air construction permit and a revised/renewal Title V permit. If there are multiple responsible officials, the "application responsible official" need not be the "primary responsible official."

1. Application Responsible Official Name: <b>Phong T. Vo, General Manager of Engineering and Technical Services</b>
2. Application Responsible Official Qualification (Check one or more of the following options, as applicable): <input checked="" type="checkbox"/> For a corporation, the president, secretary, treasurer, or vice-president of the corporation in charge of a principal business function, or any other person who performs similar policy or decision-making functions for the corporation, or a duly authorized representative of such person if the representative is responsible for the overall operation of one or more manufacturing, production, or operating facilities applying for or subject to a permit under Chapter 62-213, F.A.C. <input type="checkbox"/> For a partnership or sole proprietorship, a general partner or the proprietor, respectively. <input type="checkbox"/> For a municipality, county, state, federal, or other public agency, either a principal executive officer or ranking elected official. <input type="checkbox"/> The designated representative at an Acid Rain source.
3. Application Responsible Official Mailing Address... Organization/Firm: <b>US Agri-Chemicals Corporation</b> Street Address: <b>3225 State Road 630 West</b> City: <b>Ft. Meade</b> State: <b>FL</b> Zip Code: <b>33841-9799</b>
4. Application Responsible Official Telephone Numbers... Telephone: <b>(863) 285-8121</b> ext. Fax: <b>(863) 285-7088</b>
5. Application Responsible Official Email Address: <b>PVO@USAGRICHEM.COM</b>
6. Application Responsible Official Certification: <p>I, the undersigned, am a responsible official of the Title V source addressed in this air permit application. I hereby certify, based on information and belief formed after reasonable inquiry, that the statements made in this application are true, accurate and complete and that, to the best of my knowledge, any estimates of emissions reported in this application are based upon reasonable techniques for calculating emissions. The air pollutant emissions units and air pollution control equipment described in this application will be operated and maintained so as to comply with all applicable standards for control of air pollutant emissions found in the statutes of the State of Florida and rules of the Department of Environmental Protection and revisions thereof and all other applicable requirements identified in this application to which the Title V source is subject. I understand that a permit, if granted by the department, cannot be transferred without authorization from the department, and I will promptly notify the department upon sale or legal transfer of the facility or any permitted emissions unit. Finally, I certify that the facility and each emissions unit are in compliance with all applicable requirements to which they are subject, except as identified in compliance plan(s) submitted with this application.</p> <p><u>Phong T. Vo</u> Signature</p> <p><u>3/8/04</u> Date</p>

U.S. Agri-Chemicals Corporation  
3225 State Road 630 West  
Fort Meade, FL 33841-9799  
941 285 8121

**US**  
**Agri-Chemicals**

A Sinochem Company

March 08, 2004

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MAR 10 2004

BUREAU OF AIR REGULATION

Ms. Cindy Phillips, P.E.  
Florida Department of Environmental Protection  
MS 5505  
2600 Blair Stone Road  
Tallahassee, FL 32399-2400

RE: Additional Information on Title V Permit Renewal  
U.S. Agri-Chemicals – Bartow Facility  
DEP File No. 1050050-014-AV

Dear Ms. Phillips,

Enclosed please find the original Responsible Official Certification to match the response filed by Pradeep Raval of Koogler & Associates for the subject permit renewal.

Please feel free to contact me at (863) 285-8121, extension 279 if you have any questions.

Sincerely,



Ronald L. Brunk, Manager  
Environmental Engineering

CC: P. Raval- K&A





**Table 2-1, Summary of Compliance Requirements**

U.S. Agri-Chemicals Corporation  
Bartow Chemical Plant

**FINAL Revised Permit No.:** 1050050-012-AV  
**Facility ID No.:** 1050050

This table summarizes information for convenience. It does not supersede any of the terms or conditions of this permit.

**E.U. ID No. Brief Description**

- 038 MAP/DAP Plant
- 039 MAP/DAP Storage & Loadout

E.U. ID No.	Pollutant Name or Parameter	Fuel(s)	Compliance Method	Testing Frequency	Frequency Base Date *	Min. Compliance Test Duration	CMS**	See Permit Condition(s)
-038	F (Fluoride)		13A or 13B	annual	20-March	1 hour	Yes	III. A.7. & A.8.
	VE		9	annual	20-March	30 minutes		III. A.7, A.8, & A.9.
	PM	oil/gas	5	annual	20-March	1 hour		III. A.7. & A.8.
	SO <sub>2</sub>	oil	fuel analysis, and sampling	annual	20-March			III. A.7, A.8, & A.10.
	Pressure drop							III. A.11, A.12, A.13, A.15 & A.21.
	Water flow rate							III. A.11, A.12, A.13 A.21.
	Mass flow						III. A.14 & A.16.	

Notes: \*Frequency base date established for planning purposes only; see Rule 62-297.310, F.A.C.  
\*\*CMS [=] continuous monitoring system

Pollution Control Equipment	Parameter	Minimum Limitation	Maximum Limitation	Units
RGCE Tail Gas Scrubber	Liquid Flow	1712	2728	GPM
	Pressure Drop	3.0	12.2	"H <sub>2</sub> O
Dryer Tail Gas Scrubber	Liquid Flow	881	1336	GPM
	Pressure Drop	4.2	13.1	"H <sub>2</sub> O

**Table 2-1, Summary of Compliance Requirements**

U.S. Agri-Chemicals Corporation  
Bartow Chemical Plant

**FINAL Revised Permit No.:** 1050050-012-AV  
**Facility ID No.:** 1050050

This table summarizes information for convenience. It does not supersede any of the terms or conditions of this permit

E.U. ID No.	Pollutant Name or Parameter	Fuel(s)	Compliance Method	Testing Frequency	Frequency Base Date *	Min. Compliance Test Duration	CMS**	See Permit Condition(s)
-039	VE PM  Pressure drop		5 9	annual five years	27-February 6 months prior to exp. date	30 minutes 1 hour		III. B.5. & B.7. III. B.6 & B.7. (waived per Condition B.4) III. B.8, B.9 & B.10.

Notes: \*Frequency base date established for planning purposes only; see Rule 62-297.310, F.A.C.  
\*\*CMS [=] continuous monitoring system

Pollution Control Equipment	Parameter	Minimum Limitation	Maximum Limitation	Units
MAP/DAP Storage & Loadout—Baghouse	Pressure Drop	0.7	6.0	"H <sub>2</sub> O

Pollution Control Equipment	Dust-Suppressing Oil	Minimum Application Rate	Point of Application	Method of Measurement
MAP/DAP Storage & Loadout Unit—Product Oiling	Dustrol 3064	0.5 gallons per ton of product	Cooler; approx. 15" from discharge end	Mass flow meter/automatic valve

**Subsection B. This section addresses the following emissions unit(s).**

**E.U.**

<b><u>ID No.</u></b>	<b><u>Brief Description</u></b>
-039	MAP/DAP Storage & Loadout

The MAP/DAP storage and loadout facility has a process input rate of 300 tons per hour. Particulate matter emissions are controlled by a Mikro-Pulsaire Model 512K10 baghouse rated at 30,000 acfm *and/or application of a dust-suppressing oil to product.*

{Permitting note(s): This emissions unit is regulated under Rule 62-296.320, F.A.C., General Pollutant Emission Limiting Standards; Rule 62-296.700, F.A.C., RACT Particulate Matter; and Rule 62-296.403, F.A.C., Phosphate Processing; }

**The following specific conditions apply to the emissions unit(s) listed above:**

**Essential Potential to Emit (PTE) Parameters**

**B.1. Capacity.** The maximum process/transfer rate for the MAP/DAP storage and loadout facility shall not exceed 300 tons per hour on a 24-hour basis.  
[Rule 62-4.160(2), F.A.C. and Rule 62-210.200, F.A.C., Definitions - (PTE), Title V Application dated 6/13/96.]

**Emission Limitations and Standards**

**B.2.** The maximum allowable particulate matter emissions from the MAP/DAP storage and loadout facility shall not exceed 22.7 pounds per hour and 99.43 tons per year. This particulate matter emission rate limitation qualifies the facility for the PM-RACT exemption per Rule 62-296.700(2)(b), F.A.C.  
[Requested by permittee, August 9, 1988, and Rule 62-296.700(2)(b), F.A.C.]

**B.3.** Visible emissions shall not be equal to or greater than 20% opacity. *However, when a dust-suppressing oil has been applied to product to control particulate emissions in lieu of operation of the baghouse emission-control device, there shall be less than 5% visible emissions to the ambient atmosphere from any point on the MAP/DAP storage and loadout building. (Effective as of the date of revision under FDEP project 012, as shown on page 2 of 10.)*  
[Rule 62-4.070(3) and -296.320(4)(b)&(c), F.A.C.; Construction permit 1050050-009-AC (as amended by project no. 010)]

**B.4.** Due to the expense and complexity of conducting a stack test on a minor source of particulate matter, and because the MAP/DAP storage and loadout facility is equipped with a baghouse emission control device, the Department, pursuant to the authority granted under Rule 62-297.620(4), F.A.C., hereby establishes a visible emission limitation not to exceed an opacity of 5% from this source's baghouse exhaust in lieu of a particulate stack test and a 20% opacity standard. [Rule 62-297.620(4), F.A.C.]



compliance test is submitted based on any other allowable permitted oil within 30 days of fuel switching. [Rules 62-297.310(7)(a)5, and 62-4.070(3), F.A.C.]

**A.10.** If testing is conducted while firing fuel oil in the dryer, compliance with the sulfur content requirement of Condition A.2 shall be demonstrated during the test by submitting either of the following with the test report:

- a. A Certificate of Fuel Oil Analysis from your fuel oil vendor for the fuel used during the compliance test; or
- b. A Certificate of Fuel Oil Analysis for a fuel oil sample taken during the compliance test.

[Rule 62-4.070(3), F.A.C.].

**Monitoring of Operations**

**A.11.** The permittee shall measure and record the total acid flow rate to the venturi scrubber system. The total acid flow rate to the venturi scrubber system shall be within the range of 1.4 to 6.8 gpm of acid per TPH of P<sub>2</sub>O<sub>5</sub>. Static pressure measured across the venturi scrubber system must be within the (vacuum) range of -25 inches w.c. to -35 inches w.c. measured at the exhaust gas blower. [Air Construction Permit AC53-145424]

~~**SUPERCEDED**~~

~~**A.12.** In order to provide reasonable assurance that the pollution control equipment is operating properly, the permittee shall comply with the minimum and maximum pressure drops and water flow rates specified in the attached table of control device parameters for the MAP/DAP Plant: [Rule 62-213.440(1), F.A.C.]~~

<del>Pollution Control Equipment</del>	<del>Parameter</del>	<del>Minimum Limitation</del>	<del>Maximum Limitation</del>	<del>Units</del>
<del>RGCE Tail Gas Scrubber</del>	<del>Liquid Flow</del>	<del>1712</del>	<del>2604</del>	<del>GPM</del>
	<del>Pressure Drop</del>	<del>3.4</del>	<del>7.1</del>	<del>"H<sub>2</sub>O</del>
<del>Dryer Tail Gas Scrubber</del>	<del>Liquid Flow</del>	<del>881</del>	<del>1371</del>	<del>GPM</del>
	<del>Pressure Drop</del>	<del>4.2</del>	<del>8.2</del>	<del>"H<sub>2</sub>O</del>

~~(Superceded as of the date of revision under Project 012, as shown on page 2 of 10.)~~

*A.12. In order to provide reasonable assurance that the MAP/DAP plant's pollution-control equipment is operating properly, the permittee shall comply with the minimum and maximum values of pressure drop and water flowrate that have been established by compliance tests, approved by the Department, and maintained in the Department's file with the current permit. This schedule, which is identified as Table 2-1, may be revised upon request from the permittee and written approval from the Department. (Effective as of the date of revision under Project 012, as shown on page 2 of 10.)*

*[Rule 62-213.440(1), F.A.C.; Air Construction Permit 1050050-009-AC (as amended under Project 010)]*

compliance test is submitted based on any other allowable permitted oil within 30 days of fuel switching. [Rules 62-297.310(7)(a)5, and 62-4.070(3), F.A.C.]

**A.10.** If testing is conducted while firing fuel oil in the dryer, compliance with the sulfur content requirement of Condition A.2 shall be demonstrated during the test by submitting either of the following with the test report:

- a. A Certificate of Fuel Oil Analysis from your fuel oil vendor for the fuel used during the compliance test; or
- b. A Certificate of Fuel Oil Analysis for a fuel oil sample taken during the compliance test.

[Rule 62-4.070(3), F.A.C.].

**Monitoring of Operations**

**A.11.** The permittee shall measure and record the total acid flow rate to the venturi scrubber system. The total acid flow rate to the venturi scrubber system shall be within the range of 1.4 to 6.8 gpm of acid per TPH of P<sub>2</sub>O<sub>5</sub>. Static pressure measured across the venturi scrubber system must be within the (vacuum) range of -25 inches w.c. to -35 inches w.c. measured at the exhaust gas blower. [Air Construction Permit AC53-145424]

***SUPERCEDED***

~~**A.12.** In order to provide reasonable assurance that the pollution control equipment is operating properly, the permittee shall comply with the minimum and maximum pressure drops and water flow rates specified in the attached table of control device parameters for the MAP/DAP Plant: [Rule 62-213.440(1), F.A.C.]~~

<del>Pollution Control Equipment</del>	<del>Parameter</del>	<del>Minimum Limitation</del>	<del>Maximum Limitation</del>	<del>Units</del>
<del>RGCE Tail Gas Scrubber</del>	<del>Liquid Flow</del>	<del>1712</del>	<del>2604</del>	<del>GPM</del>
	<del>Pressure Drop</del>	<del>3.4</del>	<del>7.1</del>	<del>"H<sub>2</sub>O</del>
<del>Dryer Tail Gas Scrubber</del>	<del>Liquid Flow</del>	<del>881</del>	<del>1371</del>	<del>GPM</del>
	<del>Pressure Drop</del>	<del>4.2</del>	<del>8.2</del>	<del>"H<sub>2</sub>O</del>

~~(Superceded as of the date of revision under Project 012, as shown on page 2 of 10.)~~

*A.12. In order to provide reasonable assurance that the MAP/DAP plant's pollution-control equipment is operating properly, the permittee shall comply with the minimum and maximum values of pressure drop and water flowrate that have been established by compliance tests, approved by the Department, and maintained in the Department's file with the current permit. This schedule, which is identified as Table 2-1, may be revised upon request from the permittee and written approval from the Department. (Effective as of the date of revision under Project 012, as shown on page 2 of 10.)*

*[Rule 62-213.440(1), F.A.C.; Air Construction Permit 1050050-009-AC (as amended under Project 010)]*