James Kotcon, Chair
Energy Committee
West Virginia Chapter of Sierra Club
414 Tyrone Avery Road
Morgantown, WV 26508

Nov. 5, 2008

Permit Supervisor
WV-DEP, Division of Mining and Reclamation
105 South Railroad Street, Suite 301
Philippi, WV 26416

RE: Permit No. 0200709

Dear Sir:

Please accept these comments on behalf of the approximately 2000 members of the West Virginia Chapter of Sierra Club.

1) The application by Coresco, LLC for an Article 3 permit for surface disturbance to construct their Coal Refuse Disposal Area No. 4 improperly describes the material as "beneficial" coal combustion by-products. There does not appear to be any beneficial purpose to the disposal of the coal ash and combustion by-products, the application indicates that all mining on the site has been completed, and the use of flue-gas desulphurization material (FGD) appears to be solely for disposal. The combination of FGD with refuse from the adjacent coal preparation plant will, of course, help to neutralize acidity from the coal refuse, however, the coal refuse itself is simply a waste product, and its disposal in a landfill can not be used as a justification for exempting these materials from other solid waste disposal requirements. Hence its designation as a beneficial use is not appropriate, notwithstanding the claims of the company that the existing Area 3 permit was granted for disposal as a beneficial use. **We recommend that the beneficial use designation be determined to be inapplicable to this permit, and that a solid waste landfill permit be required, complete with liner, leachate collection, and leachate leak detection systems.**

2) The basis for the analysis of the FGD scrubber sludge is unclear, as the scrubbers at the Fort Martin plant are not operational yet, and the Longview plant is still under construction. Until data from actual samples are available, **we recommend that no permit be granted for a period longer than 6 months, and that complete analyses be required on the actual products generated from these plants before a 5-year permit be issued.**

3) The claim that the existing facility has not contributed to water quality problems (Attachment MR-36-II-2) is contradicted by the variable water quality in Crafts Run and Crooked Run. While the location of samples is unclear, we are disturbed by levels of Total Dissolved Solids in 2 of the samples exceeding EPA's recommended Water Quality Standard of 500 ppm. Given the problems observed on nearby Dunkard Creek, including invasive Golden Algae and the resulting fish kills, continuation of these levels is not acceptable.

Furthermore, EPA recently released a detailed report (Steam Electric Power Generation Point Source Category: Final Detailed Study Report. October, 2009. EPA 821-R-09-008.) documenting water quality problems associated with fly ash and FGD disposal facilities. In particular, the report found:

"FGD wastewaters generally contain significant levels of metals, including biaccumulative pollutants such as arsenic, mercury, and selenium. The FGD wastewaters also contain significant levels of chloride, total dissolved solids (TDS), total suspended solids (TSS), and nutrients."

While it is true that dry fills such as proposed under this permit tend to have fewer adverse impacts, the lack of adequate leachate collection, detection, liners, and surface water treatment, coupled with the potential for subsidence of underground mines, and the on-going Underground injection of coal refuse materials, all suggest that this facility would create significant adverse impact to the environment. **We recommend that additional water quality data be required to verify the impacts of the existing facility on Crafts and Crooked Run, and that no permit be granted unless and until adequate water quality can be assured in the receiving streams and in ground water at the site. In particular, discharges of Total Dissolved Solids, as well as toxic pollutants such as arsenic, mercury, and selenium must be prevented, and enforceable provisions should be incorporated into this permit to assure water quality.**

4) We oppose the use of hay/pastureland as a post-mining land use. The existing use for much of the area is hardwood forests, and the land should be returned to that existing use. While pasture land is a frequent post-mining land use, it has been over-used as a way to avoid returning the land to the pre-mining land use. The soils data document that suitable subsoils and some topsoil exists on the site, and that therefore, the full 4 feet of soil should be used for reclamation. **We recommend that Forestland be designated as the post-mining land use, at least for those areas currently in forest. Pasture/hay land should only be accepted as a post-mining land use if the operator can demonstrate that livestock grazing will actually occur post-closure. The request to reclaim the soil with less than 4 feet of suitable soil material should also be denied, as the data submitted (showing adequate revegetation with two feet of soil) do not apply to forestland.**

5) The conclusion that the proposed operation "will not alter stream flow, will not create flooding, ..." is totally unsupported by any hydrologic analysis. While the ground water aquifers were obviously impacted by mining in the Pittsburgh seam, these streams are still running and are still receiving water impacted by adjoining mining and waste disposal activities. **We recommend that the permit should require a more thorough analysis of the potential impacts from the facility, and should require water treatment and mitigation activities to assure that both Crafts and Crooked Run will maintain water quality standards. Sections J-7 and J-8 should be marked "Yes" and a Plan to remediate these impacts should be required. Plans should include a liner, leachate collection systems, and leachate leak detection to minimize impacts to ground water, as well as specific treatment of surface water runoff to minimize total dissolved solids. While sediment control ponds are useful for reducing suspended solids, they will not treat dissolved solids.**

6) The application asserts with regard to the Pittsburgh coal seams which have been mined under the site "It is anticipated that subsidence from these mining and pillaring operations has already occurred." No evidence is provided to verify that this assumption is true for the entire permit area. Even if some subsidence is demonstrated via test borings, additional subsidence as the soil materials collapse further is possible. While no effects of subsidence were reported on the existing refuse disposal area, the proposed facility is substantially larger, and covers areas not previously used. Thus actual evidence is required before one can conclude that it is safe to pile the tremendous weight of ash and FGD material over areas that are known to have been undermined. **We recommend that DEP require more extensive test borings, and that the deep mines in the Pittsburgh seam be filled with grout or otherwise stabilized to prevent further subsidence. (Note: Ongoing injection of coal refuse/preparation plant wastes does**

not qualify for this purpose and should be suspended.) If this is not technically possible, the permit should be denied.

7) The ground water monitoring plan is inadequate for this facility. It is not clear how many ground water aquifers are present, what confining layers separate them, and where interconnection through cracks or fissures might occur. The fact that subsidence into the Pittsburgh coal is reported suggests a highly fractured site with unconfined aquifers that warrant a much more detailed ground water monitoring effort. More comprehensive ground water monitoring is essential to verify that permit conditions are practically enforceable, as the current proposal is simply inadequate to verify whether ground water contamination from the facility is occurring. **We recommend that the Ground Water Monitoring Plan should require no less than one up-gradient well and three down-gradient well in each defined aquifer.**

8) The use of Underground Injection for coal refuse disposal further complicates this permit. Underground injection creates additional potential sources for pollution discharges. When coupled with the proposed fill above ground, on-going subsidence below ground, and recent discoveries of the long-term potential for migration of contaminants through mine voids, the whole concept is fraught with peril. **We recommend that the current UIC permit be terminated as a condition of granting this surface mine permit. Alternatively, extensive monitoring wells must be required, to supplement those in the ground water monitoring plan. This should consist of not less than three concentric rings of monitoring wells in the coal seams surrounding the receiving mine voids, both up and down gradient of the mine void, to detect any possible migration of contaminated waters from the UIC site.**

In summary, the proposed permit should be considered a very high risk activity, with inadequate monitoring and insufficient data to support the issuance of the permit. We recommend that the permit be denied, or, in the alternative, that substantial revisions be required to address the issues identified above.

Sincerely,

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