

September 10, 2008

Mr. David A. Finley, Administrator
Division of Air Quality
Department of Environmental Quality
122 West 25th Street, Herschler Bldg.
Cheyenne, WY 82002

Re: AP-6045, FMC Wyoming Corporation Westvaco Facility

Dear Mr. Finley:

Please accept these comments from the Wyoming Outdoor Council regarding the proposed Best Available Retrofit Technology (BART) permit for the above-referenced facility. The Westvaco facility is a trona mine and sodium products plant located in Sweetwater County near Green River. The sources of emissions at this plant that may be subject to BART requirements are two coal-fired boilers and one natural gas-fired boiler.

In the proposed permit the Wyoming Department of Environmental Quality (DEQ) propose as BART the requirement to install low NO_x burners (LNB) with enhanced overfire air (OFA) with limits on NO_x emissions of 0.35 lb/MMBtu (30-day rolling average) and 310.5 lb/hr (30 day rolling). These limits would be applicable to the two coal-fired boilers; the natural gas-fired boiler would not be subject to additional limits. No other BART controls are proposed, specifically for particulate matter and sulfur dioxide, although FMC would be required to participate in the emissions trading program for sulfur dioxide "should the program be triggered." In our view the proposal put forth by the DEQ does not constitute BART and does not meet the requirements of EPA's regional haze rule.

1. In Addition to Low NO_x Burners with Overfire Air, Selective Noncatalytic Reduction Should Be Required as BART.

In our view, "option 2," the requirement to use LNB plus OFA plus the use of selective noncatalytic reduction (SNCR) should be required as BART. The implementation of this requirement would substantially reduce NO_x emissions from the plant and have significant benefits to visibility in Class I areas. Under this option, NO_x emissions would be reduced from 0.35 lb/MMBtu under the DEQ's proposal to 0.21 lb/MMBtu. In the Bridger Wilderness Area, visibility impacts on the 98th percentile day would be reduced and there would be generally be fewer days of impairment greater than 0.5 deciviews (dv). Given the policies that underlie the regional haze rule, which will be discussed in more detail below, we believe this enhanced level of pollution control must be adopted.

More generally, under the DEQ's proposal only pre-combustion pollution controls would be required (LNB + OFA). But post-combustion controls for NO_x reduction, such as SNCR, are widely viewed as being the most effective and state-of-the-art pollution controls for NO_x. Post-combustion controls represent BART, not the proposed pre-combustion controls. BART is defined as the "emission limitation based on the degree of reduction achievable through application of the best system of continuous emission reduction for each pollutant that is emitted by an existing stationary facility." Wyoming Air Quality Standards and Regulations (WAQSR) Ch. 6, Sec. 9(b) (emphasis added). See also 40 C.F.R. § 51.301 (EPA definition of BART). And while BART is determined by considering several factors, as will be discussed below DEQ's consideration of those factors is deficient, so the permit

analysis does not support a claim that option 1 (LNB + OFA) is BART or that option 2 (LNB + OFA + SNCR) is not BART.

We feel the need to pursue option 2 as BART is emphasized by the fact that DEQ rejected imposing any additional controls on the natural gas-fired boiler, or requiring any additional specific limits for particulate matter and sulfur dioxide. Given that these other pollutants and other emissions sources will escape additional regulation, this increases the need for the coal-fired boilers to be carefully and fully regulated.

It is also noteworthy that the DEQ is not proposing anything different for these pollution sources than what was already being required. As noted in the proposed permit, Air Quality Permit MD-57233 is already requiring the installation of LNB + OFA and it has in fact already been installed on the NS-1A boiler. Given that nothing different would occur, it is difficult to view DEQ's proposal as constituting BART, or as an effort to move toward achievement of natural visibility conditions as required by the regional haze rule; rather it seems to be little more than business as usual.

Speaking from a more technical standpoint, the baseline condition that should serve as the point of reference for measuring visibility improvements is already option 1 (LNB + OFA), not the asserted "baseline" achieved by the old level of emission control based on "good combustion practices" that has already been largely supplanted. See AP-6045 Proposed Permit at Tables 5 and pages 28 and 29 (presenting baseline conditions based on old good combustion practices requirement). There is already a permit requirement in place requiring LNB + OFA, it has already been put in place for the NS-1A boiler, and will be put in place for the NS—1B boiler "during the scheduled 2008 turnaround." So claiming that LNB + OFA constitutes BART is not supportable since it represents the level of pollution control already in place. LNB + OFA is the baseline and consideration of BART options should seek to improve this existing level of pollution control and reduce visibility impacts resulting from this level of pollution. A "retrofit" by definition does not mean leaving the existing pollution control in place unchanged.

2. The Impacts Analysis in the Proposed Permit is too Limited.

The EPA's regulations applicable to making a BART determination for purposes of the regional haze rule require that under step 4 of the BART analysis (consideration of impacts) four potential impacts should be reviewed: the cost of compliance, energy impacts, non-air quality environmental impacts, and the remaining useful life of the facility. 40 C.F.R. pt. 51, App. Y § IV.A. See also 40 C.F.R. § 51.308(e)(1)(ii)(A). In our view the consideration of these impacts presented in the proposed permit are deficient, and thus the overarching BART determination is deficient.

It appears to us that the only real consideration made by the DEQ were the costs of compliance and that requiring the cheapest possible BART was the sole factor that led to the determination of BART. We do not feel that costs can dominate the analysis to that degree, and consequently the analysis is deficient. Under the EPA's rules, DEQ must present "an evaluation of each impact along with appropriate supporting information." 40 C.F.R. pt. 51, App. Y § IV.D.4 (emphasis added). "You should discuss and, where possible, quantify both beneficial and adverse impacts." Id. We do not believe the analysis in the proposed permit meets these standards.

For one, as indicated, it appears to us that the only consideration that DEQ made in any specific or quantitative way were the costs of compliance. See AP-6045 Proposed Permit at 8. This does not meet the requirements to consider all of the stated impacts in such a manner. Cost is only one impact consideration yet here it seems to be the sole consideration. That is inappropriate.

Furthermore, the DEQ seems to have felt it must select the cheapest solution. The proposed BART has the cheapest cost of pollution reduction per ton and the cheapest incremental cost per ton of reduction (\$ 304.00). The option we have advanced above, option 2, LNB + OFA + SNCR, would cost more: \$ 673.00 per ton of reduced NO_x pollution and \$ 1,597.00 in incremental cost per ton of reduction. Yet accepting these values at face value—especially as the sole determinant of BART—is far too simplistic to meet regulatory requirements. The context in which these costs would be incurred must be considered, yet as far as we can tell, the permit analysis presents no context in which to consider these costs.

According to the Bureau of Land Management's (BLM) Proposed Resource Management Plan and Final Environmental Impact Statement for the Kemmerer Field Office Planning Area (FEIS), 4.7 million tons of trona were mined at the Westvaco Facility in 2005, and according to the data presented at <http://www.the-innovation-group.com/ChemProfiles/Soda%20Ash.htm>, from 1996 to 2001 prices were \$ 105.00 per ton. That would equate to nearly half a billion dollars in gross revenues per year.

It appears the trona plants in southwest Wyoming are highly productive ventures. The companies are probably making very good profits from this activity. Given that, the mere fact that a control option costs twice as much per ton of pollution reduction or even five times as much in terms of incremental costs should not per se determine (or eliminate) BART. At a minimum, the DEQ needs to consider the context in which these costs might be borne, and no such context is presented in the permit analysis. And again, cost is only one of four considerations, not the sole consideration. Furthermore, probably the key consideration that needs to be made is the amount of pollution reduction that can be achieved by one option versus another: option 2 will achieve nearly twice as much pollution reduction as option 1 (0.21 lb/MMBtu vs. 0.35 lb/MMBtu) so that costs are roughly twice as great should not be surprising and should not be deemed per se unacceptable. AP-6045 Proposed Permit at Table 5. Option 2 will also provide substantial visibility benefits, in some cases reducing the number of days with visibility impairment over 0.5 dv by half. AP-6045 Proposed Permits at 28 ,29.

Furthermore, generally speaking, the economic effects of a proposed BART requirement are only to be considered in "unusual circumstances." 40 C.F.R. pt. 51, App. Y § IV.E.3. If product prices may be affected, the market share impacted, or the profitability of the plant impacted—if "plant operations" are negatively influenced—"you may take into consideration the conditions of the plant and the economic effects of requiring the use of a control technology." *Id.* It seems apparent to us that costs are not intended to have a per se dominant influence on BART determinations, but that appears to have occurred here. The dominant consideration should be the degree of visibility improvement that can be achieved and how that helps achieve "reasonable progress" at a "uniform rate" that will allow achievement of natural visibility conditions by 2064, in order to meet the requirements of the regional haze rule.¹ 40 C.F.R. §§ 51.308(d)(1) and 51.308(d)(1)(i)(B). That is the whole purpose of this exercise, not reductions in cost per se. Achieving the goals of the Clean Air Act and the purposes of the regional haze rule should drive BART determinations, not necessarily minimization of costs.

In addition to the shortcomings in the consideration of costs, we feel the AP-6045 Proposed Permit is also deficient because it does not explicitly consider the remaining useful life of the Westvaco Facility, as required by the EPA regulations. The remaining useful life of the facility seems primarily to be used to assist with consideration of the costs of a BART option. If the facility will be in operation over a long period, the costs can be amortized over a longer period, reducing the impact of incurring the costs. According to the BLM's FEIS for the Kemmerer Resource Management Plan, this area contains "the world's largest known trona deposit." According to the BLM, there are billions of tons of trona in southwest Wyoming. Trona has been mined in the area since 1947, and it seems apparent that mining is very likely to continue for at least the next generation. This fact should be explicitly reflected in the DEQ permit analysis and its considerations of the costs of BART options, but as far as we can tell the AP-6045 Proposed Permit is silent on this issue, at least in any explicit manner.

Finally, the AP-6045 Proposed Permit seems to also be silent on issues related to non-air quality environmental impacts. The EPA regulations mention water impacts, solid waste disposal impacts, irreversible and irretrievable commitments of resources, and other adverse impacts (including noise, heat, and static electrical energy). 40 C.F.R. pt. 51, App. Y § IV.D.i-j. Energy impacts or costs are also important. Absent an explicit consideration of the potential adverse impacts on non-air quality related values and resources, the AP-6045 Proposed Permit is deficient. Overall, the failure to appropriately

¹ See EPA's "Guidance for Estimating Natural Visibility Conditions Under the Regional Haze Rule at 1-5 to 1-8 for a discussion of what constitutes an appropriate rate to achieve reasonable progress.

consider costs, the remaining useful life of the project, and non-air quality impacts makes the AP-6045 Proposed Permit insufficient to meet the requirements of either the WAQSR or the EPA regional haze rule.

3. Incorporation of Comments on the Granger Facility Air Quality Permit by Reference.

Today we have also submitted comments on the FMC Wyoming Corporation Granger Facility BART permit analysis (AP-6044). We incorporate those comments into these comments by this reference and ask that they be fully considered as part of these comments on permit AP-6045. In particular we ask that the following be considered as part of these comments. First, just as with the Granger facility, there is no clear explanation of where receptors for visibility modeling were located in the Bridger Wilderness Area. We think it is crucial that it be insured that there are receptors in the southwest part of this wilderness due to the proximity to the Westvaco facility, and furthermore that impacts on these receptors be used to measure impacts to visibility, not receptors in more remote parts of the wilderness. And just as was true in the Granger Permit, in this Westvaco Permit the DEQ makes reference to a “scaling factor” being applied to determine aerosol concentrations on the 20% best visibility days, but there is no explanation or justification for what those scaling factors were or how they were derived, or any explanation of their acceptance in the scientific or engineering community. And last, in our Granger comments we explain in detail a number of the policies and definitions underlying the EPA regional haze rule and the need to ensure that those federal requirements are met, and we ask the DEQ to fully consider those issues here as well.

For the above reasons we feel that the AP-6045 permit analysis should be conducted again addressing the issues we have identified and that more stringent BART should be required for this facility. Thank you for considering these comments.

Sincerely,

Bruce Pendery,
Staff Attorney

cc: Governor Dave Freudenthal
Wyoming Environmental Quality Council
Wyoming Air Quality Advisory Board
Callie Videtich, EPA
Bruce Polkowsky, National Park Service
Bud Rolofson, Forest Service