

**ALLEGHENY COUNTY HEALTH DEPARTMENT**  
**Air Quality Program**

**SUMMARY OF PUBLIC COMMENTS AND DEPARTMENT RESPONSES**  
**ON THE PROPOSED ISSUANCE OF ORION POWER MIDWEST, L.P. - CHESWICK**  
**POWER STATION TITLE V OPERATING PERMIT NO. 0054r**

*[Notice of the opportunity for public comment appeared in the legal section of the Pittsburgh Post-Gazette on June 26, 2016. The public comment period ended on August 1, 2016.]*

1. **COMMENT:** *The Proposed Permit's NO<sub>x</sub> Limits Are Appropriate.*

First, concerning NO<sub>x</sub>, the proposed emission limit for Main Boiler No. 1 is consistent both with Reasonably Available Control Technology ("RACT") requirements and with historical operations at Cheswick... SCR is capable of high rates of NO<sub>x</sub> removal. SCR systems maintained consistent with good operating procedures can regularly ensure NO<sub>x</sub> emission reductions of 90% or more. This translates to emission limits as low as 0.05 lbs/MMBtu or lower—meaning that the contemplated limit in the Proposed Permit is a reasonable and generous accommodation for SCR operation. For Cheswick's Main Boiler No. 1, the Proposed Permit sets NO<sub>x</sub> emission limits at "0.10 lb/MMBtu when the inlet temperature to the SCR is equal to or greater than 600 degrees Fahrenheit;" and 0.35 lb/MMBtu when the inlet temperature to the SCR is less than 600 degrees Fahrenheit. This is very consistent with historical performance of the SCR controls at Cheswick...

Cheswick installed its SCR controls in 2003. That year, and the next few subsequent years, Cheswick did rather well in terms of control operations: in 2003, over 90% of hours had a NO<sub>x</sub> emission rate of 0.10 lbs/MMBtu or lower, and when excluding likely startup and shutdown hours, the facility emitted below that rate for roughly 90% of operation hours for the years 2003-2006. Post-2006, however, very few hours (as few as 4% in 2008 and 2009) were below this emission rate—suggesting that Cheswick stopped operating its SCR effectively. The implication is clear: the contemplated NO<sub>x</sub> emission rates in the Proposed Permit are indicative of control operation at Cheswick and, thus, are entirely appropriate. Moreover, they would require Cheswick to reverse the current rather perverse situation in which Cheswick—despite being equipped with controls— does not operate them effectively, thereby delivering enormous reductions in NO<sub>x</sub> pollution, and generating concomitant improvements in air quality.

**RESPONSE:** The Department agrees in part with the comment above. However, the analysis of hours of SCR operation at NRG Cheswick performed by the Sierra Club does not appear to take into account the operating load of the Main Boiler. The SCR at NRG Cheswick cannot be operated at low inlet temperatures, which are produced when the Main Boiler is under low operating loads (lower heat input levels). Independent of that, the Department has decided to adopt the PA DEP emission limitations for RACT and has revised the NO<sub>x</sub> emissions limit from 0.10 lb/MMBtu to 0.12 lb/MMBtu. This change was made because the RACT process and emission limit that was proposed by the Department was not subjected to a rule-making process, public comment period, or EPA review. No other changes to the permit were made as a result of this comment.

2. **COMMENT:** *The Proposed Permit's SO<sub>2</sub> Limits Are Largely Appropriate.*

Here, the Proposed Permit contemplates an emission limit of "3,176 lb/hr on a daily average basis" for SO<sub>2</sub>. This emission limit is a positive addition to the permit for two reasons. First, it appears to be based on the air modeling that ACHD performed on Cheswick; emission limits for SO<sub>2</sub> should always be based

on AERMOD modeling to ensure the facility in question is not causing or contributing to dangerous exceedances of the NAAQS. Second, the emission limit is based on a short-term averaging period. Although the period contemplated in the Proposed Permit is a 24-hour averaging period and, thus, is not consistent with the 1-hour average of the NAAQS, this is an improvement over prior 30-day averaging periods. However, Sierra Club urges ACHD to revise the Proposed Permit before finalization to convert the SO<sub>2</sub> emission limit from a daily to an hourly averaging period. Because exposure to SO<sub>2</sub> for even very short periods of time can be dangerous, in setting the new NAAQS EPA not only lowered the standard from 140 parts per billion (“ppb”) to 75 ppb, but—critically—slashed the averaging period for the standard from 24 hours to just one hour. This standard is evaluated through reference to the 4th-highest daily maximum ambient concentration annually, meaning that ambient air quality conditions can be rendered unsafe by as few as four hours of elevated emissions over the course of a year.

As a result, an emission limit with an averaging period of longer than one hour is highly unlikely to be able to protect this short-term standard. Spikes in emissions (perhaps coinciding with startup or shutdown conditions or temporary malfunctions in scrubber operation) could cause short term elevations in ambient SO<sub>2</sub> levels sufficient to violate the NAAQS while nonetheless averaging out over longer periods such that the permit is “complied” with. Nor is it at all unreasonable to impose an hourly averaging period for emission limits to protect the SO<sub>2</sub> NAAQS in practice: many facilities across the country are subject to such limits, including at least one other plant in Pennsylvania: the Homer City power plant. As such, before finalizing the permit, ACHD should revise the Proposed Permit to include the 1-hour modeling-informed SO<sub>2</sub> emission limit of 4,020 lbs/hour, rather than converting that limit into one with a 24-hour averaging period. Likewise, ACHD should impose such a 1-hour limit when it receives the air modeling study from Cheswick that the Proposed Permit contemplates requiring as part of the Data Requirements Rule compliance.

**RESPONSE:** The Department disagrees with the comment. The Department used an EPA memorandum titled “Guidance for 1-Hours SO<sub>2</sub> Nonattainment Area SIP Submissions”, dated April 23, 2015, to help establish a longer averaging time period. The rationale for longer averaging periods is explained in detail in Appendix B of the above cited memorandum. A summary of their finding reads as follows:

*“Thus, at issue is the likelihood that a source complying with a 30-day average limit reflecting the adjustment generally recommended in this guidance would have sufficiently high emissions on a sufficient fraction of the potential exceedance days to cause an SO<sub>2</sub> NAAQS violation. This appendix documents analyses addressing this question. Although results will differ according to individual circumstances, the EPA views its analyses as indicating that suitably adjusted longer term average limits can generally be expected to provide adequate confidence that the attainment plan will provide for attainment.”*

Additionally, while the EPA investigated and allowed averaging periods of 30 days or more, the averaging period of 24-hours used NRG Cheswick’s draft permit is a significantly tighter averaging period. Finally, the emission limit used for the 24-hour averaging period is 21% lower than the 1-hour critical emission value of 4,020 lbs/hr. Employing the 1-hour critical emission value of 4,020 lbs/hr would result in an additional 3,676 tons/yr of potential (allowable) SO<sub>2</sub> emissions from the Main Boiler at NRG Cheswick over what is currently being proposed in the draft permit. There are no changes to the permit as a result of this comment.

3. **COMMENT:** *The Proposed Permit’s PM Limits Are Appropriate*

Cheswick is located in a PM<sub>2.5</sub> nonattainment area, and thus—as with SO<sub>2</sub>—Cheswick’s impacts on attainment of that standard must be addressed in its air permitting. Here, the Proposed Permit incorporates additional hourly and annual PM emission limits, above those in the prior permit, that will help reduce overall levels of PM pollution in Allegheny County. These limits are, thus, beneficial and should be retained (if not further improved) in the final version of the permit.

**RESPONSE:** The Department agrees with the comment and there are no changes to the permit as a result of this comment.

4. **COMMENT:** *The Proposed Permit Should be Revised to Provide Specificity in its Requirements for Continuous Emissions Monitoring for Sulfur Dioxide, Nitrogen Oxides, and Mercury*  
The Proposed Permit, as currently written, does not provide sufficient detail in requiring and applying continuous emission monitoring (“CEM”) data for the pollutants sulfur dioxide (“SO<sub>2</sub>”), nitrogen oxides (“NO<sub>x</sub>”), and mercury (“Hg”). As drafted, Section A.3. of the Proposed Permit correctly requires that “[t]he permittee shall operate and maintain continuous emission monitoring (CEM) equipment on the new main boiler stack for, NO<sub>x</sub>, SO<sub>2</sub> and O<sub>2</sub> or CO<sub>2</sub> in accordance with 40 CFR §51 Appendix P, PADEP Continuous Source Monitoring Manual and Department approval.” ACHD’s Permit Review Technical Support Document memorandum also states that “[a] continuous emissions monitor for mercury has been in operation since before the first compliance date of April 16, 2015 [for the Mercury and Air Toxics Standards (MATS)].” However, there is no clear requirement in Permit Section A.3. requiring that the permittee likewise “shall operate and maintain” the Plant’s Hg CEM equipment for the Main Boiler Stack. Instead, the Proposed Permit merely states that “NO<sub>x</sub>, SO<sub>2</sub> and Hg emissions *may* be determined by recently certified CEMs required in section V.A.3 below in lieu of reference test methods.” Adding to this insufficiency, the permit indicates that Hg emissions will be determined by an unspecified Department-approved test method. This is improper.

In order to ensure the permit’s monitoring requirements for SO<sub>2</sub>, NO<sub>x</sub>, and Hg assure compliance with applicable requirements, ACHD must revise the Proposed Permit so that Permit Condition A.3. also explicitly requires the operation and maintenance of the Main Boiler Stack’s Hg CEM. Further, ACHD must revise Permit Condition A.2.a.1.h.—“Mercury emissions shall be determined by a Department-approved test method”—to instead require that “Mercury emissions shall be determined by recently certified CEMs.” In addition, the Proposed Permit should be revised so it is clear that the Plant’s NO<sub>x</sub>, SO<sub>2</sub>, and Hg emissions are to be determined by CEMs—i.e. by revising Permit Condition A.2.a.1.i. to state that “NO<sub>x</sub>, SO<sub>2</sub> and Hg emissions *shall* be determined by recently certified CEMs required in section V.A.3 below in lieu of reference test methods.” Operation of the Plant’s CEMs must be required at all times. The final permit must not allow for exceptions or alternatives to the CEMs. Moreover, the final permit must be clear that the Plant’s SO<sub>2</sub>, NO<sub>x</sub>, and Hg CEM data is to be used to determine and assure compliance with all applicable SO<sub>2</sub>, NO<sub>x</sub>, and Hg-related requirements for the Main Boiler Stack.

**RESPONSE:** The Department disagrees with the comment. As noted in the specific comment, there are no local, state or federal requirements missing from the draft permit that would require the use of continuous emissions monitoring of mercury. Continuous emissions monitoring is a compliance option among several other compliance options under the Mercury and Air Toxics Rule. These regulations are listed under Section M in the draft permit.

Compliance testing for NO<sub>x</sub>, SO<sub>2</sub> and mercury is required once every two years. Compliance testing can be performed using EPA reference test methods or by using continuous emissions monitoring. There is no regulation requiring the usage of continuous emissions monitoring for mercury and thus it is not a

requirement in the permit. There are no changes to the permit as a result of this comment.

5. **COMMENT:** *The Proposed Permit Should Be Revised to Require that Continuous Opacity Monitoring System Data Be Used for Compliance Purposes with the Main Boiler Stack's Visible Emission Limits.* As drafted, the Proposed Permit fails to require monitoring appropriate to ensure compliance with Cheswick's visible emissions limits, which are contained in the Proposed Permit's Site Level Terms and Condition, Condition #2. Title V permit monitoring requirements must "assure use of terms, test methods, units, averaging periods, and other statistical conventions consistent with **the applicable requirement.**" Yet, the proposed monitoring requirements for opacity in the permit are insufficient to enforce the Plant's visible emissions limits and ensure that any potential exceedances or violations of those limits are recorded and reported, as required by law. Here, the appropriate opacity monitoring method for the Main Boiler Stack would be the Unit's Continuous Opacity Monitoring ("COM") equipment. Accordingly, Cheswick's Proposed Permit must be revised to require application and consideration of its COM data for compliance and enforcement of its visible emissions requirements.

**RESPONSE:** The COM used by NRG Cheswick is located before the flue gas desulfurization unit and is thus not suitable for accurately measuring visible emissions of the flue gas exiting the stack. The COM is utilized by NRG Cheswick as an indicator for the performance of the electrostatic precipitator control device and can only provide an estimate of the visible emissions exiting the stack. Additionally, as part of the Compliance Assurance Monitoring Plan (CAM), a wet gas particle analyzer has been installed with an output signal correlated to be proportional to EPA Method 5B particulate matter measurements and serves as an additional parameter to ensure that visible emissions do not exceed the limits contained in the permit. There are no changes in the permit due to this comment.

6. **COMMENT:** *The Proposed Permit Should Clarify that Emissions Limitations and Standards Contained Therein Apply at All Times, Even During Startup, Shutdown, and Malfunction.* As drafted, the Proposed Permit allows excess emissions from Cheswick during startup, shutdown, or malfunctions. This is impermissible under the CAA: in accordance with the definition of "emission limitations" in CAA section 302(k), emission limitations must be continuous. Variances from emission limitations such as those contained in the Proposed Permit are improper under Title V of the CAA.

**RESPONSE:** The comment above is not true for all emissions and averaging times. The regulations from §63.10020(c) specifically excludes start-up and shutdown emissions from the 30 boiler operating day average for mercury CEMS. That withstanding, those regulations have been moved to Section M of the permit.

7. **COMMENT:** *The Proposed Permit Should Define the Word "Prompt" in Order to Provide for Adequate Reporting of Deviations*

**RESPONSE:** The Department partially agrees with the comment and has made the necessary revisions to define the word "prompt" in specific instances and added in the word "promptly" to condition V.A.5.f. The Department does not agree that it is always practical to properly identify the probable cause of all deviations and will not create a blanket term for the word "prompt". The Department understands the meaning of the word "prompt" to mean as soon as practical. There are no other changes to the permit due to this comment.

8. **COMMENT:** *The Proposed Permit Should Explicitly State the Applicable Particulate Matter Emission Limits for the Main Boiler Stack.*

As drafted, the Proposed Permit states that “[n]o person shall operate or allow to be operated the Main Boiler in such manner that particulate matter (PM) emissions when combusting coal and natural gas concurrently in the Main Boiler shall not exceed the allowable emissions (lb/MMBTU) calculated by the formula in §2104.02.a.3. (§2104.02.a.3, Installation Permit No. 0054-I004b Condition V.A.1.d).” ACHD should revise this permit condition to explicitly include the actual particulate matter limit in the permit, rather than merely citing to a formula or separate installation permit that supposedly contains the applicable requirement. Because Title V permits must include all applicable requirements that apply to a facility, including particulate matter emission limitations and standards, the Proposed Permit clearly violates the CAA, as well as federal regulations under the Act.<sup>65</sup> In addition, the word “not” should be removed from this permit condition, otherwise a literal reading of the condition would actually require the Plant to exceed its allowable emissions, which is certainly not the intent.

**RESPONSE:** The Department agrees with the comment and has made the necessary revisions.

9. **COMMENT:** *The Proposed Permit Should Ensure All Applicable Requirements Set Forth in the Plant’s Installation Permit and Acid Rain Permit are Appropriately Contained in Its Title V Permit.*  
In a number of instances, the Proposed Permit sets forth terms, conditions, and limits by citing to applicable separate Installation and Acid Rain Permits for the Plant. However, merely citing to these permits is inadequate. In order to comply with the CAA as well as its implementing regulations, Title V permits must explicitly include all applicable requirements for a facility. Accordingly, the Proposed Permit must be amended so that it itself contains all emissions limits and standards applicable to the Plant, or, at the very least, ACHD must append any referenced applicable permits to the Title V permit in order to allow for an accurate determination as to whether the Plant is complying with all applicable requirements under the CAA and set forth in its Title V permit.

**RESPONSE:** Aside from the Acid Rain Permit, which is a separate requirement, the Department feels that all of the applicable requirements are included in the proposed Title V Permit. There are no changes as a result of this comment.

10. **COMMENT:** *The Proposed Permit Should Ensure the Maximum Capacity of Main Boiler No. 1 is Stated Consistently Throughout the Permit*  
As drafted, the terms of the Proposed Permit related to the maximum capacity of Main Boiler No. 1 are inconsistent, and should be harmonized. In Table II-1 - Emission Unit Identification, the Proposed Permit states that the maximum capacity of Cheswick’s Main Boiler is “5,500 MMBtu/hr Rated” and “6,000 MMBtu/Hr Maximum.” Elsewhere in the permit, the “Maximum Design Rate” when burning coal and synfuel is indicated as being 5,500 MMBtu. ACHD must clarify in the permit which of these two numbers—5,500 or 6,000—is the applicable maximum MMBtu/Hr limit for the Main Boiler. Such clarification is especially important given that some limits set forth in the permit are set in lbs/MMBtu.

**RESPONSE:** The Main Boiler No. 1 is nominally rated at 5,500 MMBtu/hr (annual) with a maximum hourly capacity of 6,000 MMBtu/hr. The hourly and annual emissions are calculated in this manner as well. There are no changes as a result of this comment.

11. **COMMENT:** ACHD should defer issuing the Permit until the RACT analysis used to determine the plant’s NO<sub>x</sub> emission Limits has been subjected to public comment and approved by EPA.

**RESPONSE:** See response to Comment No. 1. The Department has opted to use the **presumptive** RACT NO<sub>x</sub> emission limits proposed by the PA DEP and approved by the EPA. There are no changes

to the permit due to this comment.

12. **COMMENT:** The Permit should cite 40.C.F.R. § 51.1204 as authority for Section V.A.1.c.

**RESPONSE:** The Department agrees with the comment and has made the necessary revisions.

13. **COMMENT:** Section V.A.1.u of the Permit should be revised to comply with 40 C.F.R. § 51.1203(d)(3) and should cite 40 C.F.R. §§ 51.1203(d)(3) and 51.1204 as authority.

**RESPONSE:** The permit language and citations have been modified.

14. **COMMENT:** ACHD should defer issuing a final permit until it is satisfied with its modeling analysis of SO<sub>2</sub> concentrations in areas affected by the plant's emissions.

**RESPONSE:** The Department has delayed issuing the permit until a satisfactory modeling protocol was developed and approved by the DEP. Since the modeling protocol was approved and the Department is satisfied with the results of such, the permit is now being issued. There are no changes in the permit due to this comment.

15. **COMMENT:** Compliance with the SO<sub>2</sub> data requirements rule and attainment of the 1-hour SO<sub>2</sub> standard in areas affected by the plant's SO<sub>2</sub> emissions should be determined with monitored data rather than modeled data.

**RESPONSE:** See response to Comment No. 2. Adhering to the Data Requirements Rule, the Department and NRG have elected to perform modeling coupled with continuous compliance from the facility's SO<sub>2</sub> CEMs. The resulting new SO<sub>2</sub> emission limits are significantly lower than what the potential SO<sub>2</sub> emission limits would be if monitoring were the chosen compliance tool. There are no changes to the permit as a result of this comment.

16. **COMMENT:** The permit inexplicitly excludes the requirements of the recently-finalized (on April 23, 2016) PA DEP Rule entitled "Additional RACT Requirements for Major Sources of NO<sub>x</sub> and VOCs" (25 Pa. Code §§129.96 – 129.100, "PA RACT II Rule"). Per 25 Pa. Code §129.96(a), the requirements "apply Statewide to the owner and operator of a major NO<sub>x</sub> emitting facility."

**RESPONSE:** See response to Comment No. 1. The Department has opted to use the presumptive RACT NO<sub>x</sub> emission limits proposed by the PA DEP and approved by the EPA.

17. **COMMENT:** The permit illegally includes the requirements of a case-by-case RACT analysis as developed by the ACHD for select emission sources at Cheswick.

**RESPONSE:** See response to Comment No. 1. The Department has opted to use the presumptive RACT NO<sub>x</sub> emission limits proposed by the PA DEP and approved by the EPA.

18. **COMMENT:** The permit illegally includes the requirements from Installation Permit No. 0054-I004b, [revision of permit originally issued for the FGD installation] which has not yet been issued as a final permit by the ACHD.

**RESPONSE:** Installation Permit No. 0054-I004b has since been out for public comment and will be

issued concurrently with the Title V Operation Permit No. 0054. There are no changes to the permit due to this comment.

19. **COMMENT:** The permit illegally includes the requirements from preliminary SO<sub>2</sub> dispersion modeling study of Cheswick Boiler No. 1. NRG acknowledges that Article XXI, §2103.12.a.2.F, copied below, related to issuance of operating permits, addresses issues concerning compliance with the NAAQS. Compliance with a revised NAAQS follows a procedural process as outlined by U.S. EPA in implementation guidance provided to the states. It has been established that sources are not in violation of regulation instantly upon promulgation of a new or revised NAAQS. Regardless and most importantly in Cheswick's case, air dispersion modeling studies performed in 2015 and 2016 by the ACHD and NRG in accordance with DRR requirements (using recent actual SO<sub>2</sub> emissions) for the Cheswick Boiler No. 1 have shown that impacts from this source demonstrate compliance with the revised SO<sub>2</sub> NAAQS and are approximately 60 percent of the standard. Consequently, the results of these studies can be used to demonstrate compliance with the Article XXI requirement listed above. Therefore, there is no need to include any new SO<sub>2</sub> emission limits in the proposed Title V permit prior to completing the final and approved modeling study.

**RESPONSE:** See response to Comment Nos. 12, 13 and 14 (GASP comments #2-4).

20. **COMMENT:** The permit illegally includes new potential-to-emit ("PTE") and other emission limits for Cheswick Boiler No. 1. For the purposes of calculating PTE emission limits, NRG understands that the ACHD assumes a boiler heat input rating of 5,500 MMBtu/hr (versus the nominal maximum actual heat input of 6,000 MMBtu/hr as recognized in prior permits) and (ii) uses the underlying short-term emission limits. There are no current limits on annual operating hours or heat input. Accordingly, because no technical justification for adding new limits is given, the proposed PTE limits must be removed from the final permit.

**RESPONSE:** The Department used 6,000 MMBtu/hr as a maximum hourly capacity and 5,500 MMBtu/hr as a nominal annual capacity. Previous permits had only used 5,500 MMBtu/hr as both the hourly and annual capacity of Main Boiler No. 1, but subsequent testing has shown that the Boiler is capable of 6,000 MMBtu/hr in the short-term. The PM10/2.5 and H<sub>2</sub>SO<sub>4</sub> limits were changed in Installation Permit No. 0054-I004b from language in Installation Permit No. 0054-I004a and subsequent performance testing results. There are no changes in the permit due to this comment other than those (NO<sub>x</sub>) previously listed from incorporating the PADEP RACT rules and the removal of Mercury emission limits from Section V (moved to Section M).

21. **COMMENT:** The permit illegally includes new requirements concerning operating parameters for the Boiler No. 1 flue gas desulfurization (FGD) system – see Conditions V.A.1.o and p in the proposed renewed Title V permit. As previously communicated to the ACHD, NRG is willing to discuss requirements with the ACHD related to the hydrated lime injection system (Condition V.A.1.p), but the current condition is unacceptable. Other than the requirement related to the operation of at least three FGD spray levels while combusting coal, requirements related to "minimum injection rate (absorber liquid flowrate and pH of the absorber liquid)" are unnecessary and absolutely unacceptable to NRG because the certified SO<sub>2</sub> continuous emissions monitor (CEM) is the primary monitoring devices used to gauge FGD performance. The proposed permit condition is inconsistent with proper operation of FGD systems. Make-up water is added to the absorber module as needed to replace evaporation and the reagent water discharged from the absorber module. Many factors, including load and ambient conditions, affect the necessary adjustments to FGD operations. Requiring the minimum injection rate

to be equal to the average injection rate realized during the most recent compliance stack test (when the source is operated at its routine maximum operating conditions) for all operating conditions may result in decreased FGD performance at lower boiler loads (i.e., such operations would dilute the limestone slurry).

**RESPONSE:** The Department agrees with the comment and has modified the conditions.

22. **COMMENT:** Condition IV.9, concerning an archaic Article XXI requirement (promulgated circa 1972 or earlier) to provide an advance notice of cold starts of fuel combustion sources such as Boiler 1. In November 2012, the company submitted a written request with accompanying support to simply include a listing of such cold starts in the routine quarterly reports to the ACHD, upon approval by the ACHD. To date, the company has not received any response to our request. Please grant NRG's request.

**RESPONSE:** The Department partially agrees and partially disagrees with the comment. Condition IV.9 is a standard facility-wide requirement for all units operating in Allegheny County. The Department does however grant the permittee's request to list cold starts for the Main Boiler No. 1 in the quarterly reports.

23. **COMMENT:** Conditions V.A.2.a.6 and V.A.5.d.10, concerning reporting of electrostatic precipitator (ESP) operating data in compliance stack test reports and routine quarterly reports to the ACHD. NRG understand the requirement related to monitoring and recording such data. However, recognizing that particulate matter emissions control from Boiler 1 is realized by the ESP and the flue gas desulphurization (FGD) system, NRG does not understand the value of routinely reporting such data. Please grant NRG's request to forward the ESP data upon special request only.

**RESPONSE:** The Department partially agrees with the comment and has modified Condition V.A.2.a.6. The Department feels that Condition V.A.5.d.10 is neither voluminous, burdensome, nor redundant and has not made any changes to that condition.

24. **COMMENT:** Condition V.I.3.a.r, concerning the requirement to perform daily visible emissions monitoring at the FGD Limestone Handling System. Recognizing the required process controls and operating practices, and the monitoring records that document extremely infrequent episodes of fugitive dust emissions, NRG does not understand the value of continuing to perform daily monitoring with associated record keeping. Please grant NRG's request to change the monitoring frequency to weekly.

**RESPONSE:** The Department agrees with the comment and has modified the condition.

25. **COMMENT:** Section V.K, concerning the two diesel fuel-fired air compressor engines and the requirements promulgated under 40 CFR 63 Subpart ZZZZ. The proposed permit did not adequately describe and capture the applicable Subpart ZZZZ requirements. Please review Section V.K and revised the proposed permit accordingly.

**RESPONSE:** The Department has added the appropriate conditions and citations from 40 CFR 63 Subpart ZZZZ.

26. **COMMENT:** Section V.M, concerning Boiler 1 and the requirements promulgated under 40 CFR 63 Subpart UUUUU. NRG does not understand why the ACHD copied (but not verbatim) nearly all citations from the rule in the proposed permit – incorporation by reference of select requirement such

as test and calculation methodologies is an EPA-approved practice. If the ACHD intended to explicitly capture all of the Subpart 5U requirements in the proposed permit, then they must be copied from the federal regulations verbatim. NRG noticed that the ACHD obviously expended significant efforts to reorganize and even reword (e.g., Subpart 5U includes the words “you shall,” the ACHD changed such words to “the permittee shall”) the Subpart 5U requirements in a manner that matched the format of the proposed permit. NRG is concerned about “tweaking” the federal requirements as it relates to potential changes in compliance requirements and we do not understand the value of such efforts.

**RESPONSE:** The only changes in the 40 CFR 63 Subpart 5U language are the changes in pronouns to properly address “the permittee”. This is consistent with permits issued by the Department so that words such as “you”, “your” or “must” are not ambiguous in their meaning. There are no changes to the permit due to this comment.

27. **COMMENT:** Miscellaneous Section. NRG requests the ACHD to recognize alternate Responsible Officials in the Title V permit. There is no regulatory or statutory requirement that a Title V permit can list a single Responsible Official only. EPA guidance from 1995 clarified that multiple Responsible Officials can be identified in a Title V permit. Please grant NRG’s request related to this issue.

**RESPONSE:** The Department disagrees with the comment. The Department will only recognize a sole Responsible Official. There are no changes to the Permit due to this comment.

28. **COMMENT:** Condition IV.22: The referenced regulations are not a Site Level Condition, as they are only applicable to the Main Boiler.

**RESPONSE:** The Department partially agrees with the comment. While the Acid Rain Program is only applicable to the Main Boiler No. 1, the Department still feels that it is in the appropriate section. There are no changes to the permit due to this comment.

29. **COMMENT:** Conditions V.A.1.r, V.A.1.s and V.A.1.t are not applicable requirements.

**RESPONSE:** The Department disagrees with the comment. The conditions were contingent on Installation Permit No. 0054-I004a and subsequent stack testing of the referenced emissions. There are no changes to the permit due to this comment.

30. **COMMENT:** Condition V.A.2.a: As approved by the Department, the test program may be performed with 4 FGD spray levels in service to help ensure exhaust gas opacity standards.

**RESPONSE:** The Department agrees with the comment and has modified the condition.

31. **COMMENT:** Condition V.A.2.a should read: “160 lb/hr (filterable only) for the PM<sub>10</sub> limit.

**RESPONSE:** The Department disagrees with the comment. See response to Comment No. 29. There are no changes to the permit due to this comment.

32. **COMMENT:** Condition V.B.1.c: The Auxiliary Boiler is subject to the requirements promulgated under 40 CFR 63 Subpart DDDDD. Under 5D, the boiler is classified as an existing industrial boiler. The permittee has elected to designate the boiler as a *limited-use boiler*.

**RESPONSE:** The condition has been re-worded and the citations updated.

33. **COMMENT:** Condition V.B.6.b should read: “5 year tune-ups”, as per DDDDD.

**RESPONSE:** The Department agrees with the comment and has made the requested change.

34. **COMMENT:** Condition V.H: Please delete this section and move to Table VIII, Miscellaneous Insignificant Sources.

**RESPONSE:** The Department disagrees with the comment. There are no changes to the permit due to this comment.

35. **COMMENT:** Condition V.A.1.b: The allowable emissions formula referred to in §2104.02.a.3. must be added to the permit.

**RESPONSE:** See response to Comment No. 8. The condition has been modified.

36. **COMMENT:** Table V-A-1: Periods of start-up and shutdown cannot be excluded from the 30 day rolling average for boiler operation.

**RESPONSE:** See response to Comment No. 6. The language is from §63.10020(c), which specifically excludes start-up and shutdown emissions from the 30 boiler operating day average for mercury CEMS. That withstanding, the regulations have been moved to Section M of the permit.

37. **COMMENT:** Condition V.A.1.p: Provide the appropriate hydrated lime injection rate as well as the appropriate system minimum boiler injection load.

**RESPONSE:** See Comment No. 21 and response. There are no changes to the permit due to this comment. The permit has been revised accordingly.

38. **COMMENT:** Conditions V.A.2.a.7) and V.A.2.a.8): The facility needs to establish values for these parameters for the FGD system and include them in the permit.

**RESPONSE:** See Comment No. 21 and response. Additionally, the “Title V Task Force” investigated this and their April 2006 report to the EPA noted that it is impossible to determine the full range of parametric values indicating compliance unless the source violates its emission limits. Compliance with emission limits is already continuously monitored through a NO<sub>x</sub> and SO<sub>2</sub> CEMS and also a wet gas particle analyzer (CAM). There are no changes to the permit due to this comment.

39. **COMMENT:** Conditions V.A.3.a, V.A.3.c and V.A.3.f: The facility needs to establish values for these monitoring parameters (SCR, ESP and FGD) and include them in the permit.

**RESPONSE:** See response to Comment Nos. 21 and 38. There are no changes in the permit due to this comment.

40. **COMMENT:** Condition V.A.3.b: Manufacturer's specifications should be called out in a document. Good air pollution control practice should be defined in the context of operation of an SCR.

**RESPONSE:** As noted in EPA White Paper No. 2, it is not necessary to include details related to inspection and maintenance plans in a Title V Operating permit. Such plans can be incorporated into the permit by reference provided that such plans are readily available at the facility. There are no changes to the permit due to this comment.

41. **COMMENT:** Condition V.A.3.f.1): The facility needs to establish values for Catalytic bed inlet temperature, ammonia solution injection rate, and ammonia solution concentration to allow monitoring of these parameters and thus assure proper operation of the SCR.

**RESPONSE:** See response to Comment Nos. 21 and 38. There are no changes to the permit due to this comment.

42. **COMMENT:** Condition V.I.1.n: The opacity standards must apply at all times.

**RESPONSE:** The language is taken directly from 40 CFR Part 60 Subpart A, which applies to this source. There are no changes to the permit at this time due to this comment.

43. **COMMENT:** I write today to urge approval of the strong draft permit being considered by the Health Department for the Cheswick Generating Station... The proposed permit would require meaningful emissions reductions which would protect the health of residents in the vicinity of the plant, as well as represent strides toward bringing all of Allegheny County into line with federal standards and truly debunking the continuing perception of Pittsburgh as the 'smoky city.' I am compelled, however, to note that regulations have little value without vigorous enforcement.

**RESPONSE:** The Department appreciates and agrees with the comment.

44. **COMMENT:** Coal ash contains almost all of the metallic element oxides on earth, which are highly concentrated after the carbon in the coal has been burnt. Some of these metal oxides, such as that from mercury, evaporate up the smokestack to pollute our air. The others remain to form toxic alkaline waste matter. Reliant Energy's (NRG) coal ash waste has been seeping into Springdale's springs from Reliant's (NRG) settling ponds, which have been thoughtfully placed from high on the ridgeline all the way down to the river level, to save Reliant (NRG) the tiny cost of pumping the waste sludge from one pond to the next before it all gets dumped into the river. Now Springdale's springs are toxic and the township has had to install a river-water treatment plant. How can Reliant (NRG) be thought of as being a public benefit when such a miniscule savings for it has resulted in such large costs for its surrounding community?

Similarly Reliant (NRG) has been poisoning our local air with its chemical and particle emissions, and I have been waiting in vain for the past 25 years for it to comply with the 'New Source' EPA regulations that would take toxics out of its smokestack. Again, it has been placing its own profits above public welfare although it has a large and steady customer base, partly ensured by regulations, and old capital equipment that has been amortized many times over by now.

**RESPONSE:** The Department only regulates the air quality emissions as they relate to NRG or any other stationary source in Allegheny County. The NRG Cheswick Generating Station is in compliance with all emission limits and NESHAP standards. There are no changes to the permit due to this comment.

**LIST OF COMMENTERS**

<b>Comment Numbers</b>	<b>Name</b>	<b>Affiliation</b>
1-10	Kathryn M. Amirpashaie Zachary M. Fabish	Sierra Club
11-15	John K. Baillie	Group Against Smog & Pollution (GASP)
16-34	John P. Shimshock	NRG
35-42	Paul Wentworth	EPA Region 3
43	Chelsea Wagner	County of Allegheny – Office of the Controller
44	Chris Horwitz, PhD	Citizen