

August 6, 2011

John Guth,
Regional Air Quality Program Manager
Department of Environmental Protection
230 Chestnut Street
Meadville, PA 16335

Re: Crawford Renewable Energy, No. 20-305A

Dear Mr. Guth:

This letter provides additional comments on behalf of Citizens for Pennsylvania's Future (PennFuture) and Group Against Smog and Pollution (GASP) on the proposed plan approval (No. 20-305A) for the Crawford Renewable Energy, LLC (CRE) tire-derived fuel power generation plant in Greenwood Township, Crawford County. This proposal, was published in the Pennsylvania Bulletin on June 25, 2011.¹ These comments are intended to supplement, not replace, those we submitted on August 5, 2011.

VIII. The potential to emit calculation for volatile organic compound is underestimated and must be revised to account for improperly excluded categories of VOCs.

The CRE application underestimates the facility's volatile organic compound (VOC) potential to emit (PTE). Table 1-1 of the application lists a PTE of 27.59 TPY under the label "VOC (non-methane),"² indicating the Table 1-1 VOC calculations are made up solely of nonmethane hydrocarbon emissions. However, the major source definition of volatile organic compound is not composed solely of non-methane hydrocarbons.³ The 27.59 TPY figure improperly excludes other categories of VOCs, such as aldehydes and alcohols. The facility's VOC PTE must be revised to include all VOCs and to determine if VOC nonattainment new source review requirements are applicable.

IX. CRE must provide some basis for its estimated boiler fine particle PTE.

Commenters were unable to identify any basis for CRE's calculated fine particle (PM2.5) emissions for the CFBs. CRE claims the PM2.5 PTE from both CFBs combined will be 45.99

¹ 45 Pa.B. 3212.

² Plan Approval Application, Crawford Renewable Energy "TDF" Facility, Section 1, Page 5, Table 1-1 (Aug. 13, 2010).

³ 40 C.F.R. § 51.100(s); 25 Pa. Code § 121.1, definition of "VOC."

TPY, which CRE describes as based on “testing on similar CFB units.”⁴ However, CRE does not provide stack test results, PM-related vendor guarantees or spec sheets, particle size distributions, or even the names of the similar CFB units. CRE does include some CFB emissions data from the RBLC database in its application,⁵ but these RBLC entries provide no support for CRE’s PM2.5 emissions estimate: only one of RBLC entries CRE provides includes a PM2.5 emissions estimate, and in that case the permitting authority simply used the outdated PM10 surrogate approach⁶ to provide a PM2.5 value identical to the PM10 value. Given the complete lack of information regarding the PM2.5 fraction of emissions from these facilities, they cannot possibly serve as a basis for CRE’s PM2.5 emissions estimate.

To further confuse matters, CRE describes its CFB PM2.5 emissions estimate as “50% of the total particulate,”⁷ but the PM2.5 emissions rates CRE provides are 50% of PM10. If CRE is correct that PM2.5 is “50% of the total particulate,” then CRE’s CFB PM2.5 emissions are underestimated to the extent PM larger than 10 microns is emitted by the CFBs. CRE must provide better support for its claimed PM2.5 PTE, such as stack test data from a similarly controlled CFB combusting tire-derived fuel or a calculation based on representative tire-derived fuel CFB particle size distribution and the facility’s control device PM capture efficiencies.

X. The Bottom Ash Silo #2 emission limit does not satisfy BACT.

The Bottom Ash Silo #2 PM10 emission limit of 0.01 gr/dscf does not satisfy BACT.⁸ According the CRE’s application, Bottom Ash Silo #1 will achieve an outlet grain loading rate of 0.005 gr/dscf.⁹ Thus the lower 0.005 gr/dscf emission rate is both available and achievable and should be considered BACT for bottom Ash Silo #2.¹⁰

XI. The fire water pump PTE is based on an operating restriction that is not practically enforceable. DEP must add an enforceable permit condition limiting the pump’s hours of operation or recalculate the emission unit PTE without the hourly restriction.

PADEP’s draft plan approval for the CRE facility states that the fire water pump’s “expected operating hours = 20 hr/yr.”¹¹ The fire water pump’s PTE is based on this expected 20 hr/yr limit; however, in order to be used in a PTE calculation, facility restrictions must be enforceable as a practical matter.¹² A PTE limitation must be a “physical or operational limitation,”¹³ such as

⁴ CRE Application, *supra* note 2, Section 3, Page 2.

⁵ *Id.* Appendix D

⁶ The PM10 surrogate policy ended on May 16, 2011, 73 FR 28321, 28340–41.

⁷ *Id.* Section 3, Page 2.

⁸ *Id.* Section 3, Page 11.

⁹ *Id.*

¹⁰ A PSD-BACT limit of 0.0050 gr/dscf was also required at for a bottom ash silo baghouse at the Lake Charles Cogen. Facility in Louisiana, see RBLC Process Description - :RBLC ID: LA-0231, Lake Charles Gasification Facility, Sand/Bottom Ash Silos and Day Bins, *available at*: http://cfpub.epa.gov/rblc/index.cfm?action=PermitDetail.PollutantInfo&Facility_ID=26963&Process_ID=107090&Pollutant_ID=339&Per_Control_Equipment_Id=148097

¹¹ PADEP, Draft Plan Approval - Crawford Renewable Energy, No. 20-305A, page 132.

¹² U.S. v. Louisiana-Pacific Corp., 682 F. Supp. 1122 (D. Colo. Oct. 30, 1987) , 682 F. Supp. 1141 (D. Colo. March

a “restriction[] on hours of operation or on the amount of material which may be combusted or produced,”¹⁴ or a limit derived from pollution control equipment coupled with enforceable emission rates included in the permit.¹⁵ Only such a physical or operational restriction can be used to reduce PTE calculations.¹⁶ In the absence of such a restriction in the permit, DEP must presume the fire water pump will operate and emit pollution at its maximum operational capacity.

Sincerely,

Joe Osborne, Legal Director
Group Against Smog and Pollution
5604 Solway Street, Suite 204
Pittsburgh, PA 15217
(412) 325-7382
joe@gasp-pgh.org

Charles McPhedran, Staff Attorney¹⁷
Earthjustice
156 William Street, Suite 800
New York, NY 10038-5326
(212) 791-1881 ext. 8234
cmcphebran@pennfuture.org

John K. Baillie, Senior Attorney
PennFuture
425 Sixth Avenue, Suite 2770
Pittsburgh, PA 15219
(412) 258-6684
baillie@pennfuture.org

22, 1988).

¹³ 40 C.F.R. §§ 52.21(b)(4), 51.165(a)(1)(iii), 51.166(b)(4).

¹⁴ U.S. v. Louisiana-Pacific Corp., 682 F. Supp. at 1132.

¹⁵ U.S. EPA, NSR Workshop Manual, Prevention of Significant Deterioration and Nonattainment Area Permitting (Oct. 1990) p. A.6, *available at*: <http://www.epa.gov/ttn/nsr/gen/wkshpman.pdf>.

¹⁶ Letter from John S. Seitz, Director Stationary Source Compliance Division U.S. EPA, Guidance on Limiting Potential to Emit in New Source Permitting, (Jun. 13, 1989) pp. 18-19, *available at*: http://www.epa.gov/ttn/atw/pte/june13_89.pdf.

¹⁷ Admitted to practice in Pennsylvania; not admitted to practice in New York.