

From: Mike Ewall <mike@energyjustice.net>  
Sent: Monday, February 18, 2013 4:22 PM  
To: Airpermits, AOC (DDOE)  
Subject: Capitol Power Plant Proposed Air Quality Permits

Dear Mr. Ours:

I write in support of all of the comments seeking the rejection of the Capitol Power Plant Air Quality permit application. In the event that DDOE does not reject the permit, for all of the good reasons already cited by other commenters, I urge the application of the strictest permit requirements possible.

Specifically, I urge that DDOE require the use of continuous emissions monitors (CEMS) for each unit. While the technology now exists to continuously monitor for at least 40 pollutants, and the equipment for much of this has been tested and verified by the U.S.

Environmental Protection Agency, it is hard to justify the typical requirements where only a few pollutants are monitored on a continuous basis.

Emissions limits are meaningless if there is not adequate testing to ensure that they are being met. Most regulated pollutants are required to be tested once per year, or once ever. This is akin to having a speeding limit but allowing drivers to drive with no odometer. Once per year, a speed trap would be set, but drivers would be warned ahead of time, and the driver's brother would be managing the speed trap. Regulating air polluting facilities in this manner is inexcusable, especially in the age where continuous testing technology exists and where the data is able to be made available to the public real-time through a website.

Annual stack tests are inadequate, in part, because they are done by the applicant, under optimal performance, rather than capturing the day-to-day reality of operations. Emissions can be far higher during startup, shutdown, and malfunction times -- especially for such temperature-sensitive pollutants like dioxins/furans (where a study has shown emissions to be 32-52 times higher in reality -- as measured with long-term samplers -- than annual stack tests show). See [http://www.ejnet.org/toxics/cems/1998\\_DeFre\\_OrgComp98\\_Underest\\_DIoxin\\_Em\\_Inv\\_Amesa.pdf](http://www.ejnet.org/toxics/cems/1998_DeFre_OrgComp98_Underest_DIoxin_Em_Inv_Amesa.pdf)

Typically, only three pollutants (none of them toxic) are required to be monitored on a continuous basis: Carbon Monoxide (CO), Nitrogen Oxides (NOx) and Sulfur Oxides (SOx)

The technology exists to do continuous monitoring of the following additional pollutants: Carbon Dioxide (CO<sub>2</sub>), Particulate Matter, Nitrous Oxide (N<sub>2</sub>O), Hydrogen Sulfide (H<sub>2</sub>S), Hydrofluoric Acid (HF), Hydrochloric Acid (HCl), Hydrogen Cyanide, Volatile Organic Compounds (VOCs), Methane, Ethylene, Acetylene, Methanol, Antimony, Arsenic, Barium, Bromine, Cadmium, Calcium, Chromium, Cobalt, Copper, Iron, Lead, Manganese, Mercury, Nickel, Selenium, Silver, Thallium, Tin, Titanium, Vanadium, Zinc, Ammonia, Dioxins & furans, Polycyclic Aromatic Hydrocarbons (PAHs) and Vinyl Chloride Monomer.

Not all of these are major concerns from fossil fuel burning, but many are.

I urge DDOE to require continuous monitoring of the following pollutants from the coal units: Carbon Dioxide (CO<sub>2</sub>), Particulate Matter, Hydrofluoric Acid (HF), Hydrochloric Acid (HCl), Volatile Organic Compounds (VOCs), Arsenic, Cadmium, Chromium, Lead, Manganese, Mercury, Nickel, Selenium, Ammonia (if ammonia injection is ever used in scrubbers on these units), Polycyclic Aromatic Hydrocarbons (PAHs), and dioxins/furans.

I urge DDOE to require continuous monitoring of the following pollutants from the oil/gas units: Carbon

Dioxide (CO2), Particulate Matter, Volatile Organic Compounds (VOCs), Methane, Lead, Mercury, Ammonia (if ammonia injection is ever used in scrubbers on these units), Polycyclic Aromatic Hydrocarbons (PAHs), and dioxins/furans.

Many of these CEMs have been tested and verified by EPA's Environmental Technology Verification Program (<http://www.epa.gov/etv/>). See their list of verified technologies here: <http://www.epa.gov/nrmrl/std/etv/verifiedtechnologies.html>

I urge DDOE to require that all emissions data be released real-time on a public website, with data broken out per unit as well as facility-wide, so that it's clear when the coal units are in use, and what the emissions are from the coal units vs. the oil/gas units. Please find some precedent for local government requirement of continuous air emissions monitoring and disclosure (for crematoria and medical waste incinerators) at <http://www.actionpa.org/ordinances/>

These ordinances which I've developed, and which were passed into law by local PA governments, include:

-West Reading Borough, PA: requires CEMS for mercury and real-time data disclosure -Kulpmont Borough, PA: requires CEMS for mercury and dioxins/furans and real-time data disclosure -Peters Township, PA: requires CEMS for mercury and dioxins/furans

Also, note that the City of Philadelphia required the Sun Oil refinery to be the first oil refinery in the nation to have CEMS for particulate matter, in response to my comments and supported by the facts that the PA DEP required CEMS for particulate matter in a permit for a waste coal burning power plant, and that the U.S. EPA, USDA Forest Service and the National Park Service all commented in favor of such CEMS being required for other waste coal burning power plants permitted that year. These comments are available at:

<http://www.ejnet.org/toxics/cems/>

CEMS for mercury are becoming widespread on coal power plants, and there are plenty of precedents for CEMS for hydrochloric acid as well. Examples from Pennsylvania facilities are online here: [http://www.dep.state.pa.us/dep/deputate/airwaste/aq/cemspage/docs/CSMS\\_List\\_for\\_the\\_State\\_of\\_Pennsylvania.pdf](http://www.dep.state.pa.us/dep/deputate/airwaste/aq/cemspage/docs/CSMS_List_for_the_State_of_Pennsylvania.pdf)

Please take these comments -- and the precedents, comments, and resources in the links provided -- into consideration, and please require CEMS for all pollutants for which the Capitol Power Plant has permitted emissions limits.

Sincerely,

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