TWIN TOWERS OFFICE BUILDING
2600 BLAIR STONE ROAD
TALLAHASSEE, FLORIDA 32301

BOB GRAHAM
GOVERNOR

JACOB D. VARN
SECRETARY

STATE OF FLORIDA

DEPARTMENT OF ENVIRONMENTAL REGULATION

MEMORANDUM CERTIFIED MAIL

TO: Dave Puchaty, Manager
Southwest District, Florida DER

Roger Stewart, Director
Hillsborough Co. Env. Prot. Comm.

FROM: Steve Smallwood, Acting Bureau Chief
Bureau of Air Quality Management, FDER

DATE: December 26, 1979

SUBJ: Proposed Department Action on Application by the Agrico Chemical Co., to construct phosphate rock and granular fertilizer transport and storage facilities to be constructed at the Big Bend Terminal near Gibsonton, Hillsborough County, Florida.

Attached please find one copy each of the seven proposed Construction Permits, Technical Evaluations, Statement of Department Intent, and the original applications, from the Agrico Chemical Company, for the construction of the aforementioned phosphate and fertilizer transfer and storage facility.

Pursuant to 17-2.091 and 40 CFR 51.18 this information is to be maintained, on file, for public review for 30 days following issuance of public notice.

Comments are to be submitted to Mr. John Svec, of the Bureau, in writing.

SS:caa

ENCLOSURES: 1

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DEPARTMENT OF ENVIRONMENTAL REGULATION

MEMORANDUM

CERTIFIED MAIL

TO: Harold W. Long, Jr., Manager
Environmental Control,
Agrico Chemical Company

FROM: Steve Smallwood, Acting Bureau Chief,
Bureau of Air Quality Management, FDER

DATE: December 26, 1979

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ENCLOSURES: 1

Technical Evaluation

and

Preliminary Determination

Agrico Chemical Company

Big Bend Terminal

Gibsonton, Florida

Construction Permit

Application Numbers:

AC 25142
AC 25149
AC 25160
AC 25161
AC 25162
AC 25163
AC 25164

Florida Department of Environmental Regulation

Bureau of Air Quality Management

Central Air Permitting

December 20, 1979

I. PROPOSED DEPARTMENT ACTION

The Department intends to issue the requested Construction Permits to Agrico Chemical Company to construct a dust collector on the existing rotary railcar dump, transfer to storage; new storage silos for dry phosphate rock, transfer to shiploader; new railcar dump for phosphate fertilizer, transfer to storage; new storage building and transfer to shiploader. All drop points on the outdoor conveying system will be controlled by fabric dust collectors. The dry phosphate storage silos will be controlled by venturi scrubbers. Construction is to take place at the Big Bend Terminal which is located near Gibsonton, Florida. Issuance of the Construction Permits is subject to public comment received as a result of this notice.

Any person wishing to file comments on this proposed action may do so by submitting such comments in writing to:

Mr. John Svec
Florida Department of Environmental Regulation
Twin Towers Office Building
2600 Blair Stone Road
Tallahassee, Florida 32301

Any comments received within thirty days after publication of this notice will be considered and noted in the Department's final determination.

Any person whose substantial interests would be affected by the issuance or denial of this permit may request an administrative hearing by filing a petition for hearing as set forth in Section 28-5.15 (copy attached). Such petition must be filed within 14 days of the date of this notice. Such petition is to be filed with:

Mary Clark
Office of General Counsel
Florida Department of Environmental Regulation
Twin Towers Office Building
2600 Blair Stone Road
Tallahassee, Florida 32301

II. SUMMARY OF EMISSIONS AND AIR QUALITY ANALYSIS:

a. The proposed location, Big Bend Terminal, is in that part of Hillsborough County which is classified as "nonattainment" for the criteria pollutant, ozone. This location is an "attainment" area for the remaining criteria pollutants. However, the terminal is located in the "area of

influence" for the Hillsborough County Particulate Nonattainment Area.

b. The significant sources of particulate emissions for these applications is dry phosphate rock dust and phosphate fertilizer dust generated at the drop points in the conveying system. Estimated actual particulate emissions are:

Emission point	Location	Annual emissions (tons)
DC-A	Rotary car dump to conveyor 1	8.0
DC-B	Conveyor 1 to conveyor 2/15	1.2
DC-C	Conveyor 2/15 to conveyor 3/16	1.2
DC-G	Conveyor 16 to conveyor 17	1.2
DC-H	Conveyor 19 to conveyor 4	1.2
DC-L	Conveyor 3 to stackraker	1.2
SCR-J	Dry phosphate storage silos	3.6
SCR-K	Dry phosphate storage silos	3.6
DC-D	Conveyor 3 and 14 to conveyor 4	1.8
DC-E	Conveyor 4 to conveyor 5	1.8
DC-F	Conveyor 5 to shiploader	6.0
DC-A'	Railcar and truck dump to conveyor 20	3.7
DC-B'	Conveyor 20 to conveyor 21/28	0.6
DC-C'	Conveyor 21 to conveyor 22	0.6
DC-D'	Conveyor 22 to conveyor 23	0.6
DC-E'	Conveyor 28 to conveyor 29	0.6

(For plant layout see figures 1 and 2).

III. SYNOPSIS OF APPLICATION

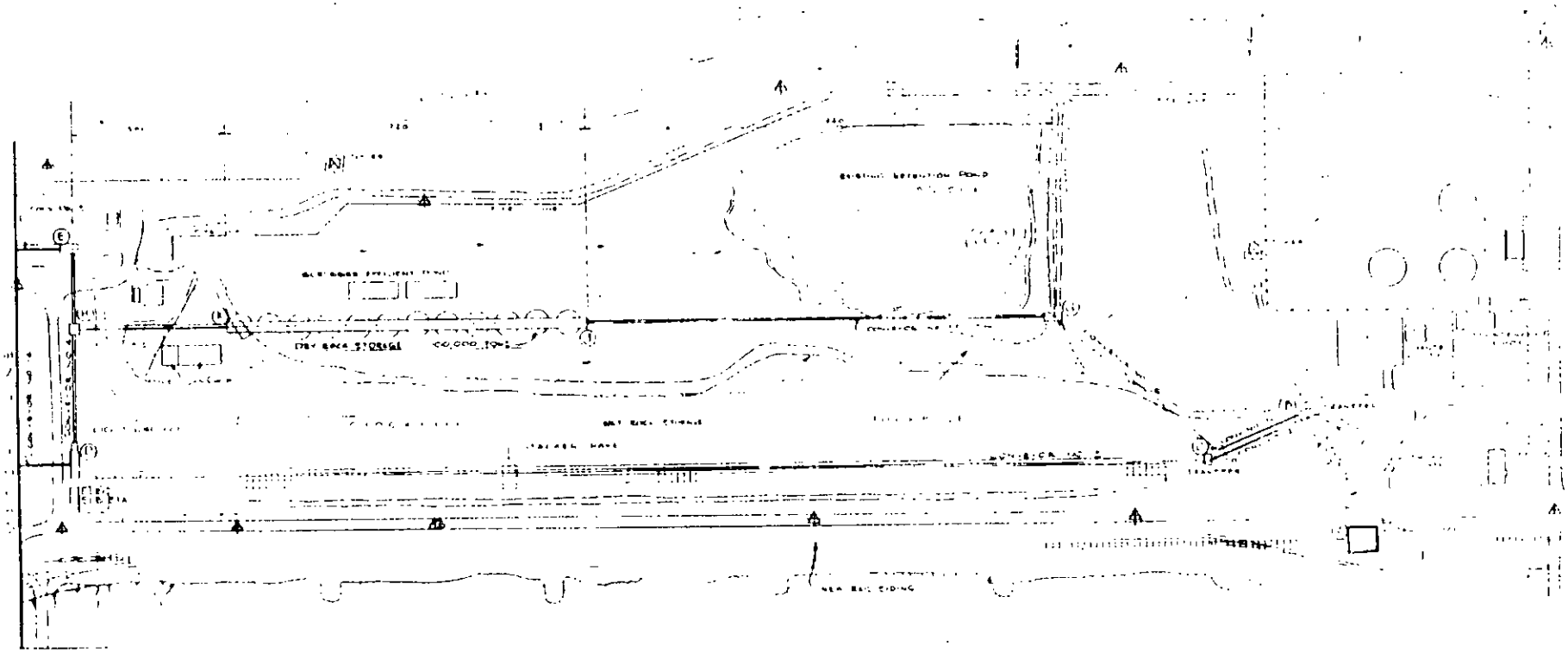
a. Name and Address of Applicant:

Agrico Chemical Company
P. O. Box 1110
Mulberry, Florida 33860

b. Description of Project and Controls:

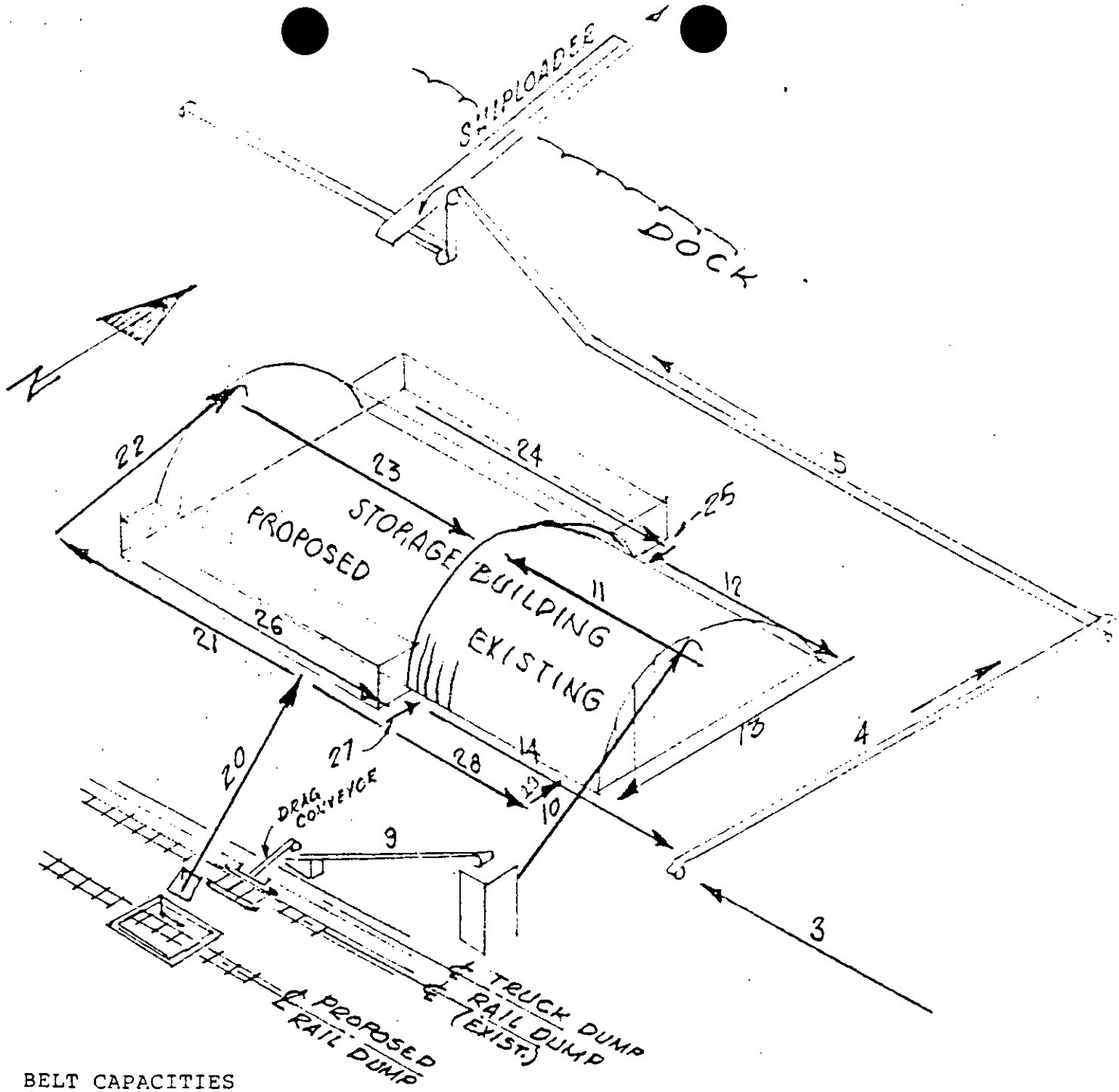
The purpose of this project is to construct new facilities at the existing Agrico Big Bend Terminal. One part of the new facilities will receive dry phosphate rock by railcar, transfer to storage, reclaim from storage and transfer to ships or barges via the existing shiploader. Initially, and until the silo storage and reclaim system is operable, seven of the dust collectors for the above system will be installed on the existing conveyor system to enable dry rock to be transferred directly for shipping. The second part of the facilities will receive phosphate fertilizer by railcar and truck, transfer to storage, reclaim and tranfer by the existing conveyor system to the shiploader for loading ships and barges. This part also will have the capabilities to receive and transfer

Figure 1



Agrico

PRUGER ENGINEERING COMPANY



BELT CAPACITIES

EXISTING	3	3000 TPH	
	4	3000 TPH	
	5	3000 TPH	
	Shiploader	3000 TPH	
	9	350 TPH	
	10	350 TPH	
	11	350 TPH	
	12	1200 TPH	
	13	1200 TPH	
	14	1500 TPH	
PROPOSED	20	500 TPH	
	21	500 TPH	
	22	500 TPH	
	23	500 TPH	
	24	1000 TPH	
	25	1000 TPH	
	26	1500 TPH	
	27	1500 TPH	
	28	500 TPH	
	29	500 TPH	

Conveyors 3, 4, 5 and the shiploader are multiple use conveyors.

Figure 2

directly for shipping. Fabric dust collectors will be placed at the drop points of all conveyor connections. Wet venturi scrubbers will vent the emissions obtained from the operations at the dry phosphate rock storage silos. The fabric dust collectors are projected to capture 99.8% of the particulate captured at the drop points. The wet venturi scrubbers are projected to capture 99.7% of the particulate emissions generated at the dry phosphate rock storage silos.

c. Description of Processes, Proposed Process Rates and Emissions Rates:

Approximately 2,800,000 TPY of dry rock will be received at the terminal. The dry rock will be received by the existing railcar rotary dump, Dust Collector (A) will be installed at this site. The rock will be conveyed by existing Conveyor No. 1 and transferred to Conveyor No. 15, Dust Collector (B) will be installed at this site. The material will be transferred from Conveyor No. 15 to Conveyor No. 16, Dust Collector (C) will be installed at this site. Conveyor No. 16 will discharge to Conveyor No. 17 Dust Collector (G) will be installed at this site. Conveyor No. 17 will discharge into Silo No. 1 or to tripper Conveyor No. 18. Conveyor No. 18 will discharge into Silos Nos. 2 through 12. The discharge of Conveyor No. 17 and Conveyor No. 18 will be within the gallery atop the silos. The silos and silo discharges will be vented by Scrubbers (J) and (K). The silo venting will create a negative pressure in the gallery to contain the dust from the discharge of Conveyors Nos. 17 and 18. The silos will discharge to Conveyor No. 19 for transfer to existing Conveyor No. 4, Dust Collector (H) will be installed at this site. Existing Dust Collector No. "DC-3" (AO29-12987) will be replaced by Dust Collector (E). The existing Dust Collector No. "DC-4" (AO29-14855) will be replaced with new Dust Collector (F) to service the shiploader.

Initially, Dust Collector (B) will control the transfer from existing Conveyor No. 1 to existing Conveyor No. 2. Dust Collector (C) will control the transfer from existing Conveyor No. 2 and the existing stackrake to existing Conveyor No. 3. Dust Collector (L) will control fugitive particulate at the stackrake. Dust Collector (D) will be installed in place of existing Dust Collector "DC-2" (AO29-12987) to control the transfer from existing Conveyor No.3 or existing Conveyor No. 14 to existing Conveyor No. 4.

Conveyor Nos. 15 through 19 will convey 2700 TPH of dry phosphate rock. These conveyors will have covers, except tripper Conveyor No. 18, to prevent windblown particulate and to keep the material dry.

The dust collectors will return the collected particulate to that conveyor exiting from the transfer point.

The scrubber effluent will be partially recycled and partially bled off to a settling pond. The clarified pond water will be recycled to the Scrubber. The settled particles will be dredged from the pond, as required, and disposed of on the south side of the property.

Fresh water will be required from time to time to provide the necessary supply for the scrubbers. Excess water in the scrubber effluent pond, should this condition occur, and ground water runoff will be retained in an existing retention pond.

Approximately 800,000 TPY (400,000 TPY at present) of fertilizer products will be received at the terminal. These products will be unloaded into below grade hoppers and transferred to Conveyor No. 20, Dust Collector (A') will be installed at this site. The material will be transferred from Conveyor No. 20 to Conveyor No. 21 or Conveyor No. 28, Dust Collector (B') will be installed at this site. Conveyor No. 21 will transfer to Conveyor No. 22, Dust Collector (C') will be installed at this site. Conveyor No. 22 will transfer to storage tripper Conveyor No. 23, Dust Collector (D') will be installed at this site. Conveyor Nos. 24 and 26 will be for storage reclaim within the storage building. The latter conveyors will transfer to Conveyor Nos. 25 and 27, which will, in turn, transfer to existing Conveyors Nos. 12 and 14. These conveyors are also within the storage building. Conveyor No. 28 will transfer to Conveyor No. 29, Dust Collector (E') will be installed at this site. Conveyor No. 29 will transfer to existing Conveyor No. 14 within the storage building.

Conveyors Nos. 20 through 23 and 28 and 29 will convey 500 TPH of fertilizer products. These conveyors will also be covered. Conveyors Nos. 24 and 25 will convey 1000 TPH, while Conveyors Nos. 26 and 27 will convey 1500 TPH.

Dust Collectors (D), (E) and (F) will control fertilizer particulate, in addition to dry phosphate rock particulate.

Emission rates for each outlet are:

	Potential Emissions		Actual Emissions	
Emission Point	lb./hr	tons/yr	lb./hr	tons/yr
DC-A	7663	3973	15.3	8.0
DC-B	1149	596	2.3	1.2
DC-C	1149	596	2.3	1.2
DC-D	1149	902	2.3	1.8
DC-E	1149	902	2.3	1.8
DC-F	3831	3009	7.7	6.0

Emission Point	Potential Emissions		Actual Emissions	
	lb./hr	tons/yr	lb./hr	tons/yr
DC-G	7663	3973	15.3	8.0
DC-H	1149	596	2.3	1.2
SCR-J	2279	1182	6.8	3.6
SCR-K	2279	1182	6.8	3.6
DC-L	1149	596	2.3	1.2
DC-A'	4598	1839	9.2	3.7
DC-B'	766	307	1.5	0.6
DC-C'	766	307	1.5	0.6
DC-D'	766	307	1.5	0.6
DC-E'	766	307	1.5	0.6

IV. RULE APPLICABILITY

The proposed project is located in the Hillsborough County Ozone Nonattainment Area. Since no Volatile Organic Compounds (VOC) are emitted from this project, the application is not subject to the nonattainment rules for this pollutant.

The proposed project is located in the "area of influence" for the Hillsborough County Particulate Nonattainment Area. The applicant has demonstrated by using mathematical models that the proposed project does not significantly impact the nonattainment area. Therefore, according to Section 17-2.17(1)(c)2.c. FAC, these applications are exempt from Sections 17-2.17, 17-2.18 and 17-2.19 FAC.

According to 17-2.02(70) FAC, the facility is a major emitting facility for particulate. Mathematical modeling demonstrates that the PSD increments or ambient air quality standards are not violated off plant property with this project. Latest and best technology is being applied to this project.

Section 17-4.07 FAC authorizes the Department to impose reasonable permit conditions necessary to prevent air pollution and 17-4.23 require all new sources to use the best and latest technology that is applicable to the source.

V. FINDINGS

1. The potential and actual emissions are projected to be:

Emission Point	Potential Emissions		Actual Emissions	
	lb./hr.	tons/yr.	lb./hr.	tons/yr.
DC-A	7663	3973	15.3	8.0
DC-B	1149	596	2.3	1.2
DC-C	1149	596	2.3	1.2
DC-D	1149	902	2.3	1.8
DC-E	1149	902	2.3	1.8

Emission Point	Potential Emissions		Actual Emissions	
	lb./hr	tons/yr.	lb./hr.	tons/yr.
DC-F	3831	3009	7.7	6.0
DC-G	1149	596	2.3	1.2
DC-H	1149	596	2.3	1.2
SCR-J	2279	1182	6.8	3.6
DCR-K	2279	I182	6.8	3.6
DC-L	1149	596	2.3	1.2
DC-A'	4598	1839	9.2	3.7
DC-B'	766	307	1.5	0.6
DC-C'	766	307	1.5	0.6
DC-D'	766	307	1.5	0.6

Proposed NSPS for Phosphate Rock Plants indicates opacity limits of 0% for transfer facilities.

2. The facility is a major emitting facility as defined in 17-2.102(70). Although the facility is a major emitting facility, actual emissions from each source are de minimus (less than 15 tons per year).

3. The maximum operating schedule will be 1,037 hours per year for transferring dry phosphate rock and 533 hours per year for transferring granular fertilizer from the storage to shiploading systems. Maximum operating hours will be 1,037 hours per year for the proposed dry phosphate rock unloading to storage system. Maximum operating hours will be 800 hours per year for the proposed granular fertilizer unloading to storage system.

4. Maximum raw material input will be 2,800,000 tons per year of dry phosphate rock and 800,000 tons per year of granular fertilizer for the storage to shiploading systems. Maximum raw material input will be 2,800,000 tons per year of dry phosphate rock for the unloading to storage system. Maximum raw material input will be 400,000 tons peryear of granular fertilizer for the proposed unloading to storage system.

5. Since the actual emissions are de minimus from the various sources, a BACT determination is not required. The controls described in the applications meet the best and latest control requirement of 17-4.23 FAC.

6. Adequate fugitive particlate controls are proposed with this project. Rail cars bring the products tothe facility are covered. The rotary railcar dump for the phosphate rock is enclosed. All conveyors will be covered with the exception of conveyors number 3 and 5 which contain traveling equipment and cannot be covered. The granular fertilizer is hygroscopic and transport must be enclosed to prevent contamination. This also serves as fugitive control.

7. Construction should commence and be completed within a reasonable time based on the projections included in the application.

8. The applicant should submit periodic reports on construction progress.

9. Construction should reasonably conform to the plans submitted.

10. The actual particulate emissions from each emission point should be verified by test using standard test methods prior to issuance of an operating permit. As a part of the operating permit, periodic tests on the emission points should be required.

11. Upon obtaining an operating permit, the applicant should submit periodic reports on the actual operation of the facility.

12. In accordance with Subsection 17-2.04(6)(a), the applicant has provided the Department with reasonable assurance that operation of the facility, as proposed, will not cause or contribute to ground-level particulate concentrations in excess of any Prevention of Significant Deterioration (PSD) increment or ambient air quality standard. Furthermore, the applicant has demonstrated that increased particulate emissions from the facility will not result in ground-level concentrations in excess of any level of significance within the nearby Hillsborough County particulate nonattainment area. Therefore, in accordance with Subsection 17-2.17(I)(c)2.c., none of the proposed sources at the facility is subject to the requirements of Sections 17-2.17, 17-2.18, 17-2.19 and 17-2.20.

Worst-case operating conditions for which the air quality 24-hour impact analyses were performed are as follows:

Case 1 - Dry phosphate rock receiving/transfer to silos/ transfer to ship; and granular fertilizer receiving on both systems No. 1 and No. 2 (Emissions from dust collectors A,B,C,G,H,E,F,1,A',B',C', and D' and scrubbers J and K)

Case 2 - Dry phosphate rock receiving/transfer to silos; and granular fertilizer receiving on both systems No. 1 and No. 2/ transfer from either system to ship. (Emissions from dust collectors A,B,C,G, 1,D,E,F,A',B',C', and D' and scrubber J).

The air quality annual impact analyses were performed using emission rates reflecting the hours of operation each control device is expected to experience based on proposed maximum product annual throughpout.

13, Impacts of the proposed sources on air quality within the property boundaries of the facility have not been evaluated. Thus, it is necessary that the applicant secure the property boundary in a manner such that the public is effectively desired access to the area within.

14. The applicant shall provide at least one year post-construction ambient particulate monitoring data from a sampling site approved by the Department. A number of factors including the facility's proximity to a nonattainment area and its potential for emitting fugitive particulate matter suggest a need for data such as these to verify the reasonableness of assumptions made in the predictive air quality analysis.

VI. Proposed Allowable Emissions and Permit Conditions

See Draft Permits

Attachment: Rule 28-5 December 20, 1979

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Case 2 - Dry phosphate rock receiving/transfer to silos; and granular fertilizer receiving on both systems No. 1 and No. 2/ transfer from either system to ship. (Emissions from dust collectors A,B,C,G, 1,D,E,F,A',B',C', and D' and scrubber J).

The air quality annual impact analyses were performed using emission rates reflecting the hours of operation each control device is expected to experience based on proposed maximum product annual throughpout.

RULES OF THE ADMINISTRATIVE COMMISSION
MODEL RULES OF PROCEDURE
CHAPTER 28-5
DECISIONS DETERMINING SUBSTANTIAL INTERESTS

28-5.15 Requests for Formal and Informal Proceedings

(1) Requests for proceedings shall be made by petition to the agency involved. Each petition shall be printed typewritten or otherwise duplicated in legible form on white paper of standard legal size. Unless printed, the impression shall be on one side of the paper only and lines shall be double spaced and indented.

(2) All petitions filed under these rules should contain:

(a) The name and address of each agency affected and each agency's file or identification number, if known;

(b) The name and address of the petitioner or petitioners;

(c) All disputed issues of material fact. If there are none, the petition must so indicate;

(d) A concise statement of the ultimate facts alleged, and the rules, regulations and constitutional provisions which entitle the petitioner to relief;

(e) A statement summarizing any informal action taken to resolve the issues, and the results of that action;

(f) A demand for the relief to which the petitioner deems himself entitled; and

(g) Such other information which the petitioner contends is material.