UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

REGION VII
901 NORTH 5TH STREET
KANSAS CITY, KANSAS 66101

NOV 0 9 2007

Clark Duffy
Kansas Department of Health & Environment
Bureau of Air and Radiation
1000 S.W. Jackson Street, Suite 310
Topeka, KS 66612-1366

Dear Mr. Duffy:

On September 18, 2007, KDHE transmitted an application for a proposed prevention of significant deterioration (PSD) permit that would authorize modifications at Westar Energy's Jeffrey Energy Center. Westar proposes to initiate seven changes, including boiler modifications to produce steam for an adjacent ethanol production facility. Specifically, Westar proposes to: 1) add steam extraction from steam turbines to support ethanol plant; 2) improve steam turbine efficiency and increase output; 3) add anti-slagging additives to improve availability; 4) upgrade the boilers to supply 400,000 lbs/hr steam for the ethanol plant by increasing heat input capacity by an additional 207 mmBtu/hr; 5) rebuild its existing scrubbers; 6) make upgrades to its existing electrostatic precipitators; and 7) install low NOx burners and separated over-fire air on Jeffrey units 1 and 2.

Westar proposes to provide the steam needed for the new ethanol plant from several of the existing emissions units, which are the subject of an ongoing EPA PSD enforcement investigation and Notice of Violation. Westar projects that the above-described changes will result in a significant net emissions increase of only carbon monoxide (CO). As a result, Westar's BACT analysis and modeling focus solely on CO emissions. The Westar PSD application does not evaluate either SO2 or NOx for compliance with BACT and other PSD requirements. Instead, as part of its proposal, Westar proposes to net the ethanol steam expansion project out of PSD review by taking credit for SO2 and NOx reductions achieved by retrofitting the Jeffrey units with scrubbers and low NOx burners. In its PSD application, Westar indicates that the boilers will be modified to increase heat input by an additional 207 mmBtu/hr. However, based on Region 7's experience with other biofuel projects much more steam is likely needed to power the ethanol plant. With the increased energy demands we believe the changes may result in significant emissions increases, and if there are no netting credits available, the changes may trigger full PSD review for several pollutants.

The approach taken by Westar in its PSD application could be problematic for a number of reasons. First, EPA issued a Notice of Violation to Westar on January 22, 2004, alleging that Westar violated the Clean Air Act by modifying the Jeffrey units without applying for and obtaining a PSD pre-construction permit(s) and without installing best available control technology (BACT) level controls for SO2 and NOx. It is EPA's position that a source cannot

receive emission reduction credit for reducing any portion of actual emissions which resulted because the source was operating out of compliance. See 40 CFR 52.21(b)(3)(vi). Consequently, only emission reductions that are surplus and beyond BACT requirements may be used for netting purposes.

Second, as proposed the emissions decreases that Westar is relying upon to net out of PSD review are not "contemporaneous" with the proposed emissions increases. 40 CFR 52.21(b)(3)(i) provides that a "net emissions increase" is the amount by which the sum of the emissions increases from a particular project and "contemporaneous" increases and decreases exceed zero. 40 CFR 52.21(b)(3)(ii) defines "contemporaneous," and limits the time period in which emissions reductions can be used for netting purposes. This section of the regulations provides:

> (ii) An increase or decrease in actual emissions is contemporaneous with the increase from the particular change only if it occurs between:
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> (*a*) The date five years before construction on the particular change commences; and
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> (*b*) The date that the increase from the particular change occurs.

We understand that Westar intends to implement the changes that will result in emissions decreases many years after the boiler modifications that will cause the increase in emissions. Since these emissions decreases will not take place until after the emissions increases caused by the boiler modifications, as proposed they are not contemporaneous under 40 CFR 52.21(b)(3)(ii), and cannot be used for netting.

In conclusion, these issues put use of the emission reductions for netting purposes, and any resulting permit based upon them, at risk. We also note that when best available retrofit technology (BART) applies on Jeffrey's Units 1 and 2 the resultant emissions reductions may not be "surplus" emissions, and therefore may not be available for netting.

We look forward to discussions with Westar and KDHE to resolve these outstanding questions at the Jeffrey Energy Center. If you have any questions, please contact Jon Knodel at (913) 551-7622 or Dana Skelley at (913) 551-7923.

Sincerely,

Becky Weber

Becky Weber, Director
Air Waste and Management Division

cc:

Marian Massoth, Kansas Department of Health and Environment
Mindy Bowman, Kansas Department of Health and Environment