



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

REGION 4
ATLANTA FEDERAL CENTER
61 FORSYTH STREET
ATLANTA, GEORGIA 30303-8960

C. Danley

JUL 28 1999

4APT-ARB

Howard L. Rhodes, Director
Air Resources Management Division
Florida Department of Environmental Protection
Mail Station 5500
2600 Blair Stone Road
Tallahassee, Florida 32399-2400

SUBJ: EPA's Review of Proposed Title V Permit
Perpetual Energy Corporation of Florida
Permit No. 0790011-001-AV

Dear Mr. Rhodes:

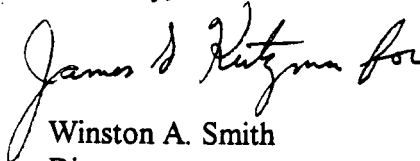
The purpose of this letter is to provide comments to the Florida Department of Environmental Protection (DEP) on the proposed title V operating permit for Perpetual Energy Corporation of Florida, which was posted on DEP's web site on June 10, 1999. Based on the Environmental Protection Agency's (EPA's) review of the proposed permit and the supporting information for this facility, EPA formally objects, under the authority of Section 505(b) of the Clean Air Act (the Act) and 40 C.F.R. § 70.8(c) (see also Florida Regulation 62-213.450), to the issuance of the title V permit for this facility. The basis of EPA's objection is that the permit does not contain all applicable requirements for the facility as required by 40 C.F.R. § 70.6(a)(1), and does not fully meet the periodic monitoring requirements of 40 C.F.R. § 70.6(a)(3)(i).

Section 70.8(c) requires EPA to object to the issuance of a proposed permit in writing within 45 days of receipt of the proposed permit (and all necessary supporting information) if EPA determines that the permit is not in compliance with the applicable requirements under the Act or 40 C.F.R. Part 70. Section 70.8(c)(4) and Section 505(c) of the Act further provide that if the State fails to revise and resubmit a proposed permit within 90 days to satisfy the objection, the authority to issue or deny the permit passes to EPA and EPA will act accordingly. Because the objection issues must be fully addressed within the 90 days, we suggest that the revised permit be submitted in advance in order that any outstanding issues may be addressed prior to the expiration of the 90-day period.

Pursuant to 40 C.F.R. § 70.8(c), this letter and its enclosure contain a detailed explanation of the objection issues and the changes necessary to make the permit consistent with the requirements of 40 C.F.R. Part 70. The enclosure also contains general comments applicable to the permit.

If you have any questions or wish to discuss this further, please contact Mr. Gregg Worley, Chief, Operating Source Section at (404) 562-9141. Should your staff need additional information they may contact Ms. Gracy R. Danois, Florida Title V Contact, at (404) 562-9119, or Ms. Angelia Souder-Blackwell, Associate Regional Counsel, at (404) 562-9527.

Sincerely,



Winston A. Smith
Director
Air, Pesticides & Toxics
Management Division

Enclosure

cc: Mr. Dave Brown
Vice-President, Operations
LFC No. 47 Corporation

Enclosure

U.S. EPA Region 4 Objection Proposed Part 70 Operating Permit Perpetual Energy Corporation of Florida Permit no. 0790011-001-AV

I. EPA Objection Issues

1. Applicable Requirement - PSD: The proposed permit for Perpetual Energy does not assure compliance with all applicable requirements, as required under 40 C.F.R. § 70.6(a)(1). Based on the review of the proposed permit and supporting documentation, EPA has concluded that this facility should have gone through PSD review at the time of construction, and that the subsequent modifications should have also undergone PSD review. As a result, the State must replace Section II, condition 8 of the permit with a schedule of compliance for Perpetual Energy to complete PSD review and obtain a PSD permit, in accordance with 40 C.F.R. 70.6(c)(3), which meets the requirements of 40 C.F.R. § 70.5(c)(8)(iii)(C). Progress reports referenced under 40 C.F.R. § 70.6(c)(4) need to also be required by the permit. Any changes to the facility resulting from the PSD review, including but not limited to changes in operation or installation of control equipment, will have to be incorporated in the title V permit through permit modification.

EPA's conclusions regarding PSD applicability are based on the review of the construction permit application, dated July 11, 1983, the construction permit issued to this facility on December 1, 1983, a report prepared by Koogler & Associates on behalf of Madison County, FL, dated February 17, 1999, the title V permit application, and the title V proposed permit for the facility. The 1983 permit application only addressed particulate matter and visible emissions. The applicant should have also addressed emissions of other criteria pollutants. EPA emission factors were readily available to the permittee before the facility was constructed to provide sufficient information for a conclusion of PSD applicability. As described in the report prepared by Koogler & Associates, if the applicant had evaluated the emissions of carbon monoxide from the facility, the facility would have been a major source subject to PSD review. Moreover, the carbon monoxide emissions cap requested in the title V permit application seems to be based on an emission factor that is less than half the emission factor listed in AP-42 for wood waste boilers. Using the operating rate of 8400 hours per year and the current emission factor listed in AP-42 (0.726 lb/MMBTU) for wood waste boilers, we obtained a value of 564 tpy of carbon monoxide. This number is twice as high as the emissions cap requested by the applicant. In order to use an emission factor different than the one listed in AP-42, detailed stack test data is needed to evaluate the adequacy of the factor.

As specified in the title V permit application, the facility wishes to burn other waste fuels in the boiler including wood wastes, paper, tire-derived fuel, and refuse-derived fuel. This raises the question of whether the boiler could possibly be classified as a municipal incinerator. If so, the PSD major source threshold would be 100 tpy rather than 250 tpy (assuming the combustion of greater than 250 tons of "refuse" per day). Various regulations exist to avoid classification as a municipal waste combustor, but this question must be addressed by the State during the PSD review process.

2. Applicable Requirements - NSPS: Based on available information, Perpetual Energy may also be subject to 40 C.F.R. 60 *Subpart Db - Standards of Performance for Industrial-Commercial-Institutional Steam Generating Units*. A construction permit (AC40-75860) for the boiler was issued on December 1, 1983. Please provide verification that construction of the boiler commenced prior to June 19, 1984, to address applicability of this standard.
3. Applicable Requirements - NSPS: As discussed in Objection Issue 1, the permit application indicates that the facility desires to burn a variety of fuels in the boiler, including tire-derived fuel and refuse-derived fuel. If the boiler is combusting any solid waste, as defined under 40 C.F.R. 60.51, Perpetual Energy may be subject to 40 C.F.R. Part 60 *Subpart E - Standards of Performance for Incinerators*. If the boiler is combusting any municipal solid waste as defined under 40 C.F.R. 60.51b, Perpetual Energy may be subject to 40 C.F.R. Part 60 *Subpart Eb - Standards of Performance for Large Municipal Waste Combustors for Which Construction is Commenced After September 20, 1994 or for Which Modification or Reconstruction is Commenced After June 19, 1996*. Please provide documentation to address the applicability of Subparts E and Eb to the boiler at Perpetual Energy.
4. Periodic Monitoring: Condition A.1 specifies the maximum operation heat input for this facility. In the past, the State has included a permitting note with this requirement clarifying that this is not intended as a limit but as a basis to determine the percent capacity of the source during testing. If this is the case, please add a permitting note to clarify this; otherwise periodic monitoring requirements sufficient to assure compliance with this limitation need to be included in the permit.
5. Not Practicably Enforceable: As written, conditions A.3 and A.4 seem not to be practicably enforceable since they leave it to the source to determine in which manner they will limit the hours of operation and the fuel usage in order to meet the carbon monoxide limit. Permit conditions need to be clear and concise as to what is expected from the facility to assure compliance with a permit limitation. Also, please note that both conditions share the same last sentence, even though

they are addressing different limitations.

Additionally, the permit does not require any recordkeeping and reporting requirements for these two parameters. In order to adequately assure compliance with these requirements, the permit needs to require that the facility maintain daily logs of the hours of operation and the amount and type of fuel burned.

6. Emission Limits: Condition A.5 contains equivalent emissions for the particulate matter limit. It is not clear whether the facility is required to demonstrate compliance with these equivalent emissions and what the basis for these limits is. Please clarify this condition of the permit.
7. Periodic Monitoring: Condition A.5 establishes the emissions limitation for particulate matter for this facility. However, the permit does not contain sufficient periodic monitoring to assure compliance with the applicable limit. The permit only requires the facility to conduct a Method 5 test prior to permit renewal. This would not constitute an adequate basis for the annual certification of compliance that the facility will have to submit for this unit.

The unit addressed in the permit uses add-on control equipment to comply with the applicable particulate matter standard. Since there is not sufficient available information to determine the compliance status of this facility and because of the size of this unit, the permit needs to require the source to perform an annual particulate matter test. Once enough information about the operation has been obtained, and if the data supports it, the permit may be modified to reduce the frequency of testing for particulate matter.

8. Appropriate Averaging Times: In order for the emissions standard for particulate matter contained in condition A.5 to be practicably enforceable, the appropriate averaging time must be specified in the permit. An approach that can be used to address this deficiency is to include general language in the permit to indicate that the averaging times for all specified emission standards are tied to or based on the run time of the test method(s) used for determining compliance.
9. Periodic Monitoring: The permit does not require sufficient periodic monitoring to ensure compliance with the visible emissions limit contained in condition A.6. The permit only requires an annual one hour Method 9 visible emissions reading. In most cases, this does not constitute adequate periodic monitoring to ensure continuous compliance with the opacity standard. The permit must require the source to conduct visible emissions observations on a daily basis (Method 22), and that a Method 9 test be conducted within 24 hours of any abnormal qualitative survey. As an alternative, a technical demonstration can be included in the statement of basis explaining why the District has chosen not to require any

additional visible emissions testing. The demonstration needs to identify the rationale for basing the compliance certification on data from a short-term test performed once a year.

10. Periodic Monitoring: Condition A.7 contains a limitation for carbon monoxide. However, the permit does not contain any periodic monitoring requirements to assure compliance with this emissions limit. Also, neither the permit nor the statement of basis present any information to suggest that the operational limits will be sufficient to provide assurance that the source will stay below the limit. Therefore, the permit must include further information in order to verify that the operational limitations will be sufficient to assure compliance with the carbon monoxide limit. More frequent monitoring needs to be included in the permit, or a technical demonstration must be included in the statement of basis explaining why the State has chosen not to require periodic monitoring for carbon monoxide. The demonstration needs to identify the rationale for basing the compliance certification on data from a test performed once every five years.

II. General Comments

1. Section II, condition 1: Appendix TV-1 has been replaced by Appendix TV-3. Please correct accordingly.
2. Section II, condition 11: Reports should be sent to the Air Enforcement Section, not the Operating Source Section. Also, please correct the telephone and fax number for the Air Enforcement Section. The correct telephone and fax numbers are 404/562-9155 and 404/562-9163, respectively.
3. Section III, subsection A, condition A.2: The permit application for this facility lists other fuels that may be fired in this facility. Please address in the statement of basis why the source is prohibited to fire such fuels listed in the application but not included in the permit.