



# UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

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

OFFICE OF  
REGIONAL ADMINISTRATOR

JUL -1 2009

Roderick L. Bremby, Secretary  
Kansas Department of Health and Environment  
Curtis State Office Building  
1000 SW Jackson  
Topeka, Kansas 66612

Dear Secretary Bremby:

We appreciate the opportunity to meet recently with your staff, counsel for Governor Parkinson, and representatives of Sunflower Electric Power Corporation and Tri-State Generation and Transmission Association. During the meeting, we discussed important issues with respect to the new Sunflower project currently under review by your office. This letter summarizes state and federal air permitting and approval requirements which were discussed during the meeting.

As you know, in October 2007, KDHE announced its decision to deny a construction permit for two new 700 MW coal-fired units at the Sunflower Electric Power Corporation Holcomb Power Plant. On May 4, Governor Parkinson and Sunflower signed an agreement (the "Agreement") requiring issuance of a permit for one new 895 MW unit. This agreement was incorporated into HB2369 and signed into law by the Governor on May 22. However, as we stated at the meeting, the new Sunflower project contemplated by the Agreement must still meet the requirements of the federal Clean Air Act (CAA or the "Act") and the Kansas State Implementation Plan approved by EPA under the Act. These requirements are summarized below.

## **CAA Prevention of Significant Deterioration (PSD) Permit**

The CAA establishes a preconstruction permit program, the prevention of significant deterioration (PSD) program, to ensure, prior to approval for construction of a project, that major new sources of certain air pollutants other than hazardous air pollutants (HAP) are well controlled and will not significantly degrade air quality. The KDHE also has a program in place, approved by EPA, to implement the PSD program in accordance with federal law. A State with an EPA-approved PSD program is authorized to issue a single construction permit that fulfills the requirements of both State and federal law. Notwithstanding KDHE's responsibilities under State law, as amended by HB2369, KDHE retains a responsibility under its approved PSD program to ensure that construction permits issued by KDHE meet the requirements of the PSD program under the federal Clean Air Act. If a permit issued by KDHE under State law is not

issued in accordance with the requirements of the State's approved PSD program, the Sunflower facility will not have the necessary authorization under the Clean Air Act to commence construction.

The original application for the Sunflower modifications, submitted to KDHE in February 2006, requested approval of three new 700 MW units. This was the project on which EPA and the public were invited to comment during the permit review process. However, the 2007 draft final construction permit, prepared after EPA's review and after the close of the public comment period, addressed requirements for two new 700 MW units. Despite the preparation of a draft final permit for these two units, KDHE denied the permit. The Agreement contemplates that Sunflower will now construct a single, new 895 MW unit and states, in part, that "the Secretary shall issue the final permit substantially in the form of the draft final permit prepared by the KDHE technical staff." However, as discussed below, the redesign of this new unit, as well as public input on the new project, will need to be considered in determining the form and content of any final permit.

Several design changes are anticipated for the larger 895 MW unit. Such redesign can lead to changes in emissions impacts on air quality, which could affect the public's concerns about the project. The public should have an opportunity to provide meaningful comment on any such impacts. For example, the following potential changes have been discussed: 1) a relocated stack, which could change the location of significant emissions impacts, 2) one or more additional scrubber modules, and 3) redesign of the coal and other materials handling facilities, which could change the projected impacts of fugitive emissions on air quality in the area.

We believe that the requirements of the Clean Air Act PSD program, as implemented through KDHE's approved State Implementation Plan, necessitate submission of an application addressing all applicable requirements of the PSD program for the new project. KDHE should conduct a comprehensive analysis of the new project addressing the PSD program requirements. Best available control technology (BACT) will need to be established and air quality and increment impacts will need to be analyzed contemporaneously with any approval of the project. We recommend that part of the analysis include an evaluation of PM2.5 emissions instead of relying on PM10 emissions as a surrogate. In addition, Sunflower should consider the option of employing Integrated Gasification Combined Cycle (IGCC) technology, and other higher efficiency designs for the permit record.

As required by the applicable federally approved state regulations implementing the CAA PSD program, we expect that KDHE will prepare a comprehensive record supporting any decision it makes regarding the new project. Consistent with the approved regulations, KDHE must provide opportunity for a full 30-day public notice and comment period, making the results of KDHE's analysis of the new project available for public review. KDHE should also respond to any comments prior to making a final permit decision.

## CAA Section 112(g) Hazardous Air Pollutant (HAP) Permit

The CAA establishes comprehensive programs to address sources of hazardous air pollutants (HAP), which can cause serious health effects. One such program, the 112(g) permit program, is designed to ensure that certain major new sources of HAPs are determined, prior to their construction or reconstruction, to be well controlled regarding these pollutants. As you know, the EPA and KDHE have requirements in place to implement these programs.

In 2006, KDHE proposed a mercury limit for the new units consistent with EPA's New Source Performance Standards (NSPS) found at 40 CFR Part 60, Subpart Da. The limit satisfied the regulatory requirements for hazardous air pollutants (HAP) at that time because EPA had promulgated a rule, called the Section 112(n) Revision Rule, which removed coal- and oil-fired electric generating units from the list of categories regulated under section 112. On February 8, 2008, the United States Court of Appeals for the District of Columbia Circuit vacated this rule. On March 14, 2008, the Court issued its mandate, which made the vacatur effective. The effect of the vacatur is that coal- and oil-fired electric generating units remain a section 112(c) listed source category. Because EPA has not yet promulgated national emission standards for coal- and oil-fired electric generating units under section 112(d), any such units that are major sources<sup>1</sup> must undergo a case-by-case MACT determination pursuant to section 112(g)(2) prior to construction or reconstruction. See January 7, 2009 memorandum from Robert J. Myers to Regional Administrators (attachment).

The construction permit proposed and denied by KDHE contained no limits on HAPs, other than mercury, and would not effectively satisfy Sunflower's obligation to comply with 112(g). Likewise, the Agreement signed May 4 does not establish adequate limits for HAP emitted for the new unit, including, for example, HAP acid gases, metals, organics or mercury for the new unit. To reconcile the gap, Sunflower is required to apply for a case-by-case 112(g) permit. Alternatively, Sunflower can obtain a "synthetic area source" permit, which would include enforceable emissions limits that prevent Sunflower from emitting pollutants above the 112 major source levels. See section 112(a)(1)-(2). In either case, KDHE would have to conduct an appropriate review, set rigorous, enforceable emissions limits in a proposed permit, provide a minimum of 30 days for public comment, respond to comments, and issue a final permit decision. We discussed these issues with your staff and Sunflower in detail at the recent meeting. The 112(g) case-by-case permitting requirements are described in 40 CFR §63.40-63.44 and the Kansas implementing rules at K.A.R. 28-19-752a.

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<sup>1</sup> A major source is any stationary source or group of stationary sources within a contiguous area and under common control that emits or has the potential to emit considering controls, in the aggregate, 10 tons per year or more of any HAP or 25 tons per year or more of any combination of HAP.

## Next Steps

We look forward to working with KDHE and Sunflower to ensure that all preconstruction permits or approvals issued by the Department meet applicable requirements for this new project under the Kansas program. EPA also retains its authority under Sections 113 and 167 of the Clean Air Act, as appropriate, to ensure that the applicable legal requirements are met.

We appreciate your consideration of these issues. We will be available during the review process to assist with issues that arise, and to make the review proceed as expeditiously as possible. If you have any questions, please don't hesitate to contact me at 913-551-7006, or have your staff contact Rebecca Weber, [weber.rebecca@epa.gov](mailto:weber.rebecca@epa.gov), 913-551-7487.

Sincerely,



William W. Rice  
Acting Regional Administrator

cc: Sally Howard, Governor Parkinson's Office  
Aaron Dunkel, Kansas Department of Health and Environment  
John Mitchell, Kansas Department of Health and Environment  
Sunflower Electric Cooperative  
Tri-State Generation and Transmission



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY  
WASHINGTON, D.C. 20460

JAN - 7 2009

OFFICE OF  
AIR AND RADIATION

TO: Regional Administrators

SUBJECT: Application of CAA Section 112(g) to Coal- and Oil-Fired Electric Utility Steam Generating Units that Began Actual Construction or Reconstruction Between March 29, 2005 and March 14, 2008

On Feb. 8, 2008, the United States Court of Appeals for the District of Columbia Circuit vacated EPA's Section 112(n) Revision Rule and its Clean Air Mercury Rule (CAMR) (*State of New Jersey v. EPA*, No. 05-1097);<sup>1</sup> the Court issued the mandate in this case on March 14, 2008. The Section 112(n) revision rule, which was published on March 29, 2005, removed coal- and oil-fired electric utility steam generating units ("EGUs") from the Section 112(c) list. One effect of the Court's vacatur of that rule is that coal- and oil-fired EGUs, which were a listed source category under Section 112 beginning December 20, 2000, remain on the Section 112(c) list and therefore are subject to Section 112(g), which requires that no person may begin actual construction or reconstruction of a major source of hazardous air pollutants unless the permitting authority determines on a case-by-case basis that new-source MACT requirements will be met.<sup>2</sup>

Questions have been raised about the applicability of Section 112(g) to coal- and oil-fired EGUs that are major sources and that began actual construction or reconstruction<sup>3</sup> between the March 29, 2005 publication of the Section 112(n) revision rule and the March 14, 2008 vacatur of that rule. Although these EGUs may have relied in good faith on rules that EPA issued and that were subsequently vacated, the Agency believes that these EGUs are legally obligated to come into compliance with the requirements of Section 112(g). EPA has reviewed permit information for the facilities of which we were aware that began actual construction in this time interval. Based on the information we have reviewed to date, EPA believes that the suite of controls in place at these facilities may be sufficient to support a determination under section 112(g) that emissions will be controlled to a level no less stringent than MACT for new sources.

<sup>1</sup> EPA notes that petitions for *certiorari* of the D.C. Circuit's 112(n) Revision Rule and CAMR decision currently are pending before the United States Supreme Court. In the event the Supreme Court grants *certiorari* and reverses the D.C. Circuit's decision, EPA would expect to revisit the issue of CAA 112(g) applicability to the EGUs addressed herein, in keeping with the decision issued by the Court.

<sup>2</sup> See 40 C.F.R. Section 63.43(d). EPA has not issued final regulations implementing the requirements of 112(g) applicable to modifications. See 61 Fed. Reg. 68384, 86 (Dec. 27, 1996).

<sup>3</sup> The phrase "begin actual construction or reconstruction" has the same meaning as the phrase "begin actual construction" in 40 CFR 51 and 52 (the NSR and PSD programs), i.e., initiation of physical onsite construction activities as set forth in those programs. (See 61 Fed. Reg. 68634, 68390, Dec. 27, 1996.)

According to 40 C.F.R. 63.43(d), however, Section 112(g) determinations are to be made by the permitting authority on a case-by-case basis based on available information as defined in 40 CFR 63.41. We therefore request that the appropriate State or local permitting authority commence a process under Section 112(g) to make a new-source MACT determination in each of these cases.

EPA recognizes that the application of MACT standards to a project that has already begun construction may present challenges. Affected EGUs may argue that certain options, which might otherwise have been considered MACT requirements prior to construction, have effectively been foreclosed by the construction that has already taken place. Section 112(g) proceedings ordinarily are concluded before the commencement of any construction activity, so it is reasonable for the permitting authority – under these unique and compelling circumstances, and within the bounds of its discretion under Clean Air Act Section 112(g) and EPA’s section 112(g) regulations<sup>4</sup> – to give consideration to the effect of prior construction, undertaken in reasonable reliance on now-vacated rules, in making the case-by-case determination of applicable MACT requirements. The Agency cautions, however, that permitting authorities should not consider any MACT options to have been foreclosed simply by the prior issuance of permits, by the progress of administrative processes, nor by obligation of contract. EPA believes that, in considering the effect of prior construction on the applicable MACT requirements, permitting authorities should limit such consideration to actual physical construction only. Moreover, such consideration should be limited to construction activities that took place prior to February 8, 2008, when the DC Circuit Court issued its opinion.<sup>5</sup>

EPA urges permitting authorities to undertake Section 112(g) reviews without delay, and stands ready to offer technical assistance in expediting these procedures.

Sincerely,



Robert J. Meyers  
Principal Deputy Assistant Administrator

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<sup>4</sup> See 40 C.F.R. 63.43(d)(1) (New source MACT shall not be less stringent than the emission control which is achieved in practice by the best controlled similar source, as determined by the permitting authority.).

<sup>5</sup> One court noted that “As early as June 2005 [defendant] undoubtedly knew that the delisting of EUGs [sic] was being challenged . . .” (*Southern Alliance for Clean Energy, et al, v. Duke Energy Carolinas, LLC*, Civil No. 1:08CV318 (W.D.N.C.)). EPA does not attach any significance to this date, and cautions that parties may not assume that any regulation is less than fully effective merely because it is being challenged. In the Agency’s view, any reasonable reliance on the prior rules ended neither earlier nor later than February 8, 2008.