

COMMONWEALTH OF VIRGINIA
Department of Environmental Quality

INTRA-AGENCY MEMORANDUM

TO: File, Reg. #11526
FROM: Margaret Key, OAPP
SUBJECT: Permit Changes to Article 7 (112(g)) Permit
DATE: DRAFT

The following changes are recommended in response to public comments on the Article 7 (112(g)) draft permit:

Mercury emission limits (Condition 13):

- Decreased emission limits from 0.000014 lb/MWhr to 0.0000014 lb/MWhr, and from 49.46 lb/yr to 8.19 lb/yr. The revised limits are equal to the most stringent limit (1.4×10^{-6} pounds per megawatt-hour) identified in a permit for a similar facility (Robinson Power Company in Robinson Township, Pennsylvania). Although it is higher than the short term emission rate demonstrated at Reliant, the difference between actual emissions measured at Reliant and the emission rate limitation for VCHEC is justified by the need to ensure that the emission standard is achievable under the most adverse circumstances which can reasonably be expected to occur over the life of the equipment.
- Deleted Condition 13 (d), which would have allowed deviations from the annual mercury emission limit if mercury content or heating value of the coal varied from those used to calculate the previous emission limit. These values are not used in calculation of the revised emission limit.

Mercury Monitoring Requirements (Attachment A and Conditions 18 & 26):

- Added Attachment A to incorporate mercury monitoring requirements directly into the permit rather than incorporate them by reference, and modified Condition 18 d.ii. to refer to requirements in Attachment A.
- Included an option for deferring the requirement to install, calibrate, maintain, and operate the mercury CEMS in the event CEMS are not reliable compliance indicators at the detection levels needed to demonstrate compliance with this permit. For any period CEMS installation is deferred, sorbent trap monitoring is required. Sorbent trap monitoring is an approved reference method for stack testing for mercury and is therefore not less stringent than CEMS monitoring.

The cost for sorbent trap monitoring on a continuous basis may exceed the cost for CEMS, but this alternative is provided in the event that CEMS monitoring ability is not sufficiently developed to allow for accurate and reliable compliance demonstration by the time VCHEC begins operation. Requiring use of CEMS in that case could result in many periods when data collected is below detection limits of the monitoring system. Use of an alternative monitoring system would provide a more accurate quantification of emissions than substitution of data or use of questionable data for periods when emissions are below detection level of mercury CEMS.

The following changes are recommended to ensure consistency with the PSD permit being simultaneously processed:

Conditions 8 and 35:

Added annual average sulfur content limit (1.5%) for coal and coal refuse, and record keeping requirement needed to demonstrate compliance with this limit.

Condition 13:

Added 30-day rolling average(0.009 lb/MMBtu) for Filterable Particulate Matter (PM).

Conditions 19 and 28:

Changed particulate monitoring requirement to CEMS and removed the alternative requirement to monitor with a combination of COMS and bag leak detection.

Condition 51:

Removed. The United States Court of Appeals for the District of Columbia Circuit decided not to rehear the case State of New Jersey vs EPA en banc. As a result, the Clean Air Mercury Rule vacatur stands and this condition is no longer applicable.