

### State of Florida DEPARTMENT OF ENVIRONMENTAL REGULATION

	For Routing To Other Than The Addresses
То:	Location:
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# Interoffice Memorandum Please call Patty Adams when signed 8-1344

TO: Dale Twachtmann

Steve Smallwood FROM:

August 24, 1990 DATE:

Modification of Permits SUBJ:

Gardinier, Inc.

Attached for your approval and signature is a letter that will modify the visible emissions standard specified in the BACT determinations and the construction permits for the No. 7 and No. 8 sulfuric acid plants at Gardinier, Inc.'s phosphate fertilizer complex in Hillsborough County, Florida. The revised visible emissions standard of 10% opacity is consistent with county, department, and EPA regulations.

I recommend approval of this modification.

CF/WH/plm

Attachment

AUG 24 1990

Office of the Secretary,



# Florida Department of Environmental Regulation

Twin Towers Office Bldg. • 2600 Blair Stone Road • Tallahassee, Florida 32399-2400

Bob Martinez, Governor Dale Twachtmann, Secretary John Shearer, Assistant Secretary

August 24, 1990

CERTIFIED MAIL - RETURN RECEIPT REQUESTED

Mr. E. O. Morris, Environmental Manager Gardinier, Inc. Post Office Box 3269 Tampa, Florida 33601

Dear Mr. Morris:

Re: Modification of BACT Determinations and Construction Permits Gardinier, Inc., Hillsborough County, Florida.

AC 29-089697, No. 7 Sulfuric Acid Plant AC 29-089696, No. 8 Sulfuric Acid Plant AC 29-130371, No. 8 Sulfuric Acid Plant

PSD-FL-026, Nos. 7 and 8 Sulfuric Acid Plants

PSD-FL-118, No. 8 Sulfuric Acid Plant

The Department is in receipt of KBN's August 7, 1990, letter requesting the visible emission standard in the referenced construction permits and BACT determinations for the No. 7 and No. 8 sulfuric acid plants be relaxed from 5% opacity to 10% As noted in KBN's letter, the 5% opacity standard was based on Chapter 1-3.300V1.C. of the Hillsborough County regulations. The 10% opacity standard requested is consistent regulations, the the revised Hillsborough County Department's air regulations, and the new source performance standard for sulfuric acid plants (40 CFR 60, Subpart H). This request is acceptable and the referenced construction permits and BACT determinations are modified to allow visible emissions from Gardinier's No. 7 and No. 8 sulfuric acid plants of 10% opacity (6 minute average as determined by Reference Method 9 as described in 40 CFR 60, Appendix A, July 1, 1988).

A copy of this letter must be filed with the referenced construction permits and shall become a part of those permits.

vale Twachtmany

Secretary

DT/plm

Mr. E. O. Morris August 24, 1990 Page 2

Attachment: KBN letter dated August 7, 1990

Copies:

Bill Thomas, SW District Jerry Campbell, EPCHC Jewell Harper, EPA David Buff, KBN



RECEIVED

DER-RACE

- August 7;-1990

Mr. Clair Fancy, P.E.
Bureau Chief
Bureau of Air Regulation
Florida Department of Environmental Regulation
2600 Blair Stone Road
Tallahassee, Florida 32399-2400

Re: Gardinier, Inc. Hillsborough County Sulfuric Acid Plants No. 7 and No. 8

Dear Mr. Fancy: \_..

This correspondence is in regards to the No. 7 and No. 8 Sulfuric Acid plants located at Gardinier, Inc., Hillsborough County. It is requested that the visible emissions limitation set forth in the most recent construction permits for these two sources be revised. A discussion of the permitting history of each source and the visible emission (VE) limitations is presented below.

#### No. 7 Sulfuric Acid Plant

The No. 7 Sulfuric Acid plant received a federal and state PSD permit in 1985 (AC29-089697). This permit authorized the increase in production rate from 1,750 tons per day (TPD) to 2,200 TPD. The VE opacity limitation determined as BACT for the expansion was the Hillsborough County rule contained in Chapter 1-3.30 V1.c. This rule allowed 5% opacity, with the exception that up to 40% opacity was allowed for 30 minute periods during plant startups. It appears that the sole basis for the BACT determination was the Hillsborough County rule. Since the limit was a rule, Gardinier in essence could not challenge the BACT determination at that time. It is noted that the Hillsborough VE regulation was more stringent than Florida's regulation, which limited VE to 10%.

In August 1985 Gardinier received the initial operating permit for the sulfurication decide expansion (A029-104895). The VE limit in the permit was 5% opacity for any 6-iminute consecutive period. This limit was somewhat different than limit stated in the construction permit.

Subsequent to this permit issuance, Hillsborough County rewrote portions of their air quality regulations, and in 1986 revised their VE regulation to conformato the state regulation. The new rule was codified in Chapter 1-3.63(a), and allowed 10% topacity except for a thirty minute period during plants tartup, during which time 40% opacity is allowed. This rule is currently in effect in Hillsborough County

As a result of the change in the Hillsborough County VE rule, in mid-1986 the Hillsborough County Environmental Protection Commission initiated efforts to revise the operating permit to be consistent with the Hillsborough County rule. DER subsequently revised the permit in a letter dated August 22, 1986, which amended Specific Condition 33 c. of the permit to 10% opacity, except that up to 40% is allowed forwarthing minute period during plants tartup

## KBN/ENGINEERING/AND/APPLIED/SCIENCES, INC



Gardinier was recently issued an operating permit renewal for No. 7 Sulfuric Acid plant. The new permit (A029-178406), in Specific Condition 5, limits VE to 10% opacity. Specific Condition 8 of the permit contains provisions for excess emissions during times of startup, shutdown or malfunction. In addition, Specific Condition 23 requires that Gardinier apply to FDER's Bureau of Air Regulation in Tallahassee to request an amendment to Specific Condition 4 of the construction permit (AC29-89697) to be consistent with Specific Condition 5 of the operating permit. This condition reflects both Hillsborough County's and FDER Tampa's recognition that the construction permit needs to be amended, and that they believe the proper opacity limit is 10%.

Gardinier is requesting that the original BACT determination for VE of 5% opacity contained in the construction permit AC29-089697 be amended to reflect the 10% opacity limit that has been written into the operating permits for the source since 1986. This is also the current state and Hillsborough County limits for VE.—It appears that the sole basis for the original BACT determination was the old Hillsborough County rule, so it is appropriate to revise the BACT based on the revised rule. Hillsborough County and FDER Tampa are in agreement with this request.

#### No. 8 Sulfuric Acid Plant

The No. 8 Sulfuric Acid plant received a federal and state PSD permit in 1985 (AC29-089696) and again in 1987 (AC29-089696). These permits authorized the increase in production rate from 1,784 TPD to 2,200 TPD and 2,500 TPD, respectively. The VE opacity limitation determined as BACT for the 1985 expansion was the 5% opacity limitation contained in Hillsborough County Rule Chapter 1-3.30 V1.c. This BACT was determined jointly with the No. 7 Sulfuric Acid plant expansion in 1985. Again, it appears that the sole basis for the BACT determination was the Hillsborough County rule.

The BACT for the second plant expansion in 1987 was also 5% VE. FDER again referred to the Hillsborough County rule Chapter 1-3.03 VI.C as the sole pushing the previous BACT justification for the limit. Apparently, the state was following the previous BACT determination for the source and did not recognize that the Hillsborough County rule had been revised in 1986 to 10% opacity. However, the limit was corrected in the operating permit subsequently issued (A029-162411) in October 1989. The VE limitation in Specific Condition 2 of this permit quotes the revised Hillsborough County rule of 10% opacity and references the rule citation.

Gardinier is therefore, requesting that the original BACT determination for VE of 5% opacity contained in the construction permit AC29 089696 for No. 8 Sulfuric Acid plantibe amended to reflect the 10% opacity limit that has been written into the operating permit for the source. This is also the current state and Hillsborough County limits for VE. It appears that the sole basis for the original BACT determination was the old Hillsborough County rule, so it is appropriate to revise the BACT based on the revised rule.

If this request is approved the VE limitation for all three sulfuric acid plants at Gardinier would be the same (10%), and would be consistent with the Hillsborough.

County and FDER VE limits for sulfuric acid plants.



If you should have any questions concerning the above requests, please do not .. hesitate to contact me:

\_\_.Sincerely, .

David A. Buff, M.E., P.E. Principal Engineer

cc: Ozzie Morris

Dr. Hanks
B. andrews
B. clampull