Wheelabrator Ridge Energy Inc.

A Wheelabrator Technologies Company
3131 K-Ville Avenue
Auburndale, FL 33823

Phone 941.665.2255
Fax 941.665.0400

December 6, 1996

Mr. A. A. Linero, P.E.
Department of Environmental Protection
Bureau of Air Regulation
Twin Towers Office Building
2600 Blair Stone Road
Tallahassee, FL 32399-2400

Subject: Ridge Generating Station
Draft Amended Air Construction Permit No. AC53-206244 (PSD-FL-183)

Dear Mr. Linero:

This letter provides our comments on the Draft Amended Air Construction Permit for Ridge Generating Station (RGS) which was sent in a letter dated October 8, 1996 and received at the facility on October 16, 1996. We agree with most of the proposed revisions to the permit; however, as discussed below, we request several specific clarifications and revisions. In each instance the proposed revisions have been underlined to facilitate your review.

Specific Condition No. 3

Specific Condition No. 3 should be revised as follows:

3. Fuel for firing the RGS boiler shall consist only of wood, yard waste, landfill gas, and up to 16.9 percent tires (percent by weight equivalent to 40 percent tires based on heat content.) The 16.9 percent tire weight limitation is equivalent to a tire firing rate of 18,505 pounds of tires per hour. The tire firing rate shall be limited to 18,505 pounds of tires per hour, based on a 24-hour block average. Propane may be used as a startup, shutdown, and combustion stabilization fuel and shall not exceed an annual capacity factor of 10 percent of total heat input.

The 16.9 percent tire weight limitation is consistent with the current permit, as amended on August 8, 1995, and we request that the 16.9 percent limit be maintained.

As we indicated in our letter of December 26, 1995, an averaging period is necessary because the load cell is located on a belt that intermittently delivers tires to feed

hoppers rather than directly to the boiler. Since the feed to the hoppers is intermittent, the measured tire feed rate may be well below the weight limit one hour and substantially above the weight limit the next hour, while the feed from the hoppers to the boiler will be much more consistent. As such, an averaging period is appropriate and necessary to demonstrate compliance. A 24-hour block average is requested.

Specific Condition No. 4

Specific Condition No. 4 should be revised as follows:

4. No municipal type solid waste, as defined in 40 CFR 60, Subpart Ea (except tires, yard waste, and waste wood), or hazardous waste, as defined in 40 CFR 261 and Rule 62-730.020, F.A.C., or medical waste as defined in 40 CFR 60.51a, or biomedical waste as defined in Rule 62-712.200, F.A.C., shall be burned at any time at the RGS facility. Municipal solid waste (as defined in 40 CFR 60, Subpart Ea) shall be limited to 30 percent or less (by weight) of the fuel feed stream, as measured on a calendar quarterly basis.

As discussed in our December 26, 1995 letter, the requested 30 percent limitation on municipal solid waste feed is necessary to clarify the regulatory requirements related to 40 CFR 60, Subpart Ea, and the quarterly basis for demonstrating compliance is consistent with the recently promulgated revisions to Subparts Ea and Eb. As currently proposed, the 30 percent limitation is not broad enough to address the requirements of 40 CFR 60 Subpart Ea because the limitation does not address all materials that are defined as MSW in Subpart Ea. The current limit addresses only yard waste, while tires are also included in the definition of MSW under Subpart Ea and some (but definitely not all) of the waste wood may also be defined as MSW.

The revision is being requested solely to satisfy the requirements of Subpart Ea, and it is an essential change in order to ensure compliance with those requirements. It is not an attempt to expand the types of fuels that can be combusted at the facility and the first sentence of Specific Condition No. 4 explicitly limits those types of fuels to tires, yard waste, and waste wood.

Specific Condition No. 5

Specific Condition No. 5 should be revised to include the changes identified below.

5. The RGS boiler exhaust gases shall not exceed the following limits (Rule 62-212.400, F.A.C.):

Pollutant	Lbs/Hr.	Tons/Yr	Basis for Compliance
SO_2	65.0	284.7	30-Day Rolling Average CEMS
NO_x	90.0	394.2	30-Day Rolling Average CEMS
CO	200.0	876.0	30-Day Rolling Average CEMS
PM/PM_{10}	10.5	46.0	EPA Method 5 if Method 9 VE > 10% Opacity
VOC	22.1	96.8	EPA Method 25A (if testing is requested)
HCl	5.0	21.9	EPA Method 26 or 26A (if testing is requested)
Hg	0.022	0.096	EPA Method 101A or 29 (if testing is requested)
Pb	0.25	1.1	EPA Method 12 or 29 (if testing is requested)
Be	0.0063	0.028	EPA Method 104 or 29 (if testing is requested)
VE	10% Opacity		EPA Method 9 -- Annual

PM/PM_{10}

As discussed in our letter of May 14, 1996, we believe that the proposed revised limit for PM/PM_{10} is too stringent and must be revised. Based on the existing stack test data, Ridge Generating Station Limited Partnership (RGSLP) cannot guarantee that it can consistently achieve the proposed limit. Therefore, including the proposed limit in the final amended permit would jeopardize the future compliance status of the facility.

The proposed revised BACT limit for PM/PM_{10} is 4.0 lb/hr (based on EPA Method 5) which is equivalent to 0.003 gr/dscf @ 7% O_2. The Department established this proposed limit based on a measured emission rate of 2.1 lb/hr, which was associated with the highest of 6 individual runs that were conducted while the facility was combusting 60% wood/40% tires at 100% load. The 2.1 lb/hr measured value was adjusted to provide a margin for compliance. While 2.1 lb/hr was the highest individual run for the 60% wood/40% tire condition, it was not the highest measured value for other fuel conditions.

As described in Appendix A of the Comprehensive Testing Program Report (submitted June 29, 1995), PM/PM_{10} data were collected during eight operating conditions with three test runs per condition for a total of twenty-four individual runs. There were eight individual runs that were higher than the 2.1 lb/hr value referenced as the basis for the revised BACT limit. All eight of these occurred when the facility was combusting 80% wood/20% tires. One of these eight runs was at the proposed revised

limit of 4.0 lb/hr and two of the individual runs exceeded the proposed revised BACT limit. More importantly, the three-run average for Condition 1A (80% wood/20% tires) was 6.1 lb/hr, which is greater than the proposed final limit, and one of the individual runs was measured at the current permit limit.

We do not believe that it is appropriate to ignore valid stack test data from the facility just because it was collected during fuel conditions other than 60% wood/40% tires. The data were collected in accordance with the approved test protocol, and they demonstrate that the air pollution control equipment installed at the facility cannot consistently meet the proposed revised BACT limit for PM/PM_{10} for all permitted fuel combinations.

The current PM/PM_{10} limit of 12.6 lb/hr is equivalent to approximately 0.011 gr/dscf @ 7% O_2 or 0.02 lb/MMBtu, and it is an appropriate BACT limit for this type of facility. The PM limit was not identified as one of the disputed emission limitations in the initial BACT Determination (approved September 29, 1992). The initial Department's proposed BACT limit was the same as the limit proposed by RGSLP, and current data from the BACT/LAER Clearinghouse illustrate that it is still an appropriate emission limitation for this specific facility (see Attachment A). The Clearinghouse data indicate that the most stringent PM_{10} limit for a similar facility is 0.02 lb/MMBtu, which is consistent with the current RGS permit limit, and that the two most recent permit limits are greater than the current RGS limit. Therefore, it is not necessary to reduce the limit, nor is it warranted based on the data.

Finally, there is considerable uncertainty associated with consistently establishing accurate test results at the proposed 4.0 lb/hr limit (0.003 gr/dscf @ 7% O_2). The 0.003 gr/dscf is equivalent to a particulate catch weight of 9.5 mg actual, based on a 60 dscf sample volume (≈ 2 hour test run). The target minimum catch weight is 25 mg for reasonable accuracy and precision values using USEPA Method 5. Catch weights below 25 mg cannot be consistently and accurately measured. Therefore, the compliance status of the facility is jeopardized.

While we believe that the current PM/PM_{10} permit limit can be justified based on the existing stack test data, RGS is willing to accept a limit of 10.5 lb/hr (equivalent to approximately 0.008 gr/dscf). This limit would be achievable by the facility, would allow for a 25 mg target particulate catch weight using USEPA Method 5, and would represent a BACT limit lower than any currently listed in the BACT/LAER Clearinghouse.

Basis for Compliance

The compliance test methods should also reference USEPA Method 29 for Hg, Pb, and Be. USEPA Method 26A should also be listed for HCl. These methods are equivalent or superior to those proposed in the permit, and they have all been previously approved by the Department for similar testing. Both methods have been promulgated by USEPA under 40 CFR 60 Appendix A, and they are the methods that RGS will propose if future compliance testing is required. Including them as alternatives in the final

permit will avoid unnecessary future reviews and delays associated with the approvals necessary to use the alternative methods.

Minor wording changes are also requested to clarify that the "(only if requested)" phrase deals with testing and not with the specified test methods.

Specific Condition No. 7

The first sentence of Specific Condition No. 7 should be revised as follows:

> 7. Since the performance test requirements for the RGS facility have been satisfied through completion of the emissions testing program required by the interim construction permit, no further compliance tests shall be required other than the annual visible emission compliance tests specified in Specific Condition No. 5.

This revision is requested to clarify that the annual compliance tests are limited to a VE test using EPA Method 9 and a test for PM/PM_{10}, using EPA Method 5, if the VE > 10% opacity.

Specific Condition No. 15

Specific Condition No. 15 should be deleted or it should be revised as follows:

> An application for a Title V operation permit required under Chapter 62-213, F.A.C., was submitted to the Department's Southwest District Office on June 14, 1996.

RGS intends to revise the Title V application to incorporate the revised specific conditions once the final amended permit is issued.

We appreciate this opportunity to provide our comments on the Draft Amended Air Construction Permit. If you have any questions related to our comments, please contact Matt Killeen at (603) 929-3420 or Chuck Davis at (941) 665-2255 (Ext. 250). If our requested revisions are not acceptable to the Department, we would like an opportunity to meet with you before a final amended permit is issued.

Sincerely,

George D. Woodward

George D. Woodward
Plant Manager

Attachment

Certification #P 597 437 556

cc: C. Davis
W. Ferguson
M. Killeen
J. Reynolds

CC: EPA
NPS
SWD
Polk Co.

ATTACHMENT

A