



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY  
REGION 4  
ATLANTA FEDERAL CENTER  
61 FORSYTH STREET  
ATLANTA, GEORGIA 30303-8960

August 30, 1999

4APT-ARB

Mr. John E. Hornback, Director  
Division for Air Quality  
Department for Environmental Protection  
Natural Resources and Environmental  
Protection Cabinet  
803 Schenkel Lane  
Frankfort, Kentucky 40601-1403

SUBJ: EPA's Review of Proposed Title V Permit  
Reid/Henderson Station, Sebree, Kentucky  
Permit No. V-97-021

Dear Mr. Hornback:

The United States Environmental Protection Agency (EPA) has reviewed the proposed title V operating permit for Western Kentucky Energy Corporation's Reid/Henderson Station, located near Sebree, Kentucky. 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), 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).

Section 505(b)(1) of the Clean Air Act and Section 70.8(c) of 40 C.F.R. Part 70 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. Pursuant to 40 C.F.R. 70.8(c), 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 are provided below. 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.

The proposed permit for Reid/Henderson Station 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. As a result, KDAQ must include in Section I of the permit a schedule of compliance requiring the Reid/Henderson Station 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.

According to the Final Determination, KDAQ approved the source's request to burn petroleum coke (or petcoke) as a fuel in Emission Units 1, 2, and 3 (Indirect Heat Exchangers). During the conference call of August 30, 1999, we discussed with your staff and representatives of Louisville Gas & Electric the possibility of excluding the burning of petcoke from consideration as a modification under Kentucky's prevention of significant deterioration (PSD) rules (401 KAR 51:017). A modification under Kentucky's PSD rules is "a physical change or change in the method of operation that would result in a significant net emissions increase of any pollutant subject to regulation under the Clean Air Act." Also under PSD rules, a physical change or change in the method of operation does not include use of an alternative fuel if (a) "the source was capable of accommodating before January 6, 1975, unless the change would be prohibited under a permit condition which was established after January 6, 1975, or (b) "the source is approved to use under a permit issued under this administrative regulation or under 40 C.F.R. 52.21." We understand that no permits fitting within exclusion (b) above have been issued to allow petcoke combustion. However, since the indirect heat exchanger units were constructed before January 6, 1975 (according to the title V permit application), further analysis is needed to assess whether exclusion (a) is applicable.

We first note that a fuel like petcoke that is used as a supplemental fuel blended with a primary fuel does not qualify as an "alternative" fuel in the sense originally envisioned when the alternative fuel exclusion was added to federal PSD rules. Leaving aside the question of whether petcoke is truly an alternative fuel, we focus instead on the "capable of accommodating" provision. Region 4 has determined in similar situations that accommodation for use of a fuel has occurred prior to January 6, 1975, only if such use was included in the final construction specifications of the units in question. We would not expect that the final construction specifications for the units in question here would have addressed petcoke since petcoke was generally not available for use prior to 1975. Without further justification that petcoke fits within the "capable of accommodating" exclusion, therefore, our determination is that exclusions (a) and (b) do not apply.

Since the exclusions above are not applicable, we deem that burning of petcoke with its extremely high sulfur content is a change in the method of operation. Given that the source is major with regard to PSD, an analysis needs to be performed (and the results submitted to EPA) to verify that the burning of petcoke will not result in a significant net emissions increase and that, consequently, use of petcoke is not a major modification subject to PSD review.

During the August 30, 1999, conference call, however, your staff indicated that they do not consider petcoke as an alternative fuel, but as a form of coal itself. Their rationale is based upon their interpretation of 40 C.F.R. Subpart Db, which lists petcoke, along with other solid fuels, in 40 C.F.R. 60.41b (Definitions). However, this paragraph indicates that these fuels are

"also included in this definition for the purposes of this subpart," which treats petcoke in the same manner as coal for implementation purposes.

We are committed to working with you to resolve these issues. Please let us know if we may provide assistance to you and your staff. 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. Amy Williams, Kentucky Title V Contact, at (404) 562-9128, or Mr. Joel Huey at (404) 562-9104.

Sincerely,

/s/

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

cc: Western Kentucky Energy Corporation