NATURAL RESOURCES DEFENSE COUNCIL

AMP-Ohio's Proposed Coal-Fired Power Plant Is Not Clean

Coal is a dirty and outdated source of power. Every year, AMP-Ohio's proposed coal-fired power plant would emit more than 7.3 million tons of carbon dioxide ("CO2") and tens of thousands of tons of other pollutants, and require the mining of at least 2.8 million tons of coal.[1] The pollution controls that AMP has proposed to use in the permitting processes are far from the most effective available, and AMP has not agreed to capture and sequester CO2 emissions from the plant. This highly-polluting proposal should be rejected in favor of cleaner alternatives such as natural gas combined cycle, biomass, co-generation, energy efficiency, and renewable energy.

AMP Is Not Legally Committed to Using Powerspan

AMP claims that it is "committed" to using "Powerspan" pollution control technology, but the company has not written that "commitment" into its permit applications. As such, AMP would be free to not use Powerspan and to instead opt for the controls included in its draft air pollution permit, which are far from the most effective available.

AMP's Plant Would Be a Major New Source of Global Warming Pollution

Every year, the AMP plant would emit at least 7.3 million tons of CO2 into the air.[2] AMP has made no legally binding commitment to capture and sequester such CO2 emissions, or even estimated the costs of doing so. The Powerspan technology the company says it might use for capturing CO2 has never been tested outside of a lab for that purpose and is, therefore, unproven for use on a 960 MW coal-fired power plant.[3] If the technology fails, expensive retrofits would have to be undertaken to capture CO2. In addition, an analysis is needed of the economic and technological feasibility of sequestering whatever emissions are captured.

The AMP Plant Would Be Dirtier Than Other Recently Permitted Plants

AMP is proposing a traditional pulverized coal plant, which would emit significantly more pollution than more advanced technologies do. For example, recently permitted or proposed coal-fired power plants that use Integrated Gasification Combined Cycle ("IGCC") control

[1] AMP states that the plant will burn either 2.815 million tons of Eastern Blend coal, or 3.338 million tons of Western Blend coal. Initial Project Feasibility Study ("Feasibility Study") p. ES-10. The draft air permit recently released by the Ohio EPA would allow AMP to burn up to 5.553 million tons of coal per year. Draft Permit p. 361.

[2] Feasibility Study, Appendix ES-1 pp. 1-2 line 13.

[3] The first pilot test of use of Powerspan to capture CO2 is not expected to start until 2008, and then will be on only a 1 MW stream of power. Even if that test is successful, there are a number of technological hurdles that would have to be cleared before Powerspan could possibly be scaled up for use on a 960 MW power plant. The only real world test of Powerspan so far has been for other pollutants (not including CO2) on a 50 MW unit at First Energy's Burger plant. AMP has acknowledged in its permit applications that there is some risk that it might not be able to successfully scale the technology up to a 960 MW plant.

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technology would have "inherently lower emissions" of nitrogen oxides, sulfur dioxides, and other pollutants than from pulverized coal plants.[4] Below is a comparison of the total tons per year of pollutants that the two 480 MW units in the AMPGS plant would emit under the Ohio EPA draft air permit and the emissions that a similarly sized IGCC plant consisting of three 320 MW units would emit, based on the recently permitted Taylorville IGCC plant in Illinois:

	AMPGS[5]	**Taylorville[6]**
Sulfur Dioxide ("SO2")	6,820	456
Nitrogen Oxide ("NOx")	3,194	959
Particulate Matter ("PM")	1,182	678
Carbon Monoxide ("CO")	7,009	1,402

In addition, IGCC control technology appears to be best suited to cost effectively achieve substantial reductions in CO2 emissions.[7] Unfortunately, AMP failed to provide an evaluation of IGCC control technology in its permit application to the Ohio EPA.

AMP Might Use Mountaintop Removal and Other Destructive Coal Mining Practices

The mining of coal poses substantial safety risks to miners, destroys natural habitats, pollutes rivers and streams, and releases substantial amounts of methane, which contributes to global warming. One especially destructive form of mining, which is used frequently in West Virginia, is mountaintop removal, which involves blowing off the tops of mountains and dumping the resulting waste in adjacent river valleys. AMP has noted that nearly two million tons of the coal it would use every year may come from West Virginia.[8] Much of the rest of the coal may also come from southeast Ohio, where there is a history and continued concern about mine subsidence damaging people's homes and business.

Meigs County Already Has a Disproportionate Number of Air Pollution Sources

AMP is proposing its plant for Letart Falls, in Meigs County, which is an area in southeast Ohio that already has a high concentration of coal-fired power plants and other major polluting sources. There are four coal-fired power plants – J.M Gavin, Mountaineer, Philip Sporn, and Kyger Creek – within approximately 10 miles of Letart Falls, and there are numerous other major sources of air pollution in or near Meigs County. In 2004, the Gavin plant ranked in the top 50 nationwide for sulfur dioxide emissions, while as of 2002 the Kyger plant was in the top 50 for mercury emissions.[9] The residents of Letart Falls and Meigs County should not be subjected to another major new source of air pollution.

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[4] *See, e.g.*, Robert J. Wayland, U.S. EPA Office of Air and Radiation, OAQPS, *U.S. EPA's Clean Air Gasification Activities*, Presentation to the Gasification Technologies Council Winter Meeting, January 26, 2006, slide 4.
[5] Ohio EPA, Draft Air Permit-to-Install for American Municipal Power Generating Station (Sept. 13, 2007), p. 9.
[6] Illinois EPA, Christian County Generation LLC Final Air Permit (June 5, 2007), at Attachment 1 p. 1. Taylorville is a 630 MW plant, so we have adjusted the emission limits in the Taylorville permit to reflect a 960 MW IGCC plant.
[7] U.S. Department of Energy/National Energy Technology Laboratory, Major Environmental Aspects of Gasification-Based Power Generation Technologies (Dec. 2002), at ES-5.
[8] Feasibility Study, p. ES-11.
[9] Tom Baker and Spencer Hunt, Ohio River Coal-Fired Power Plants, Columbus Post-Dispatch (Dec. 5, 2005).