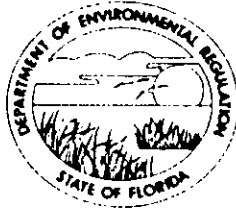


STATE OF FLORIDA
DEPARTMENT OF ENVIRONMENTAL REGULATION

TWIN TOWERS OFFICE BUILDING
2600 BLAIR STONE ROAD
TALLAHASSEE, FLORIDA 32301-8241



BOB GRAHAM
GOVERNOR
VICTORIA J. TSCHINKEL
SECRETARY

December 23, 1983

Mr. Anthony J. Clemente, Director
Department of Environmental Resources Management
909 Southeast 1st Avenue
Brickell Plaza Building - Room 402
Miami, Florida 33131

Re: Lonestar Florida Pennsuco, Inc., Request for Revision of
Coal Conversion Permit # AC 13-27742 and PSD-FL-050

Dear Mr. Clemente:

This is in response to your October 20, 1983, letter to me which stated your reasons for disagreeing with our intention to approve the relaxation of Lonestar's sulfur dioxide emission limits on its coal conversion permits.

When I stated our intention to revise both the federal and state permits in my August 30, 1983, letter to EPA concerning our Air Enforcement Action Plans, I was unaware of a problem we have recently discovered which may preclude the Department from issuing the state permit. This problem is based on our understanding that DERM considers the first annual exceedance of a Dade County short-term SO₂ standard to be a violation.

If our understanding of the DERM rules is correct, we have to compare modeled SO₂ concentrations to Dade County short-term standards differently than we compare them to state and national standards. In other words, we must compare the predicted highest concentrations at each receptor site to Dade County standards, not the predicted second-highest concentrations as used in state and federal regulations. When we reevaluated Lonestar's modeling using this method, we found that the revised SO₂ emissions from Lonestar alone, exclusive of emissions from other sources or of any background SO₂ level, are predicted to violate the 4-hour Dade County SO₂ standard (a value of 64.8 ug/m³ compared to the Dade County standard of 57.2 ug/m³). Since the Department must enforce the Dade County standards when issuing a state permit, we now believe the Department can't issue a state permit for the requested emission limits. However, since the Dade County ambient standards are not part of the approved SIP, EPA does not recognize them as enforceable, and consequently they are not to be

Mr. Anthony J. Clemente, Director
Page Two
December 23, 1983

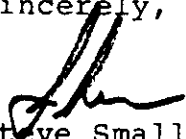
considered in whether we approve or disapprove Lonestar's request for a modification to their federal permit. Therefore, we will, if all federal requirements are complied with, recommend to EPA that the federal permit be modified.

In view of this problem, our response to the comments in your October 20, 1983, letter are as follows:

1. Comment #1 on ambient monitoring: Since the requested emission limits result in predicted violations of the 4-hour Dade County standard and since any change in emission limits Lonestar subsequently proposes because of this problem will still likely approach the 4-hour standard, we are prepared to require Lonestar to locate an SO₂ monitor near the plant.
2. Comments #2 and #3 on documenting the SO₂ emissions in the kilns: we have discussed these comments with Lonestar staff and understand that they have discussed them with DERM and that you have agreed to their answers. However, if this is not the case, we will require these comments be satisfactorily resolved before further permitting of Lonestar's kilns is considered.

We will wait for your response to this letter before taking any further action on these permits.

Sincerely,


Steve Smallwood, P.E.
Chief
Bureau of Air Quality Management

SS/LG/s

cc: Scott Quaas
Bill Voshell
Roy Duke

bc: N. Wright
B. Blommel
C. Fancy

STATE OF FLORIDA
DEPARTMENT OF ENVIRONMENTAL REGULATION

TWIN TOWERS OFFICE BUILDING
2600 BLAIR STONE ROAD
TALLAHASSEE, FLORIDA 32301-8241



BOB GRAHAM
GOVERNOR

VICTORIA J. TSCHINKEL
SECRETARY

November 17, 1983

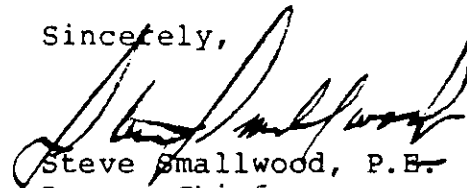
Mr. Anthony J. Clemente, Director
Environmental Resources Management
909 Southeast, 1st Avenue
Brickell Plaza Building - Room 402
Miami, Florida 33131

Re: Lonestar Florida Pennsuco, Inc., Request for Revision
of Coal Conversion Permit # AC 13-27742 and PSD-F1-050

Dear Mr. Clemente:

The Bureau is preparing a response to your October 20, 1983, letter to me which stated your reasons for disagreeing with our intention to approve the relaxation of Lonestar's sulfur dioxide emission limits on their coal conversion permits. I expect to send the Bureau's response within the next week to ten days. We will not take final action on the permit until we have resolved the questions you raised.

Sincerely,



Steve Smallwood, P.E.
Bureau Chief
Bureau of Air Quality
Management

SS/CH/3

Lonestar
Scott Oliver
305/822-2800

Louistar

Sept. 8 memo →

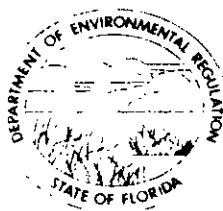
Prot. 55 letter to
Wilbur, 9/8 may
be date received or
re-sent by EPA —
Ok with Blommel

10/1/80
208

STATE OF FLORIDA

DEPARTMENT OF ENVIRONMENTAL REGULATION

TWIN TOWERS OFFICE BUILDING
2600 BLAIR STONE ROAD
TALLAHASSEE, FLORIDA 32301-8241



BOB GRAHAM
GOVERNOR

VICTORIA J. TSCHINKEL
SECRETARY

November 17, 1983

Mr. Anthony J. Clemente, Director
Environmental Resources Management
909 Southeast, 1st Avenue
Brickell Plaza Building - Room 402
Miami, Florida 33131

Re: Lonestar Florida Pennsuko, Inc., Request for Revision
of Coal Conversion Permit # AC 13-27742 and PSD-F1-050

Dear Mr. Clemente:

The Bureau is preparing a response to your October 20, 1983, letter to me which stated your reasons for disagreeing with our intention to approve the relaxation of Lonestar's sulfur dioxide emission limits on their coal conversion permits. I expect to send the Bureau's response within the next week to ten days. We will not take final action on the permit until we have resolved the questions you raised.

Sincerely,

A handwritten signature in black ink, appearing to read "Steve Smallwood", is written over the typed name.

Steve Smallwood, P.E.
Bureau Chief
Bureau of Air Quality
Management

SS/CH/s

Lonestar

Scott Davis

305/823-8800



Steve Smallwood
Chief, Bureau of Air Quality Management
Florida Department of Environmental
Regulation
Twin Towers Building
2600 Blairstone Road
Tallahassee, Florida 32301

July 22, 1983

DER

JUL 28 1983

BAQM

RE: Request by Lonestar Florida
Pennsuco, Inc. for revision
of SO₂ standards contained
in EPA permit #PSD 050 and
FDER Permit #AC 13-17742
(File No.AC 13-54054)

Dear Mr. Smallwood:

The Department of Environmental Resources Management has reviewed the response by Lonestar dated 6/13/83 to FDER's request for additional information regarding the referenced revision of their coal conversion permit, and offers the following comments for your consideration:

1. DERM feels that an ambient monitoring program for SO₂ in the predicted high impact areas is necessary to ensure that the Dade County AAQS is not exceeded, and also to protect nearby Class I areas.
2. Lonestar contends in their letter that the current sulfur absorption rate in kiln #3 is 75-80 percent, whereas the compliance stack test of July 15, 1981 showed an absorption rate of only 55%. Documentation of how this higher figure was calculated must be provided along with the results of the 15 test runs Lonestar says were performed between April, 1982 and March, 1983, including the excess oxygen level during each run.
3. The requested SO₂ emission level of 100#/hr. for kilns 1 and 2 still has not been justified by Lonestar. A detailed analysis of how this requested emission level was arrived at is necessary to alleviate those concerns contained in our letter of January 31, 1983 to Clair Fancy of your office.
4. In Attachment 3 of their June 13 letter to your Department, Lonestar erringly stated that Dade County's short term AAQS for SO₂ can be

Steve Smallwood
from Rafael Rodon

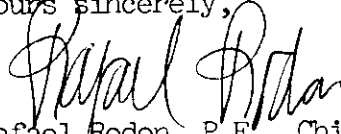
July 22, 1983
Page 2

exceeded once annually at each receptor site. However, the first exceedance of the Dade County 24-hour AAQS, as contained in Sec. 24-17(1)(b) of the Dade County Code, is considered a violation and must be addressed.

DERM hereby requests that review of Lonestar's request for revision of the above mentioned SO₂ emission standards be completed as expeditiously as possible, as kiln #3 has been operated without a valid operating permit since May 31, 1982 with SO₂ emissions far in excess of previously permitted levels. This Department has to date deferred enforcement action against Lonestar in consideration of their revision request, and in fact has had to refund the local annual operating permit fee for 1982-1983 as no operating permit was issued due to their non-compliance status.

We trust that the above concerns will be adequately addressed by Lonestar prior to any decision by you regarding the SO₂ emission standards revision request. If you have any questions pertaining to the above, please do not hesitate to call.

Yours sincerely,

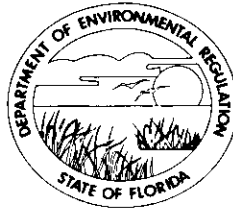


Rafael Rodon, P.E., Chief
Environmental Planning Division

RR/HPW/ag

CC: Bill Voshell, E.P.A.
Roy Duke, D.E.R.
A. Townsend, Lonestar
Scott Quaas, Lonestar

STATE OF FLORIDA
DEPARTMENT OF ENVIRONMENTAL REGULATION



SOUTHEAST FLORIDA
DISTRICT

P.O. BOX 3858
3301 GUN CLUB ROAD
WEST PALM BEACH, FLORIDA 33402-3858

BOB GRAHAM
GOVERNOR

VICTORIA J. TSCHINKEL
SECRETARY

ROY M. DUKE
DISTRICT MANAGER

TO: Clair Fancy
FROM: Tom Tittle *TT*
DATE: June 17, 1983
SUBJECT: Lonestar Florida Pennsuco, Inc. Request for B.A.C.T.
Revision

DER
JUN 23 1983
BAQM

As discussed June 16, 1983, we feel that the data presented on page two of Scott Quaas' letter supports requiring an average annual maximum of 1.75% sulfur coal be fired with sulfur content of the coal fired not to equal or exceed 2.0% at any time.

If such a restriction were applied we request that the logs showing the analyses of coal received (and as fired where applicable) be maintained on site for inspection for a period of at least two years. We also suggest that the Annual Operation Report be required to indicate the maximum as well as the annual average sulfur content of the coal fired.

TT:cj/a

EVALUATION OF PREDICTED VIOLATIONS OF THE DADE COUNTY AAQS
DOWNWIND OF ALTON BOX

In response to the Florida Department of Environmental Regulation (DER) letter of April 7, 1983, an investigation of predicted violations of the Dade County Ambient Air Quality Standard (AAQS) for sulfur dioxide (SO₂) in the vicinity of Alton Box has been completed. Based upon a conversation with Mr. Larry George of the DER on June 3, 1983, only the 24-hour averaging time was evaluated. The 4-hour Dade County AAQS was also predicted to be violated in the vicinity of Alton Box, but since Lonestar maximum 4-hour impacts near Alton Box are low (less than 17 ug/m³ based upon previous modeling), and no air quality impact significance level has been established for the 4-hour average, no further analysis was required.

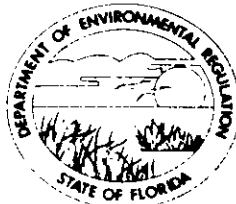
The analysis consisted of executing the Industrial Source Complex Short-Term (ISCST) model for five years of Miami Airport meteorological data (1970-1974), with Lonestar SO₂ emissions at 100 pounds per hour (lb/hr) for Kilns #1 and #2, and 400 lb/hr for Kiln #3. Stack parameters for Lonestar and other sources, and SO₂ emissions for other sources were the same as contained in the November 19, 1982 submittal to the U.S. EPA. The receptor grid used in the vicinity of Alton Box for the evaluation differed somewhat from the previous modeling. Based upon the relative location of Alton Box and Lonestar, a radial direction of 120.5° from north aligns the two plants. As a result, radial directions in the model were set at 117.5°, 119.0°, 120.5°, 122.0° and 123.5°. The 1.5° angular spacing results in a receptor spacing of about 200 m at a downwind distance of 7.4 km. The two plants are located 7.267 km apart, and therefore downwind distances (from Lonestar) of 7.4, 7.6, 7.8, 8.0 and 8.2 km were input to the model. All other model inputs were the same as for the modeling in your November 19 submittal.

From the ISCST model output, all 24-hour periods (days) on which the Dade County 24-hour SO₂ AAQS of 28.6 ug/m³ was exceeded were identified. These days and associated predicted concentrations due to all sources are shown in Table 1. Dade County's short-term AAQS can be exceeded once per year at each receptor location (Dade County, Florida, 1981 Ambient Air Quality Data Report, pg. 7). Thus, the highest 24-hour concentration at each receptor is not considered in determining if a violation of the standard has occurred. Therefore, Lonestar's contribution to total concentrations are not shown in Table 1 for the highest predicted concentration at each receptor. Lonestar's contribution is shown for all other values exceeding the AAQS.

Review of Table 1 shows that Lonestar's maximum contribution to any predicted violation of the 24-hour Dade County AAQS near Alton Box is 2.0 ug/m³. This value is well below the 24-hour SO₂ significance level of 5.0 ug/m³, and therefore Lonestar does not contribute significantly to any of these predicted violations. Supportive computer model printouts are included with this submittal.

STATE OF FLORIDA
DEPARTMENT OF ENVIRONMENTAL REGULATION

TWIN TOWERS OFFICE BUILDING
2600 BLAIR STONE ROAD
TALLAHASSEE, FLORIDA 32301-8241



BOB GRAHAM
GOVERNOR
VICTORIA J. TSCHINKEL
SECRETARY

April 7, 1983

Mr. Scott Quaas
Environmental Specialist
Lonestar Florida Pennsuco, Inc.
P. O. Box 122035-PVS
Hialeah, FL 33012

Dear Mr. Quaas:

The Bureau has started reviewing your February 23, 1983, request for revisions to the sulfur dioxide emissions allowed under federal permit number PSD-FL-050 for the three kilns at your portland cement plant in Hialeah, Florida. Your company should also officially request that the sulfur dioxide emissions allowed by state permits AC 13-27739, AC 13-27740 and AC 13-27741 for these kilns also be revised. The Bureau will then be able to process these state permit revisions concurrently with the federal permit revisions.

Part of our review of your request will be a reevaluation of the Best Available Control Technology (BACT) determination. The original determination needs to be expanded to include an analysis of flue gas desulfurization equipment and the use of coal containing less than two percent sulfur. Please amend your BACT recommendation to include an analysis of the use of desulfurization equipment and low sulfur coal. We suggest that three or more grades of coal with 0.75 to 2.0 percent sulfur be studied from an economic and process standpoint.

What percent oxygen are the kilns operated at? Test data for kiln 3 shows high sulfur dioxide emissions at low oxygen concentrations. Your test data indicated the sulfur dioxide emissions would exceed the requested standards when burning coal with less than 1.44 percent sulfur if the oxygen in the kiln was below 1.6 percent. Please provide engineering data to show if the sulfur dioxide emission limits selected as BACT for the three kilns can be met.


What is the sulfur content in your feed raw material to the kiln (average, maximum, minimum)? As the sulfur dioxide removal by the clinker is reported as 77.7 percent, this will limit the amount of sulfur in the feed and fuel that can be processed by the kiln while complying with the emission standard.

Mr. Scott Quaas
Page Two
April 7, 1983

Additionally, the air quality modeling which accompanied your February 23 request predicts violations of the Dade County ambient air quality standards (AAQS) for SO₂ downwind of Alton Box. Before we can issue a revision to your state permits, we must have assurance that emissions from Lonestar will not be predicted to have a significant impact (greater than 5.0 ug/m³, 24-hour averaging time) at any point downwind of Alton Box on any day in which a violation of the Dade County AAQS is predicted to occur.

If you have any questions on this request, please contact Willard Hanks, review engineer, or Cleve Holladay, meteorologist, at (904) 488-1344.

Sincerely,


for Clair Fancy, P. E.
Deputy Chief
Bureau of Air Quality
Management

CHF/WH/ks

cc: T. Tittle
E. Cahill
R. DuBose



LONESTAR FLORIDA PENNSUCO, INC.

Cement & Aggregate Plant
11000 N. W. 121 Way
Medley, Florida 33178
P. O. Box 122035 - PVS
Hialeah, Florida 33012
(305) 823-8800

DER

February 23, 1983

FEB 28 1983

BAQM

Mr. Clair Fancy
Env Pmt - Bur AQM
Florida Department of Environmental Regulation
Twin Towers Office Building
2600 Blair Stone Road
Tallahassee, Florida 32301

Re: PSD-FL-050 ; Request for Revision

Dear Mr. Fancy:

Pursuant to our telephone conversation today, please find enclosed a copy of our request for revision of our PSD permit limitations. The original was received by Mr. Smallood's office on November 22, 1982. It is my understanding in accordance with a December 17, 1982 letter from EPA (copy enclosed), that your office will perform the technical review and prepare a preliminary determination regarding our revision.

Please don't hesitate to call should you need anything further.

Sincerely,

Scott Quaas
Environmental Specialist

SC/ep



January 31, 1983

Mr. Clair Fancy, P.E.
Deputy Chief, B.A.Q.M.
Florida Dept. of Environmental Regulation
Twin Towers Office Building
2600 Blair Stone Road
Tallahassee, FL 32301

Re: Lonestar Florida Pennsoco Inc.;
Request for revision of SO₂ Standards
contained in EPA Permit # PSD 050 and
FDER Permit # AC13 - 54054

Dear Mr. Fancy:

The Department of Environmental Resources Management has completed review of the referenced request by Lonestar to the Environmental Protection Agency and the Florida Department of Environmental Regulation for revision of the sulfur dioxide emission limits contained in the abovementioned permits, and we have several concerns for your consideration during the review of the proposed revision.

As indicated previously in our letter dated April 23, 1982 to Mr. Roy Duke at your District office in West Palm Beach, DERM proposes that Lonestar be directed to conduct a thorough ambient monitoring program to determine the actual levels of SO₂ in predicted high impact areas, before kilns #1 and #2 are allowed to be converted to coal fuel. It is our position that such a measure is required due to inconsistencies in previous models, and also because the Dade County AAQS might be exceeded if new emission limits are granted to Lonestar. Furthermore, ambient monitoring would serve to ensure that the Class 1 increment is not exceeded in the Everglades National Park.

With regards to Lonestar's current request for revision of the SO₂ emission limits, please be advised of the following concerns by DERM:

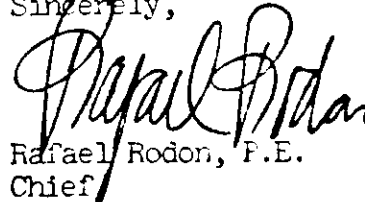
1. The original application by Lonestar for the coal conversion of their kilns projected SO₂ emissions of 56.7 lbs/hr. each from kilns 1 and 2, and 26.3 lbs/hr. from kiln #3. As you can see, this is greater than twice the amount of SO₂ from each of kilns 1 and 2 than from kiln 3. Yet the current request by Lonestar is for 100 lbs/hr. from each of kilns 1 and 2, and 400 lbs/hr. from kiln 3. Lonestar should justify such a significant change in the projected emission limitations.

2. The BACT analysis, attached to the current request, includes a section describing operating variables that affect SO₂ emissions (page 2, 2nd paragraph). It is stated in this section that the use of excess oxygen greater than 1.5 percent can cause operational problems. Then, in the separate attachment 'STACK TEST RESULTS - SO₂', it is documented that for all the stack tests where SO₂ emissions were lower than the requested limit of 400 lbs/hr. for kiln #3, the percent oxygen ranged from 2.9% to 3.4%. Other results, with the percent oxygen between 1.3% and 1.6%, all showed SO₂ emissions well in excess of 400 lbs/hr. Based on the above, it is reasonable to assume that the requested emission limit for SO₂ of 400 lbs/hr. from kiln 3 is unrealistic.

Finally, this Department does not feel that the possibility of alternate or add on controls for sulfur dioxide has been adequately addressed, in that no direct controls for SO₂ emissions have been assessed.

We trust that the above comments will assist you in your review. If you should have any questions, please do not hesitate to call at (305) 579-2760 or (Sun-com 448-2760).

Sincerely,



Rafael Rodon, P.E.
Chief

Environmental Planning Division

RR:HPW:vpc

cc: Bill Voshell
Roy Duke
Al Townsend
Scott Quaas