



Department of Environmental Protection

Lawton Chiles
Governor

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

Virginia B. Wetherell
Secretary

October 31, 1996

Certified Mail - Return Receipt Requested

Mr. Lawrence Jennings, Director
Hernando County Planning Department
20 North Main Street, Room 262
Brooksville, Florida 34601

Dear Mr. Jennings:

RE: Your letter of March 8, 1996 - Southdown Brooksville Facility

Based on my telephone conversation today with Ms. Lizanne Garcia, following are the answers to your questions in the same order as raised in your letter:

1. This is correct. The Southdown and Florida Crushed Stone operations are similar enough to warrant equivalent BACT emission rates. Both are Polysius-designed dry process cement kilns with preheaters using the same raw materials and located in the same area.
2. A VOC emission limit was established for Kiln No. 1. Please refer to Table 1-1, "Air Pollutant Standards and Terms" of the draft permit we provided for your review and comment.
3. The National Park Service (NPS) reviewed this proposed modification and commented in a letter dated April 8, 1996. We provided a copy of this letter to your Department. The NPS had no substantial comments which affected our review of the application. They are reviewing the draft permit and public notice package at this time as is EPA and Hernando County. We may yet receive comments from any of these agencies.
4. Your statement about specific condition #14 in the current permit AC27-258571 is correct. The proposed CO emission levels while *burning coal* require New Source Review (NSR) as addressed in the draft permit and public notice package we provided. Prevention of Significant Deterioration (PSD) is a subset of NSR and is the process for reviewing projects in areas which meet the National Ambient Air Quality Standards. Although the proposed draft permit 0530010-001-AC, PSD-FL-233 does not include the burning of tires, Southdown has already requested that we roll over the conditions referring to tire burning into the final permit. Generally tire burning is favorable with respect to pollutant emissions from cement kilns.
5. The net increase in carbon monoxide (CO) emissions is actually not significant on the basis of the impacts at ground level. Maximum predicted CO impacts based on approved ISCST3 modeling showed that the project would have impacts less than EPA and Department-established Significant Impact

Mr. Lawrence Jennings
10/31/96
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Levels. The maximum predicted CO impacts from this project are 411 ug/m³ and 146 ug/m³ for the 1-hour and 8-hour averaging times, respectively. These values are less than the Significant Impact Levels for CO which are 2000 ug/m³ and 500 ug/m³ for 1-hour and 8-hour averaging times, respectively. These predicted CO values are much less than the applicable national and state ambient air quality standards of 40000 ug/m³ for the 1-hour averaging time and 10000 ug/m³ for the 8-hour averaging time.

Overall the allowable emission limits proposed for this facility are among the lowest in the country. Specifically the sulfur dioxide SO₂ limits are the lowest we are aware of. The particulate limits for the kilns are also equal to the lowest we were able to find based on data available to us. Nitrogen oxide (NO_x) emission limits from both kilns are among the lowest in the country despite the ages of these kilns. From an overall air quality point-of-view, the pollutants of greatest concern are NO_x, (which contributes to formation of smog and affects visibility) and SO₂ (for which a study is planned to determine impacts on the Chassahowitzka). Flexibility in CO emissions will help insure that emissions of both SO₂ and NO_x are minimized without any significant impacts from the extra CO.

If you have any additional questions or you need any document listed in the draft permit, please let us know. Please contact Teresa Heron (review engineer) or Cleve Holladay (meteorologist) at (904) 488-1344 or write to me at the Department's address.

Sincerely,

 10/31

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

AAL/TH/kt



October 17, 1996

RECEIVED

OCT 21 1996

BUREAU OF
AIR REGULATION

VIA FAX AND UPS OVERNIGHT

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

Re: Correspondence dated October 14, 1996 from Amarjit Singh Gill;
Southdown, Inc. Permit Application Dated February 22, 1996

Dear Mr. Fancy:

On October 14, 1996 Southdown, Inc. submitted a letter regarding the above referenced permit application previously submitted to the Florida Department of Environmental Protection ("FDEP"). However, we have decided to retract the October 14, 1996 letter and request that the FDEP return this letter. Please return the original and all copies of the October 14, 1996 letter to Amarjit Gill as soon as possible and we will destroy each of those copies accordingly.

Sincerely,

Amarjit Singh Gill, PE
Director of Air Permitting

c: Bill Thomas
John Koogler
Don Kelly



October 14, 1996

Mr. C. H. Fancy, P.E., Chief
Bureau Of Air Regulation
Florida Department of Environmental Protection
2600 Blair Stone Road
Tallahassee, FL 32399-2400

RECEIVED
OCT 17 1996
BUREAU OF
AIR REGULATION

Re: Southdown, Inc.; Application Dated February 22, 1996
Modifications to Permits:
AC27-258569 Clinker Cooler No. 1
AC27-258570 Clinker Cooler No. 2
AC27-258571 Kiln No. 1
AC27-258572 Kiln No. 2

Dear Mr. Fancy:

As a result of your September 23, 1996 letter, pertaining to the above referenced application, we met with you and your staff on October 3, 1996 to review the status of the permitting process and to present our perspective on the past history of permitting for these units. During that meeting we discussed, at length, how a possible error was made in establishing the 7.13 lb/hr total suspended particulate (TSP) matter limit on Clinker Cooler No. 1. Your staff agreed to look into that matter. Since that time we have been informed that to correct the TSP limit for Clinker Cooler No. 1, the Florida Department of Environmental Protection (FDEP) would have to retroactively review if Kiln No. 1 should have gone through a prevention of significant deterioration (PSD) review during past permitting. If FDEP determines that PSD was applicable, then a NO_x limit would be imposed.

During the meeting we told you that we would voluntarily accept a NO_x limit providing that today's BACT was not applied to this 20 year old kiln. However, the Professional Engineer working on this application informed me on October 11, 1996 that the NO_x limit would have to be the same as the limit on Kiln No. 2., i.e. 250 lb/hr, which was established as a result of a PSD review in 1992. We are confused by the approach being applied by the FDEP today, to overrule the Department's own past permitting actions. On March 22, 1991, FDEP established the federally enforceable limits for TSP for Kiln No.1. and determined that no NO_x limit was necessary. Then in 1993, during permitting to allow the burning of tires in Kiln No. 1, another review was conducted by FDEP and the Department concluded that PSD was not triggered.

We included Kiln No. 1 in this application for the sole purpose of providing TSP emission offsets by reducing our allowable TSP limit from 39.0 lb/hr to 26.0 lb/hr on the main stack. Since FDEP does not agree that this provides meaningful reductions, we hereby withdraw the Kiln No. 1 permit, AC27-258571, from this permitting process. We request that the remainder of the application be evaluated to address the following requested changes:

- 1) Correct the TSP allowable limit on Clinker Cooler No. 1 from 7.13 lb/hr to the allowable limit of 13.0 lb/hr under NSPS, i.e., 0.1 lb/ton of feed.
- 2) Increase the TSP limit for Clinker Cooler No. 2 from 5.0 lb/hr to a BACT determined limit of 13.0 lb/hr. Up until 1995, the permit was written in a manner that did not require annual testing for TSP as long as the annual visible emission test, using Method 9, showed that the opacity was less than 5%. Therefore, no data exists to show whether this limit was being routinely met. During three preparatory tests conducted in October 1995, we could not meet the 5.0 lb/hr limit.
- 3) Increase the TSP limit for Kiln No. 2 main stack from 13.5 lb/hr, set in 1990, to 26.0 lb/hr. This limit used to be 24.0 lb/hr, set during the initial PSD review, and a BACT determination of 0.2 lb/ton dry feed. Somewhere along the line, incorrect information was provided to FDEP which stated the moisture content of the feed is 9.8%, which resulted in a lowering of the limit from 24 lb/hr to 21.6 lb/hr. In 1990, Florida Mining & Materials, took reductions in TSP from 21.6 to 13.5 lb/hr, SO₂ from 12.0 lbs/hr to 11.5 lb/hr, and NO_x from 250 lb/hr to 162.3 lb/hr to avoid a PSD review. In hind sight, this was clearly the wrong approach. As you know, Southdown went through a PSD review to regain the NO_x limit of 250 lbs/hr in 1992. This application seeks to regain the BACT determined TSP limit of 0.2 lb/ton of dry feed, i.e. 26.0 lb/hr. The requested emission increase for TSP would trigger the requirements for a BACT determination as stated in the Technical Evaluation, dated April 26, 1990:

"It is presumed that the applicant will accept reductions in allowable emission limits that are necessary to avoid PSD review for particulate matter (PM), SO₂, and NO_x. Any emission increase above these levels would require another evaluation including a Best Available Control Technology (BACT) determination, additional \$4,000 application fee, and perhaps additional air modeling data (this evaluation does not address the air modeling data submitted with this application.)"

- 4) Increase CO emission limit from 64 lb/hr to 169 lb/hr for Kiln No. 2. This CO limit increase is necessary so that we can use available flyash as a source of alumina and silica. The varying carbon content of the flyash contributes to the fluctuations in CO emissions.

Please advise us as to what information is required so that your staff may continue to process our application. If you have any questions, please call me at (713) 653-8098.

Sincerely,

Amarjit Singh Gill

Amarjit Singh Gill, PE
Director Air Permitting

c: Bill Thomas, SWD
John Koogler
Don Kelly

~~EPA~~

~~NPS~~

TERESA HERON, BAR

~~HCEPC~~

~~Howards Co.~~