



Wheelabrator Ridge Energy Inc.

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

Phone 941.665.2255
Fax 941.665.0400

RECEIVED

JAN 30 1997

**BUREAU OF
AIR REGULATION**

January 27, 1997

State of Florida
Department of Environmental Protection
Chief Bureau of Air Regulation
2600 Blair Stone Road
Tallahassee, FL 32399-2400

Re: Ridge Generating Station
Air Permit #AC53-206244, PSD-FL-183
AIRS Number 1050216
Emissions Unit Identification Number 001

Dear Sir:

In accordance with 40 CFR 60.50a(d), 60.59a(b)(14), and 60.59a(m), enclosed please find data summarizing the daily weight of MSW and other fuels fired during the Fourth Quarter of 1996. Our percentage of MSW combusted continues to be under 30%, so we remain subject only to the record keeping and reporting requirements for co-fired combustors under the MWC-NSPS, 40 CFR Part 60, Subpart Ea.

If you have any questions regarding this submittal, please contact Chuck Davis at (941) 665-2255 (Ext. 250).

Sincerely,

George D. Woodward
Plant Manager

cc: EPA Region IV
B. Proses, DEP SW District
Ridge File 6.2.1.3

Certification # P 597 437 573

WHEELABRATOR RIDGE ENERGY INC.

FUEL STATISTICS
 QUANTITIES IN TONS

| DATE | TIRES | YARDWASTE | WOOD | PROPANE | |
|-------------|---------|-----------|----------|---------|----------|
| 01-Oct-96 | 127.85 | 111.60 | 817.40 | 0.00 | |
| 02-Oct-96 | 46.91 | 44.67 | 320.39 | 6.96 | |
| 03-Oct-96 | 167.29 | 130.54 | 936.58 | 0.00 | |
| 04-Oct-96 | 172.49 | 127.50 | 922.42 | 0.00 | |
| 05-Oct-96 | 162.35 | 121.15 | 868.22 | 0.00 | |
| 06-Oct-96 | 0.00 | 0.00 | 0.00 | 0.00 | |
| 07-Oct-96 | 0.00 | 0.00 | 0.00 | 0.00 | |
| 08-Oct-96 | 0.00 | 0.00 | 0.00 | 0.00 | |
| 09-Oct-96 | 0.00 | 0.00 | 0.00 | 0.00 | |
| 10-Oct-96 | 0.00 | 0.00 | 0.00 | 0.00 | |
| 11-Oct-96 | 0.00 | 0.00 | 0.00 | 1.27 | |
| 12-Oct-96 | 39.86 | 52.14 | 352.49 | 11.39 | |
| 13-Oct-96 | 130.34 | 134.76 | 905.50 | 0.00 | |
| 14-Oct-96 | 146.23 | 138.55 | 917.44 | 0.00 | |
| 15-Oct-96 | 148.29 | 165.09 | 1070.36 | 0.00 | |
| 16-Oct-96 | 179.63 | 145.39 | 909.41 | 0.00 | |
| 17-Oct-96 | 140.78 | 169.00 | 1047.21 | 0.00 | |
| 18-Oct-96 | 184.67 | 173.10 | 1062.84 | 0.00 | |
| 19-Oct-96 | 155.74 | 191.81 | 1184.55 | 0.00 | |
| 20-Oct-96 | 169.98 | 177.88 | 1091.80 | 0.00 | |
| 21-Oct-96 | 157.55 | 185.25 | 1130.27 | 0.00 | |
| 22-Oct-96 | 145.28 | 181.06 | 1097.17 | 0.00 | |
| 23-Oct-96 | 140.17 | 176.00 | 1035.37 | 0.00 | |
| 24-Oct-96 | 150.10 | 171.39 | 1005.12 | 0.00 | |
| 25-Oct-96 | 142.88 | 174.67 | 1021.41 | 0.00 | |
| 26-Oct-96 | 107.39 | 139.15 | 811.76 | 0.00 | |
| 27-Oct-96 | 135.88 | 152.49 | 882.24 | 0.00 | |
| 28-Oct-96 | 164.76 | 141.58 | 816.41 | 0.00 | |
| 29-Oct-96 | 159.61 | 134.57 | 781.44 | 0.00 | |
| 30-Oct-96 | 161.61 | 154.07 | 873.19 | 0.00 | |
| 31-Oct-96 | 123.55 | 177.15 | 1000.22 | 0.00 | |
| TOTAL | 3561.19 | 3670.57 | 22861.20 | 19.62 | 30112.58 |
| PERCENT | 11.83 | 12.19 | 75.92 | 0.07 | 100.00 |
| PERCENT MSW | | 24.02 | | | |

WHEELABRATOR RIDGE ENERGY INC.

FUEL STATISTICS
QUANTITIES IN TONS

| DATE | TIRES | YARDWASTE | WOOD | PROPANE | |
|-------------|---------|-----------|----------|---------|----------|
| 01-Nov-96 | 146.40 | 169.19 | 971.46 | 0.00 | |
| 02-Nov-96 | 146.91 | 173.22 | 1002.89 | 0.00 | |
| 03-Nov-96 | 135.67 | 161.41 | 926.09 | 0.00 | |
| 04-Nov-96 | 152.58 | 179.56 | 1022.55 | 0.00 | |
| 05-Nov-96 | 119.47 | 184.19 | 1039.46 | 0.00 | |
| 06-Nov-96 | 148.87 | 194.43 | 1072.93 | 0.00 | |
| 07-Nov-96 | 117.76 | 209.45 | 1131.94 | 0.00 | |
| 08-Nov-96 | 144.71 | 187.02 | 1023.47 | 0.00 | |
| 09-Nov-96 | 175.64 | 199.97 | 1098.54 | 0.00 | |
| 10-Nov-96 | 134.11 | 157.59 | 854.49 | 0.00 | |
| 11-Nov-96 | 139.50 | 171.47 | 922.09 | 0.00 | |
| 12-Nov-96 | 143.30 | 175.88 | 948.62 | 1.27 | |
| 13-Nov-96 | 155.73 | 202.70 | 1076.21 | 0.00 | |
| 14-Nov-96 | 159.48 | 183.98 | 969.67 | 0.81 | |
| 15-Nov-96 | 164.57 | 208.78 | 1112.22 | 0.00 | |
| 16-Nov-96 | 146.33 | 175.97 | 935.81 | 0.00 | |
| 17-Nov-96 | 99.14 | 174.38 | 916.14 | 0.00 | |
| 18-Nov-96 | 166.34 | 212.47 | 1108.81 | 0.00 | |
| 19-Nov-96 | 162.68 | 195.26 | 1008.72 | 0.00 | |
| 20-Nov-96 | 165.11 | 158.77 | 797.44 | 0.00 | |
| 21-Nov-96 | 108.90 | 167.07 | 842.50 | 0.00 | |
| 22-Nov-96 | 22.80 | 111.65 | 570.10 | 0.00 | |
| 23-Nov-96 | 123.76 | 197.35 | 1019.60 | 0.00 | |
| 24-Nov-96 | 169.89 | 185.27 | 971.21 | 0.00 | |
| 25-Nov-96 | 164.79 | 195.83 | 1031.49 | 0.00 | |
| 26-Nov-96 | 182.47 | 206.41 | 1076.12 | 0.00 | |
| 27-Nov-96 | 202.53 | 208.04 | 1058.56 | 0.00 | |
| 28-Nov-96 | 200.38 | 215.99 | 1087.66 | 0.00 | |
| 29-Nov-96 | 167.81 | 164.98 | 870.18 | 0.00 | |
| 30-Nov-96 | 138.75 | 178.19 | 949.67 | 0.00 | |
| TOTAL | 4406.38 | 5506.47 | 29416.64 | 2.07 | 39331.56 |
| PERCENT | 11.20 | 14.00 | 74.79 | 0.01 | 100.00 |
| PERCENT MSW | | 25.20 | | | |

WHEELABRATOR RIDGE ENERGY INC.

FUEL STATISTICS
QUANTITIES IN TONS

| DATE | TIRES | YARDWASTE | WOOD | PROPANE | |
|-------------|---------|-----------|----------|---------|----------|
| 01-Dec-96 | 196.35 | 175.51 | 935.37 | 0.00 | |
| 02-Dec-96 | 167.40 | 154.33 | 831.14 | 0.00 | |
| 03-Dec-96 | 103.25 | 135.72 | 737.41 | 0.00 | |
| 04-Dec-96 | 178.00 | 200.73 | 1078.93 | 0.00 | |
| 05-Dec-96 | 147.19 | 165.66 | 892.71 | 0.00 | |
| 06-Dec-96 | 158.82 | 214.03 | 1158.69 | 0.63 | |
| 07-Dec-96 | 196.05 | 178.76 | 965.27 | 0.00 | |
| 08-Dec-96 | 179.27 | 192.22 | 1027.80 | 0.00 | |
| 09-Dec-96 | 163.48 | 184.16 | 995.48 | 0.00 | |
| 10-Dec-96 | 180.64 | 176.29 | 969.32 | 0.00 | |
| 11-Dec-96 | 111.97 | 122.16 | 657.20 | 0.00 | |
| 12-Dec-96 | 172.29 | 193.55 | 1047.04 | 0.00 | |
| 13-Dec-96 | 173.73 | 175.13 | 962.87 | 0.00 | |
| 14-Dec-96 | 196.30 | 149.94 | 823.31 | 0.00 | |
| 15-Dec-96 | 180.98 | 142.78 | 791.59 | 0.00 | |
| 16-Dec-96 | 158.59 | 136.47 | 768.88 | 0.00 | |
| 17-Dec-96 | 174.72 | 169.14 | 975.83 | 0.00 | |
| 18-Dec-96 | 133.49 | 120.96 | 700.26 | 0.00 | |
| 19-Dec-96 | 153.16 | 129.82 | 771.14 | 0.00 | |
| 20-Dec-96 | 188.15 | 144.65 | 863.14 | 0.00 | |
| 21-Dec-96 | 155.78 | 117.78 | 711.26 | 0.00 | |
| 22-Dec-96 | 159.15 | 135.00 | 824.76 | 0.00 | |
| 23-Dec-96 | 160.41 | 129.14 | 804.84 | 0.00 | |
| 24-Dec-96 | 143.58 | 112.40 | 718.04 | 0.00 | |
| 25-Dec-96 | 159.77 | 123.86 | 783.39 | 0.00 | |
| 26-Dec-96 | 122.65 | 96.80 | 618.34 | 0.00 | |
| 27-Dec-96 | 135.36 | 114.08 | 742.98 | 0.00 | |
| 28-Dec-96 | 134.64 | 113.97 | 765.56 | 0.00 | |
| 29-Dec-96 | 164.85 | 142.18 | 948.05 | 0.00 | |
| 30-Dec-96 | 125.75 | 104.43 | 696.05 | 0.00 | |
| 31-Dec-96 | 149.05 | 108.74 | 740.99 | 0.00 | |
| TOTAL | 4924.82 | 4560.39 | 26307.64 | 0.63 | 35793.48 |
| PERCENT | 13.76 | 12.74 | 73.50 | 0.00 | 100.00 |
| PERCENT MSW | | 26.50 | | | |

WHEELABRATOR RIDGE ENERGY INC.

QUARTERLY
FUEL STATISTICS
QUANTITIES IN TONS

| MONTH | TIRES | YARDWASTE | WOOD | PROPANE | TOTAL |
|-------------|----------|-----------|----------|---------|-----------|
| October | 3561.19 | 3670.57 | 22861.20 | 19.62 | 30112.58 |
| November | 4406.38 | 5506.47 | 29416.64 | 2.07 | 39331.56 |
| December | 4924.82 | 4560.39 | 26307.64 | 0.63 | 35793.48 |
| TOTAL | 12892.39 | 13737.43 | 78585.48 | 22.33 | 105237.63 |
| PERCENT | 12.25 | 13.05 | 74.67 | 0.02 | 100.00 |
| PERCENT MSW | | 25.30 | | | |

Fold at line over top of envelope to

Is your RETURN ADDRESS completed on the reverse side?

SENDER:

- Complete items 1 and/or 2 for additional services.
- Complete items 3, 4a, and 4b.
- Print your name and address on the reverse of this form so that we can return this card to you.
- Attach this form to the front of the mailpiece, or on the back if space does not permit.
- Write "Return Receipt Requested" on the mailpiece below the article number.
- The Return Receipt will show to whom the article was delivered and the date delivered.

I also wish to receive the following services (for an extra fee):

- 1. Addressee's Address
- 2. Restricted Delivery

Consult postmaster for fee.

3. Article Addressed to:
 George D. Woodward, PM
 Wheelabrator Ridge Energy
 3131 K-Ville Ave
 Auburndale, FL
 33823

4a. Article Number
 P265 659 143

4b. Service Type
 Registered Certified
 Express Mail Insured
 Return Receipt for Merchandise COD

7. Date of Delivery

5. Received By: (Print Name)

8. Addressee's Address (Only if requested and fee is paid)

6. Signature: (Addressee or Agent)

X Linda Colon

Thank you for using Return Receipt Service.

PS Form 3811, December 1994

Domestic Return Receipt

P 265 659 143

US Postal Service

Receipt for Certified Mail

No insurance Coverage Provided.

Do not use for International Mail (See reverse)

| | |
|---|--------------------|
| Sent to | G. Woodward |
| Street & Number | Wheelabrator Ridge |
| Post Office, State, & ZIP Code | Auburndale, FL |
| Postage | \$ |
| Certified Fee | |
| Special Delivery Fee | |
| Restricted Delivery Fee | |
| Return Receipt Showing to Whom & Date Delivered | |
| Return Receipt Showing to Whom, Date, & Addressee's Address | |
| TOTAL Postage & Fees | \$ |
| Postmark or Date | 1-9-97 |
| | PSD-FI-183 |

PS Form 3800, April 1995



Wheelabrator Ridge Energy Inc.

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

Phone 941.665.2255
Fax 941.665.0400

RECEIVED
JAN 21 1997
BUREAU OF
AIR REGULATION

January 17, 1997

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 (RGS)
Draft Amended Air Construction Permit No. AC53-206244 (PSD-FL-183)

Dear Mr. Linero:

This letter provides our response to your letter dated January 9, 1997 which we received on January 15, 1997. Our response to each of your comments is discussed below.

Specific Condition No. 3

We will accept your proposed revision of Specific Condition No. 3, assuming that the words "yard waste" are included after the word "wood" in the first sentence of the Condition.

Specific Condition No. 4

We do not believe that your proposed resolution for Specific Condition No. 4 will ensure compliance with the requirements of 40 CFR 60, Subpart Ea. In our December 6, 1996 letter we had suggested adding the following sentence to the end of Specific Condition No. 4:

"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."

Alternatively, the sentence could be modified as follows, and it could be included in either Specific Condition No. 3 or No. 4:

"The combined total of tires, yard waste, and any waste wood that is defined as municipal solid waste in 40 CFR 60, Subpart Ea shall not exceed 30 percent (by weight) of the facility fuel feed stream, as measured on a calendar quarterly basis."

An approach such as this is required because tires and yard waste are defined as municipal

solid waste (MSW) in 40 CFR 60, Subpart Ea. Some waste wood may also be defined as MSW by Subpart Ea, but most of the waste wood received at RGS is not MSW. All MSW must be limited to 30 percent (by weight). We request that you incorporate one of the two approaches presented above. If neither approach is acceptable to the Department, we request an opportunity to discuss alternative wording with you before the final permit is issued.

Specific Condition No. 5

As we described in our letters of May 14 and December 6, 1996, we believe that the proposed revised BACT limit of 6.0 lb/hr for PM/PM10 is too stringent; and we request an opportunity to discuss this matter further before the final permit and BACT determinations are issued. We would like to schedule a conference call for Tuesday, January 21, 1997 with Mr. John Reynolds and yourself to discuss this issue further.

Specific Condition No. 7


We agree with your comment assuming that the wording of Specific Condition No. 5 clarifies that VE is the only pollutant for which annual compliance testing is required.

Specific Condition No. 15

We believe that the wording of Specific Condition No. 15 is a source of potential confusion because we have already submitted an application for a Title V Operation Permit. However, we are willing to accept the condition as written, based on the understanding that we have already complied with the requirements of this condition. If that is not correct, the situation should be clarified.

We appreciate your on-going efforts and those of John Reynolds in the preparation of the final permit and BACT determination. I am confident that we can resolve these outstanding issues. We will be contacting John Reynolds to schedule the conference call. If you have any questions on this letter, please contact Matt Killeen at (603) 929-3420 or Chuck Davis at (941) 665-2255 (Ext. 250).

Sincerely,


George D. Woodward
Plant Manager

Certification # P 597 437 569

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

cc: SWD
perk Co



Department of Environmental Protection

Lawton Chiles
Governor

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

Virginia B. Wetherell
Secretary

January 9, 1997

CERTIFIED MAIL - RETURN RECEIPT REQUESTED

Mr. George D. Woodward
Plant Manager
Wheelabrator Ridge Energy, Inc.
3131 K-Ville Avenue
Auburndale, Florida 33823

RE: December 6, 1996 Comments on Draft Amended Air Construction Permit No. AC53-206244
(PSD-FL-183)

Dear Mr. Woodward:

This is in response to Wheelabrator Ridge Energy, Inc.'s (WREI) referenced letter requesting changes to Specific Conditions Nos. 3, 4, 5, 7 and 15 of the draft amended permit. The Department has the following comments:

Specific Condition No. 3:

The 16.1 % tire weight limitation was changed from the original amendment allowing 40% tires (16.9%, issued on August 8, 1995) based on a closer review of WREI's February 2, 1995 memo. The fuel feed rate calculations for 60% wood/40% tires show that 18,505 lb tires/hr is equivalent to 16.1% of the total fuel weight of 114,860 lb/hr. We will agree, however, to base the limit on a 24-hour block average due to instrumentation problems with this type of process.

Specific Condition No. 4:

The intent of this condition is to specifically exclude garbage and all municipal solid waste other than tires, yard waste and waste wood. The single reference to Subpart Ea in the first sentence is sufficient since the reference is exclusionary. There is no need to mention municipal solid waste in an inclusionary sense as long as the fuels are identified separately. Perhaps the best way to modify the wording is to include "yard waste" following "wood" in the first sentence of Specific Condition No. 3 and to move the last sentence of Specific Condition No. 4 making it the last sentence of Specific Condition No. 3, followed by the phrase "...as measured on a calendar quarterly basis". If landfill gas is not used, the current permit wording limits fuels to the following: tires - 18,505 lb/hr (16.1% of 114,860); yard waste - 34,458 lb/hr (30% of 114,860); waste wood - 61,897 lb/hr (53.9% of 114,860). WREI's proposed wording would contradict the first sentence in the condition, and the use of "or less" would be redundant if the "limit" is 30% (all lesser quantities are covered since there is a limit).

Specific Condition No. 5:

The clarifying words "testing is" will be added, however "Method 9" is listed as the compliance method for VE and does not need to be restated across from "PM/PM10". Since it is very unlikely that special tests for HCl, Hg, Pb, or Be will be required, it does not seem necessary to specify alternate methods at this point.

Regarding the PM/PM10 discussion, the Department agrees with some of your points but does not agree with the premise stated in the first paragraph to the effect that the proposed limit would jeopardize the future compliance status of the facility. Compliance is determined at 90-100% of the maximum load - - not at 75% load which was the operating rate for the high test results. The data show that at full load the facility would have no problem meeting the proposed limit with a 3-run test. We can't imagine a scenario where compliance testing would be done at 75% load since performance has been demonstrated at full load. While we agree that 0.01 gr/SCF is commonly used for many BACT determinations in the Clearinghouse, we should stress that the rationale for the proposed PM/PM10 limit is the same as for all other pollutants, i.e., a margin for compliance was set above the highest test result obtained under representative operating conditions. Where permit limits are based on proven margins above actual test results, and the data points fall below a prior "benchmark" for BACT determinations (0.011 gr/SCF), the relaxation of the limit to the prior benchmark figure would result in a compliance margin that is inconsistent with margins set for other pollutants.

There is another issue that should be discussed regarding the PM/PM10 test data. That issue concerns whether or not the high test results obtained while firing 80% wood/20% tires at 75% mode are valid and whether they should have any bearing on a limit that will be based on data obtained at 100% load. It can be shown mathematically that if the emissions from fuel A are equal to "x" and the emissions from fuel B are "y", then emissions from a 80/20 mixture of A and B should be roughly equivalent to $0.8x + 0.2y$, provided there is no reaction between A and B or other extraneous factors affecting emissions from their combustion. The average PM/PM10 emissions for 100% wood are 1.2 lb/hr. Though no data were obtained for 100% tires, the 60/40 test average is 1.4 lb/hr. Therefore one would expect that emissions from a 80/20 mixture would be no more than for the 60/40 mixture. In the absence of any evidence to the contrary, we must presume that the high numbers resulted from non-steady-state conditions during testing at 75% load.

Perhaps the most significant point concerning PM/PM10 compliance is that the lb/hr limit is provisional only, i.e. the lb/hr limit will probably never need to be enforced since all of the opacity test readings have been zero. Nonetheless, the provisional PM/PM10 limit will be increased from 4.0 to 6.0 lb/hr to provide a 50% margin above the highest test run for the 80/20 mixture at 100% load, and instead of being automatic if $VE > 10\%$, the Method 5 test will be required only "if requested". Then if the VE compliance test exceeds 10%, retesting for opacity can be done following replacement of faulty filter bags. Realizing that WREI will replace bags known prior to the compliance test to be faulty, it is hard to envision how compliance might be put in jeopardy as stated in your letter.

Specific Condition No. 7:

No change is necessary since it will be clear from the wording of Specific Condition No. 5 that VE is the only pollutant for which annual compliance testing is required.

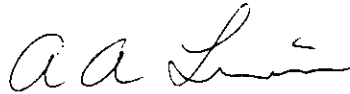
Mr. George D. Woodward
January 9, 1997
Page 3

Specific Condition No. 15:

The wording of this condition is standard for all construction permits. Even though a Title V permit application has actually been submitted, the requirement must be stated as if the permit was being originally issued.

In conclusion, since the above changes to the draft amended permit are not major and since no comments from the public have been received following publication of the notice on November 13, 1996, the Department intends to issue the final permit and BACT determination by January 22, 1997. If there are any questions regarding the above, please contact me or John Reynolds at (904) 488-1344.

Sincerely,



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

AAL/r

c: B. Thomas, SWD
R. Harwood, Polk County
B. Beals, EPA
J. Bunyak, NPS