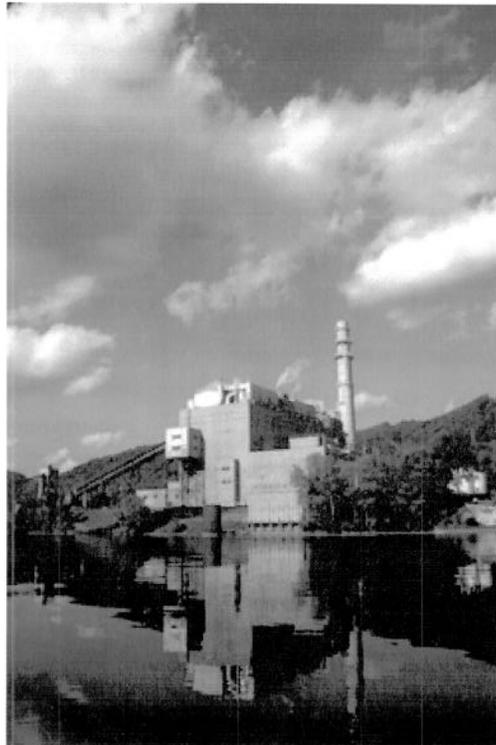


Appalachian Power Company Kanawha River Plant

Regulation 30 Permit Renewal Application



Prepared By:

American Electric Power
Environmental Services
1 Riverside Plaza
Columbus, Ohio 43215
December 2008

**Appalachian Power Company
Kanawha River Plant**

Regulation 30 Permit Renewal Application

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WEST VIRGINIA DEPARTMENT OF ENVIRONMENTAL PROTECTION

DIVISION OF AIR QUALITY

601 57th Street SE
Charleston, WV 25304
Phone: (304) 926-0475
www.wvdep.org/daq

1.

TITLE V PERMIT APPLICATION - GENERAL FORMS

Section 1: General Information

Form with 10 sections: 1. Name of Applicant (Appalachian Power Company), 2. Facility Name (Kanawha River Plant), 3. DAQ Plant ID No. (039-00006), 4. Federal Employer ID No. (54-0124790), 5. Permit Application Type (Renewal), 6. Type of Business Entity (Corporation), 7. Is the Applicant the: (Both), 8. Number of onsite employees (81), 9. Governmental Code (Privately owned), 10. Business Confidentiality Claims (No).

| | | |
|--|--------------------|-----------------------------------|
| 11. Mailing Address | | |
| Street or P.O. Box: Appalachian Power Company (dba. American Electric Power) 1 Riverside Plaza | | |
| City: Columbus | State: Ohio | Zip: 43215- |
| Telephone Number: (614) 716-1267 | | Fax Number: (614) 716-1252 |

| | | |
|---|---|--|
| 12. Facility Location | | |
| Street: #1 AEP Way | City: Glasgow | County: Kanawha |
| UTM Easting: 462.96 km | UTM Northing: 4228.62 km | Zone: <input checked="" type="checkbox"/> 17 or <input type="checkbox"/> 18 |
| Directions: Facility is located on State Route 60, 1/2 mile east of Glasgow, West Virginia. | | |
| Portable Source? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No | | |
| Is facility located within a nonattainment area? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No | If yes, for what air pollutants? PM-2.5 | |
| Is facility located within 50 miles of another state? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No | If yes, name the affected state(s). | |
| Is facility located within 100 km of a Class I Area¹? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No | If yes, name the area(s). | |
| If no, do emissions impact a Class I Area¹? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No | | |
| ¹ Class I areas include Dolly Sods and Otter Creek Wilderness Areas in West Virginia, and Shenandoah National Park and James River Face Wilderness Area in Virginia. | | |

| | | |
|--|-----------------------------------|--|
| 13. Contact Information | | |
| Responsible Official: Jeffrey D. LaFleur | | Title: Vice-President, Appalachian Power Company |
| Street or P.O. Box: Suite 1100, Chase Tower, 707 Virginia Street E. | | |
| City: Charleston | State: West Virginia | Zip: 25301- |
| Telephone Number: (304) 348-4194 | Fax Number: (304) 348-4158 | |
| E-mail address: jdlafleur@aep.com | | |
| Environmental Contact: Patrick A. Dal Porto | | Title: Manager, Air Quality Services |
| Street or P.O. Box: 1 Riverside Plaza | | |
| City: Columbus | State: Ohio | Zip: 43215- |
| Telephone Number: (614) 716-1267 | Fax Number: (614) 716-1252 | |
| E-mail address: padalporto@aep.com | | |
| Application Preparer: Jeffrey P. Novotny | | Title: Senior Engineer |
| Company: American Electric Power | | |
| Street or P.O. Box: 1 Riverside Plaza | | |
| City: Columbus | State: Ohio | Zip: 43215- |
| Telephone Number: (614) 716-1294 | Fax Number: (614) 716-1252 | |
| E-mail address: jpnovotny@aep.com | | |

| 14. Facility Description | | | |
|---|-------------|-------|------|
| List all processes, products, NAICS and SIC codes for normal operation, in order of priority. Also list any process, products, NAICS and SIC codes associated with any alternative operating scenarios if different from those listed for normal operation. | | | |
| Process | Products | NAICS | SIC |
| Electric Generation Service | Electricity | | 4911 |
| | | | |
| | | | |
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| | | | |
| | | | |
| | | | |
| <p>Provide a general description of operations.</p> <p>The Kanawha River Plant is a fossil fuel fired electric generation facility and operates under Standard Industrial Code (SIC) 4911. The facility consists of a two coal-fired steam generators that provides a steam supply to turbine driven electrical generators. The facility also includes various supporting operations including by not limited to coal handling, ash handling, wastewater treatment system and various tanks with insignificant emissions. The facility has the potential to operate seven days per week, twenty-four hours per day, and 52 weeks per year.</p> | | | |
| 15. Provide an Area Map showing plant location as ATTACHMENT A . | | | |
| 16. Provide a Plot Plan(s) , e.g. scaled map(s) and/or sketch(es) showing the location of the property on which the stationary source(s) is located as ATTACHMENT B . For instructions, refer to "Plot Plan - Guidelines." | | | |
| 17. Provide a detailed Process Flow Diagram(s) showing each process or emissions unit as ATTACHMENT C . Process Flow Diagrams should show all emission units, control equipment, emission points, and their relationships. | | | |

Section 2: Applicable Requirements

| 18. Applicable Requirements Summary | |
|---|---|
| Instructions: Mark all applicable requirements. | |
| <input checked="" type="checkbox"/> SIP | <input type="checkbox"/> FIP |
| <input checked="" type="checkbox"/> Minor source NSR (45CSR13) | <input type="checkbox"/> PSD (45CSR14) |
| <input checked="" type="checkbox"/> NESHAP (45CSR15) | <input type="checkbox"/> Nonattainment NSR (45CSR19) |
| <input type="checkbox"/> Section 111 NSPS | <input type="checkbox"/> Section 112(d) MACT standards |
| <input type="checkbox"/> Section 112(g) Case-by-case MACT | <input type="checkbox"/> 112(r) RMP |
| <input type="checkbox"/> Section 112(i) Early reduction of HAP | <input type="checkbox"/> Consumer/commercial prod. reqts., section 183(e) |
| <input type="checkbox"/> Section 129 Standards/Reqts. | <input type="checkbox"/> Stratospheric ozone (Title VI) |
| <input type="checkbox"/> Tank vessel reqt., section 183(f) | <input type="checkbox"/> Emissions cap 45CSR§30-2.6.1 |
| <input type="checkbox"/> NAAQS, increments or visibility (temp. sources) | <input type="checkbox"/> 45CSR27 State enforceable only rule |
| <input checked="" type="checkbox"/> 45CSR4 State enforceable only rule | <input checked="" type="checkbox"/> Acid Rain (Title IV, 45CSR33) |
| <input type="checkbox"/> Emissions Trading and Banking (45CSR28) | <input checked="" type="checkbox"/> Compliance Assurance Monitoring (40CFR64) |
| <input type="checkbox"/> NO _x Budget Trading Program Non-EGUs (45CSR1) | <input checked="" type="checkbox"/> NO _x Budget Trading Program EGUs (45CSR26) |

| 19. Non Applicability Determinations | |
|--|--|
| <p>List all requirements which the source has determined not applicable and for which a permit shield is requested. The listing shall also include the rule citation and the reason why the shield applies.</p> | |
| a. | 45 CSR1 – <i>Nox Budget Trading Program as a Means to Control and Reduction of Nitrogen Oxides from Non-Electric Generating Units</i> : This facility is subject to 45 CSR 26 in lieu of 45 CSR1. |
| b. | 45CSR5 – <i>To Prevent and Control Air Pollution from the Operation of Coal Preparation Plants, Coal Handling Operations and Coal Refuse Disposal Areas</i> : The facility is subject to 45CSR2 in lieu of 45CSR5. |
| c. | 45CSR17 - <i>To Prevent and Control Particulate Matter Air Pollution from Materials Handling, Preparation, Storage and Other Sources of Fugitive Particulate Matter</i> : The facility is subject to 45CSR2 in lieu of 45CSR17. |
| d. | 40 C.F.R. 60 Subpart D – <i>Standards of Performance for Electric Utility Steam Generating Units for Which Construction is Commenced After August 17, 1971</i> : The Kanawha River Plant electric utility steam generating units commenced construction prior to August 17, 1971 and have not undergone a “modification” as defined in 40 C.F.R. 60. |
| e. | 40 C.F.R. 60 Subpart Da – <i>Standards of Performance for Electric Utility Steam Generating Units for Which Construction is Commenced After September 18, 1978</i> : The Kanawha River Plant electric utility steam generating unit commenced construction prior to September 18, 1978 and have not undergone a “modification” as defined in 40 C.F.R. 60. |
| <input checked="" type="checkbox"/> Permit Shield | |

19. Non Applicability Determinations (Continued) - Attach additional pages as necessary.

List all requirements which the source has determined not applicable and for which a permit shield is requested. The listing shall also include the rule citation and the reason why the shield applies.

- f. 40 C.F.R. 60 Subpart K – *Standards of Performance for Storage Vessels for Petroleum Liquids for Which Construction, Reconstruction, or Modification Commenced After June 11, 1973 and Prior to May 19, 1978*: The facility does not include storage vessels that are used to store petroleum liquids (as defined in 40 C.F.R. § 60.111(b)) and that have a storage capacity greater than 40,000 gallons for which construction, reconstruction or modification was commenced after June 11, 1973 and prior to May 19, 1978.
- g. 40 C.F.R. 60 Subpart Ka – *Standards of Performance for Storage Vessels for Petroleum Liquids for Which Construction, Reconstruction, or Modification Commenced After May 18, 1978 and Prior to July 23, 1984*: The facility does not include storage vessels that are used to store petroleum liquids (as defined in 40 C.F.R. § 60.111(b)) and that have a storage capacity greater than 40,000 gallons for which construction, reconstruction or modification was commenced after May 18, 1978 and prior to July 23, 1984.
- h. 40 C.F.R. 60 Subpart Kb – *Standards of Performance for Volatile Organic Liquid Storage Vessels (Including Petroleum Liquid Storage Vessels) for Which Construction, Reconstruction, or Modification Commenced After July 23, 1984*: The facility storage vessels that are potentially affected by this rule are exempted because they contain liquids with a maximum true vapor pressure of less than 3.5 kPa, have a storage capacity of less than 75 cubic meters, or have not commenced construction, reconstruction or modification after July 23, 1984.
- i. 40 C.F.R. 60 Subpart Y – *Standards of Performance for Coal Preparation Plants*: The Kanawha River Plant coal crushers were installed prior to October 24, 1974 and have not undergone a “modification” as defined in 40 CFR 60.

Permit Shield

20. Facility-Wide Applicable Requirements

List all facility-wide applicable requirements. For each applicable requirement, include the underlying rule/regulation citation and/or construction permit with the condition number. (Note: Title V permit condition numbers alone are not the underlying applicable requirements).

- 45CSR6, R30-03900006-2004 Section 3.1.1 and 3.1.2 (Open Burning)
- 40CFR61, R30-03900006-2004 Section 3.1.3 (Asbestos)
- 45CSR4, R30-03900006-2004 Section 3.1.4 (Odor) – State Enforceable Only
- 45CSR13-10.5, R30-03900006-2004 Section 3.1.5 (Permanent Shutdown)
- 45CSR11-5.2, R30-03900006-2004 Section 3.1.6 (Standby Plan)
- WV Code 22-5-4(a)(14), R30-03900006-2004 Section 3.1.7 (Emission Inventory)
- 40CFR82, R30-03900006-2004 Section 3.1.8 (Ozone-depleting Substances)
- 40CFR68, R30-03900006-2004 Section 3.1.9 (Risk Management Plan)
- 45CSR26, R30-03900006-2004 Section 3.1.10 (NOx Budget Trading Program)
- 45CSR2, R30-03900006-2004 Section 3.1.11 (Fugitive Particulate Matter Control)
- 45CSR37, R30-03900006-2004, 3.1.12 (Mercury Budget Trading Program)
- 45CSR39, R30-03900006-2004, 3.1.13 (Annual NOx CAIR Program)
- 45CSR40, R30-03900006-2004, 3.1.14 (Ozone Season NOx CAIR Program)
- 45CSR41, R30-03900006-2004, 3.1.15 (Annual SO2 CAIR Program)

Permit Shield

For all facility-wide applicable requirements listed above, provide monitoring/testing / recordkeeping / reporting which shall be used to demonstrate compliance. If the method is based on a permit or rule, include the condition number and/or citation. (Note: Each requirement listed above must have an associated method of demonstrating compliance. If there is not already a required method in place, then a method must be proposed.)

Monitoring, testing, recordkeeping and reporting requirements for facility wide applicable requirements are found in the following permit conditions:

- 45CSR2, 45CSR10, and WV Code 22-5-4(a)(15), R30-03900006-2004 Section 3.3.1 (Stack Testing)
- 45CSR30-5.1.c.2.A, R30-03900006-2004 Section 3.4.1 (Monitoring Information)
- 45CSR30-5.1.c.2.B, R30-03900006-2004 Section 3.4.2 (Retention of Records)
- 45CSR30-5.1.c, R30-03900006-2004 Section 3.4.3 (Odors) – State Enforceable Only
- 45CSR30-5.1.c, R30-03900006-2004 Section 3.4.4 (Fugitive Particulate Matter Control)
- 45CSR30-5.1.c.3, R30-03900006-2004 Sections 3.5.1-3.5.3 (Reporting Requirements)
- 45CSR30-8, R30-03900006-2004 Section 3.5.4 (Certified Emissions Statement)
- 45CSR30-5.3.e, R30-03900006-2004 Section 3.5.5 (Compliance Certification)
- 45CSR30-5.1.c.3.A, R30-03900006-2004 Section 3.5.6 (Semi-Annual Monitoring Reports)
- R30-03900006-2004 Section 3.5.7 (Emergency Reporting)
- 45CSR30-5.1.c.3, R30-03900006-2004 Section 3.5.8 (Deviation Reports)
- 45CSR30-4.3.f.1.B, R30-03900006-2004 Section 3.5.9 (New Applicable Requirements)

Are you in compliance with all facility-wide applicable requirements? Yes No

If no, complete the **Schedule of Compliance Form** as ATTACHMENT F.

20. Facility-Wide Applicable Requirements (Continued) - Attach additional pages as necessary.

List all facility-wide applicable requirements. For each applicable requirement, include the rule citation and/or permit with the condition number.

Permit Shield

For all facility-wide applicable requirements listed above, provide monitoring/testing/recordkeeping/reporting which shall be used to demonstrate compliance. If the method is based on a permit or rule, include the condition number and/or citation. (Note: Each requirement listed above must have an associated method of demonstrating compliance. If there is not already a required method in place, then a method must be proposed.)

Are you in compliance with all facility-wide applicable requirements? Yes No

If no, complete the Schedule of Compliance Form as ATTACHMENT F.

| 23. Facility-Wide Emissions Summary [Tons per Year] | |
|--|---------------------|
| Criteria Pollutants | Potential Emissions |
| Carbon Monoxide (CO) | 1355 |
| Nitrogen Oxides (NO _x) | 16,910 |
| Lead (Pb) | 1.06 |
| Particulate Matter (PM _{2.5}) ¹ | 258 |
| Particulate Matter (PM ₁₀) ¹ | 588 |
| Total Particulate Matter (TSP) | 899 |
| Sulfur Dioxide (SO ₂) | 27,331 |
| Volatile Organic Compounds (VOC) | 298 |
| Hazardous Air Pollutants ² | Potential Emissions |
| Arsenic | 1.64 |
| Beryllium | 3.9 |
| Chromium | 0.58 |
| Cobalt | 0.21 |
| Manganese | 1.1 |
| Mercury | 0.51 |
| Nickel | 0.49 |
| Selenium | 14.1 |
| Hydrogen Chloride | 3,596 |
| Hydrogen Fluoride | 312 |
| Regulated Pollutants other than Criteria and HAP | Potential Emissions |
| | |
| | |
| | |

¹PM_{2.5} and PM₁₀ are components of TSP.
²For HAPs that are also considered PM or VOCs, emissions should be included in both the HAPs section and the Criteria Pollutants section.

Section 4: Insignificant Activities

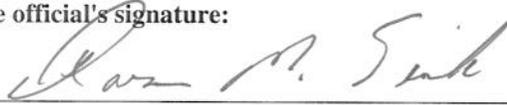
| 24. Insignificant Activities (Check all that apply) | |
|---|--|
| <input checked="" type="checkbox"/> | 1. Air compressors and pneumatically operated equipment, including hand tools. |
| <input checked="" type="checkbox"/> | 2. Air contaminant detectors or recorders, combustion controllers or shutoffs. |
| <input checked="" type="checkbox"/> | 3. Any consumer product used in the same manner as in normal consumer use, provided the use results in a duration and frequency of exposure which are not greater than those experienced by consumer, and which may include, but not be limited to, personal use items; janitorial cleaning supplies, office supplies and supplies to maintain copying equipment. |
| <input checked="" type="checkbox"/> | 4. Bathroom/toilet vent emissions. |
| <input checked="" type="checkbox"/> | 5. Batteries and battery charging stations, except at battery manufacturing plants. |
| <input checked="" type="checkbox"/> | 6. Bench-scale laboratory equipment used for physical or chemical analysis, but not lab fume hoods or vents. Many lab fume hoods or vents might qualify for treatment as insignificant (depending on the applicable SIP) or be grouped together for purposes of description. |
| <input type="checkbox"/> | 7. Blacksmith forges. |
| <input checked="" type="checkbox"/> | 8. Boiler water treatment operations, not including cooling towers. |
| <input checked="" type="checkbox"/> | 9. Brazing, soldering or welding equipment used as an auxiliary to the principal equipment at the source. |
| <input type="checkbox"/> | 10. CO ₂ lasers, used only on metals and other materials which do not emit HAP in the process. |
| <input checked="" type="checkbox"/> | 11. Combustion emissions from propulsion of mobile sources, except for vessel emissions from Outer Continental Shelf sources. |
| <input type="checkbox"/> | 12. Combustion units designed and used exclusively for comfort heating that use liquid petroleum gas or natural gas as fuel. |
| <input checked="" type="checkbox"/> | 13. Comfort air conditioning or ventilation systems not used to remove air contaminants generated by or released from specific units of equipment. |
| <input checked="" type="checkbox"/> | 14. Demineralized water tanks and demineralizer vents. |
| <input type="checkbox"/> | 15. Drop hammers or hydraulic presses for forging or metalworking. |
| <input type="checkbox"/> | 16. Electric or steam-heated drying ovens and autoclaves, but not the emissions from the articles or substances being processed in the ovens or autoclaves or the boilers delivering the steam. |
| <input type="checkbox"/> | 17. Emergency (backup) electrical generators at residential locations. |
| <input checked="" type="checkbox"/> | 18. Emergency road flares. |
| <input type="checkbox"/> | 19. Emission units which do not have any applicable requirements and which emit criteria pollutants (CO, NO _x , SO ₂ , VOC and PM) into the atmosphere at a rate of less than 1 pound per hour and less than 10,000 pounds per year aggregate total for each criteria pollutant from all emission units. Please specify all emission units for which this exemption applies along with the quantity of criteria pollutants emitted on an hourly and annual basis: _____ _____ _____ _____ _____ _____ _____ _____ |

| 24. Insignificant Activities (Check all that apply) | |
|---|--|
| <input type="checkbox"/> | 20. Emission units which do not have any applicable requirements and which emit hazardous air pollutants into the atmosphere at a rate of less than 0.1 pounds per hour and less than 1,000 pounds per year aggregate total for all HAPs from all emission sources. This limitation cannot be used for any source which emits dioxin/furans nor for toxic air pollutants as per 45CSR27. Please specify all emission units for which this exemption applies along with the quantity of hazardous air pollutants emitted on an hourly and annual basis: _____ _____ _____ _____ _____ |
| <input type="checkbox"/> | 21. Environmental chambers not using hazardous air pollutant (HAP) gases. |
| <input checked="" type="checkbox"/> | 22. Equipment on the premises of industrial and manufacturing operations used solely for the purpose of preparing food for human consumption. |
| <input type="checkbox"/> | 23. Equipment used exclusively to slaughter animals, but not including other equipment at slaughterhouses, such as rendering cookers, boilers, heating plants, incinerators, and electrical power generating equipment. |
| <input checked="" type="checkbox"/> | 24. Equipment used for quality control/assurance or inspection purposes, including sampling equipment used to withdraw materials for analysis. |
| <input checked="" type="checkbox"/> | 25. Equipment used for surface coating, painting, dipping or spray operations, except those that will emit VOC or HAP. |
| <input checked="" type="checkbox"/> | 26. Fire suppression systems. |
| <input checked="" type="checkbox"/> | 27. Firefighting equipment and the equipment used to train firefighters. |
| <input checked="" type="checkbox"/> | 28. Flares used solely to indicate danger to the public. |
| <input checked="" type="checkbox"/> | 29. Fugitive emission related to movement of passenger vehicle provided the emissions are not counted for applicability purposes and any required fugitive dust control plan or its equivalent is submitted. |
| <input type="checkbox"/> | 30. Hand-held applicator equipment for hot melt adhesives with no VOC in the adhesive formulation. |
| <input checked="" type="checkbox"/> | 31. Hand-held equipment for buffing, polishing, cutting, drilling, sawing, grinding, turning or machining wood, metal or plastic. |
| <input type="checkbox"/> | 32. Humidity chambers. |
| <input checked="" type="checkbox"/> | 33. Hydraulic and hydrostatic testing equipment. |
| <input checked="" type="checkbox"/> | 34. Indoor or outdoor kerosene heaters. |
| <input checked="" type="checkbox"/> | 35. Internal combustion engines used for landscaping purposes. |
| <input type="checkbox"/> | 36. Laser trimmers using dust collection to prevent fugitive emissions. |
| <input checked="" type="checkbox"/> | 37. Laundry activities, except for dry-cleaning and steam boilers. |
| <input type="checkbox"/> | 38. Natural gas pressure regulator vents, excluding venting at oil and gas production facilities. |
| <input checked="" type="checkbox"/> | 39. Oxygen scavenging (de-aeration) of water. |
| <input type="checkbox"/> | 40. Ozone generators. |
| <input checked="" type="checkbox"/> | 41. Plant maintenance and upkeep activities (e.g., grounds-keeping, general repairs, cleaning, painting, welding, plumbing, re-tarring roofs, installing insulation, and paving parking lots) provided these activities are not conducted as part of a manufacturing process, are not related to the source's primary business activity, and not otherwise triggering a permit modification. (Cleaning and painting activities qualify if they are not subject to VOC or HAP control requirements. Asphalt batch plant |

| 24. Insignificant Activities (Check all that apply) | |
|--|---|
| | owners/operators must still get a permit if otherwise requested.) |
| <input checked="" type="checkbox"/> | 42. Portable electrical generators that can be moved by hand from one location to another. "Moved by Hand" means that it can be moved without the assistance of any motorized or non-motorized vehicle, conveyance, or device. |
| <input checked="" type="checkbox"/> | 43. Process water filtration systems and demineralizers. |
| <input checked="" type="checkbox"/> | 44. Repair or maintenance shop activities not related to the source's primary business activity, not including emissions from surface coating or de-greasing (solvent metal cleaning) activities, and not otherwise triggering a permit modification. |
| <input checked="" type="checkbox"/> | 45. Repairs or maintenance where no structural repairs are made and where no new air pollutant emitting facilities are installed or modified. |
| <input checked="" type="checkbox"/> | 46. Routing calibration and maintenance of laboratory equipment or other analytical instruments. |
| <input type="checkbox"/> | 47. Salt baths using nonvolatile salts that do not result in emissions of any regulated air pollutants. Shock chambers. |
| <input type="checkbox"/> | 48. Shock chambers. |
| <input type="checkbox"/> | 49. Solar simulators. |
| <input checked="" type="checkbox"/> | 50. Space heaters operating by direct heat transfer. |
| <input type="checkbox"/> | 51. Steam cleaning operations. |
| <input checked="" type="checkbox"/> | 52. Steam leaks. |
| <input type="checkbox"/> | 53. Steam sterilizers. |
| <input checked="" type="checkbox"/> | 54. Steam vents and safety relief valves. |
| <input checked="" type="checkbox"/> | 55. Storage tanks, reservoirs, and pumping and handling equipment of any size containing soaps, vegetable oil, grease, animal fat, and nonvolatile aqueous salt solutions, provided appropriate lids and covers are utilized. |
| <input type="checkbox"/> | 56. Storage tanks, vessels, and containers holding or storing liquid substances that will not emit any VOC or HAP. Exemptions for storage tanks containing petroleum liquids or other volatile organic liquids should be based on size limits such as storage tank capacity and vapor pressure of liquids stored and are not appropriate for this list. |
| <input type="checkbox"/> | 57. Such other sources or activities as the Director may determine. |
| <input checked="" type="checkbox"/> | 58. Tobacco smoking rooms and areas. |
| <input checked="" type="checkbox"/> | 59. Vents from continuous emissions monitors and other analyzers. |

Section 5: Emission Units, Control Devices, and Emission Points

| |
|---|
| <p>25. Equipment Table</p> |
| <p>Fill out the Title V Equipment Table and provide it as ATTACHMENT D.</p> |
| <p>26. Emission Units</p> |
| <p>For each emission unit listed in the Title V Equipment Table, fill out and provide an Emission Unit Form as ATTACHMENT E.</p> |
| <p>For each emission unit not in compliance with an applicable requirement, fill out a Schedule of Compliance Form as ATTACHMENT F. <u>N/A</u></p> |
| <p>27. Control Devices</p> |
| <p>For each control device listed in the Title V Equipment Table, fill out and provide an Air Pollution Control Device Form as ATTACHMENT G.</p> |
| <p>For any control device that is required on an emission unit in order to meet a standard or limitation for which the potential pre-control device emissions of an applicable regulated air pollutant is greater than or equal to the Title V Major Source Threshold Level, refer to the Compliance Assurance Monitoring (CAM) Form(s) for CAM applicability. Fill out and provide these forms, if applicable, for each Pollutant Specific Emission Unit (PSEU) as ATTACHMENT H.</p> |

| | |
|---|----------------------------------|
| 28. Certification of Truth, Accuracy and Completeness and Certification of Compliance | |
| <i>Note: This Certification must be signed by a responsible official. The original, signed in blue ink, must be submitted with the application. Applications without an original signed certification will be considered as incomplete.</i> | |
| a. Certification of Truth, Accuracy and Completeness | |
| I certify that I am a responsible official (as defined at 45CSR§30-2.38) and am accordingly authorized to make this submission on behalf of the owners or operators of the source described in this document and its attachments. I certify under penalty of law that I have personally examined and am familiar with the statements and information submitted in this document and all its attachments. Based on my inquiry of those individuals with primary responsibility for obtaining the information, I certify that the statements and information are to the best of my knowledge and belief true, accurate, and complete. I am aware that there are significant penalties for submitting false statements and information or omitting required statements and information, including the possibility of fine and/or imprisonment. | |
| b. Compliance Certification | |
| Except for requirements identified in the Title V Application for which compliance is not achieved, I, the undersigned hereby certify that, based on information and belief formed after reasonable inquiry, all air contaminant sources identified in this application are in compliance with all applicable requirements. | |
| Responsible official (type or print) | |
| Name: Aaron M. Sink | Title: Plant Manager |
| Responsible official's signature: | |
| Signature:  | Signature Date: <u>12/3/2008</u> |
| (Must be signed and dated in blue ink) | |

| | |
|---|---|
| Note: Please check all applicable attachments included with this permit application: | |
| <input checked="" type="checkbox"/> | ATTACHMENT A: Area Map |
| <input checked="" type="checkbox"/> | ATTACHMENT B: Plot Plan(s) |
| <input checked="" type="checkbox"/> | ATTACHMENT C: Process Flow Diagram(s) |
| <input checked="" type="checkbox"/> | ATTACHMENT D: Equipment Table |
| <input checked="" type="checkbox"/> | ATTACHMENT E: Emission Unit Form(s) |
| <input type="checkbox"/> | ATTACHMENT F: Schedule of Compliance Form(s) |
| <input checked="" type="checkbox"/> | ATTACHMENT G: Air Pollution Control Device Form(s) |
| <input checked="" type="checkbox"/> | ATTACHMENT H: Compliance Assurance Monitoring (CAM) Form(s) |

All of the required forms and additional information can be found and downloaded from, the DEP website at www.wvdep.org/dag, requested by phone (304) 926-0475, and/or obtained through the mail.

Attachment A

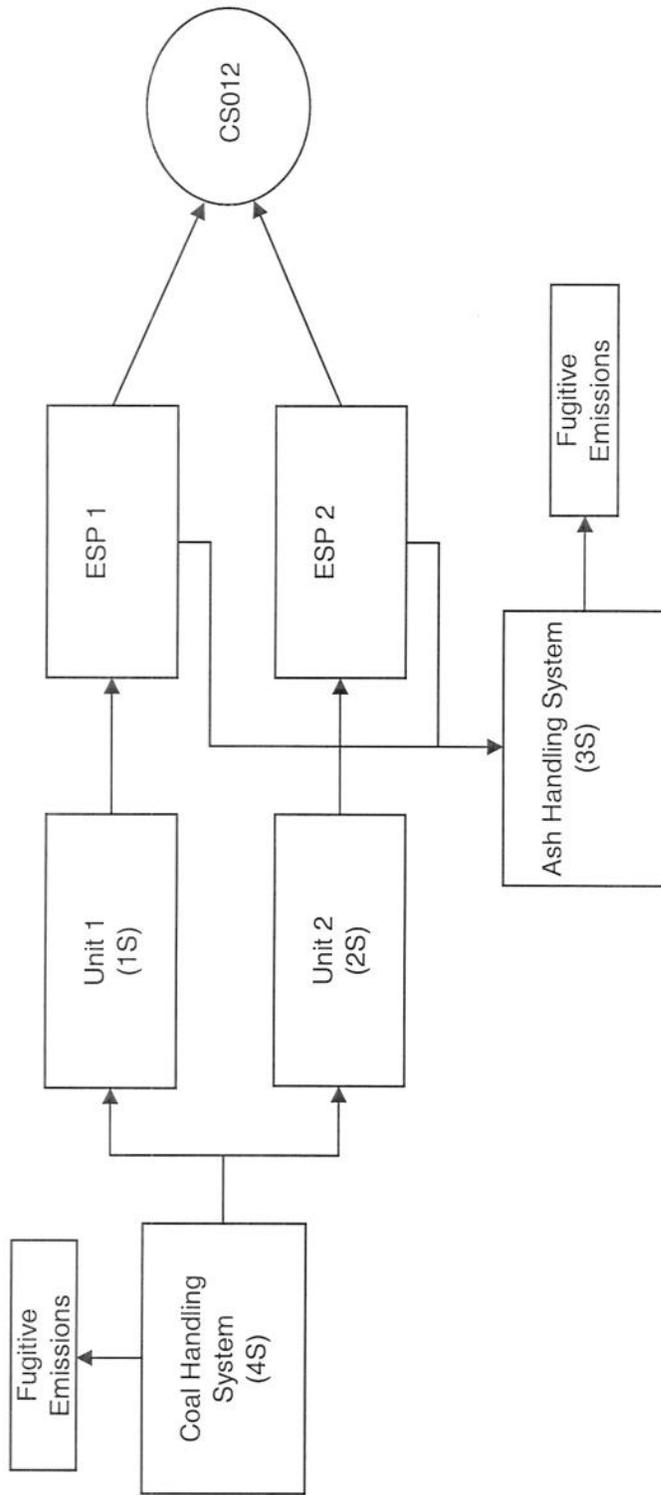
Area Map

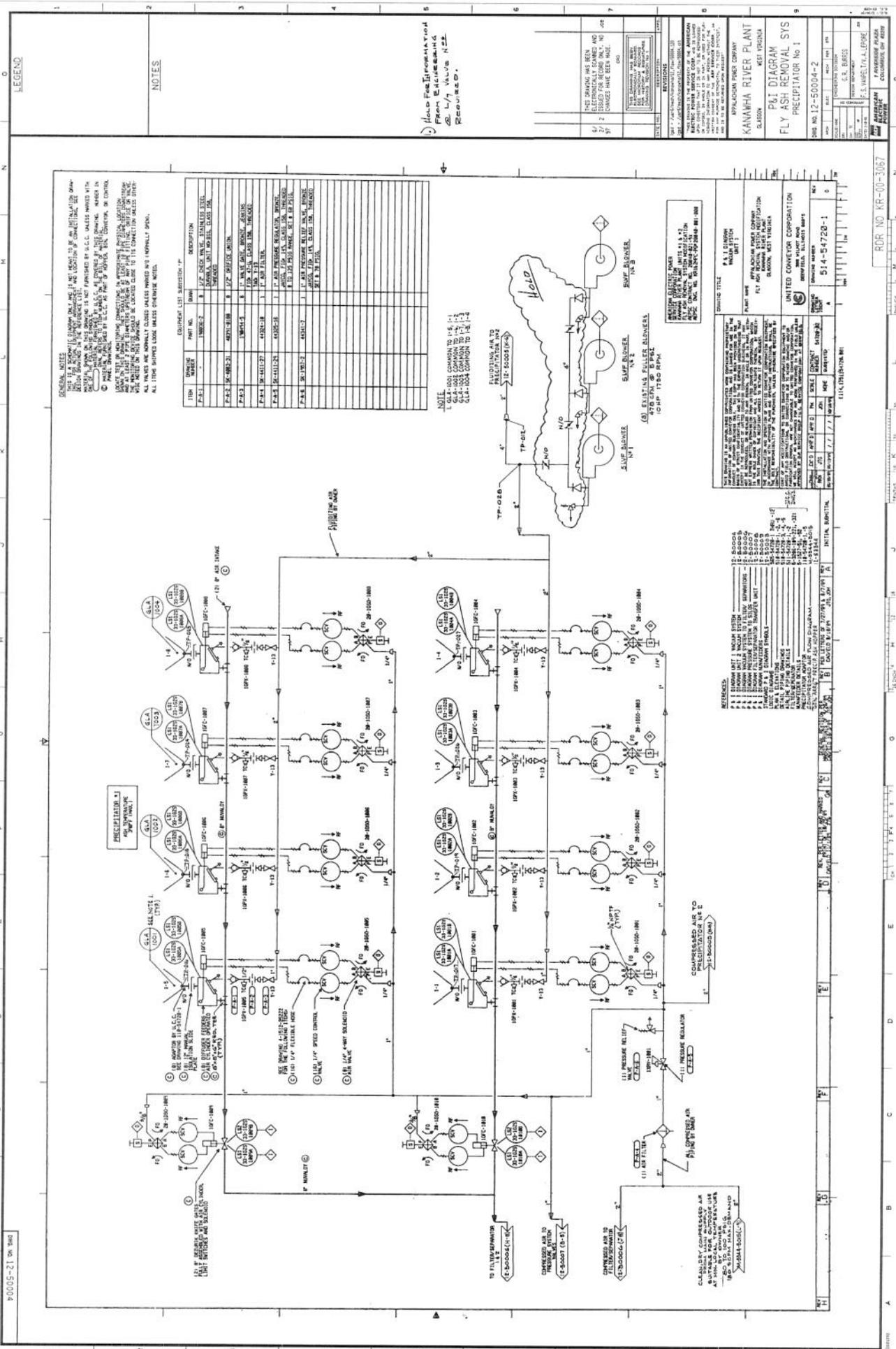
Attachment B

Plot Plans

Attachment C
Process Flow Diagrams

Kanawha River Plant
Emission Source Flow Diagram





LEGEND

GENERAL NOTES

1. THIS P&ID IS A WORKING DRAWING AND IS NOT TO BE USED FOR CONSTRUCTION PURPOSES WITHOUT THE APPROVAL OF THE DESIGNER.
2. ALL DIMENSIONS ARE IN FEET UNLESS OTHERWISE NOTED.
3. ALL VALVES ARE NORMALLY CLOSED UNLESS NOTED OTHERWISE.
4. ALL INSTRUMENTS ARE TO BE INSTALLED AS SHOWN UNLESS OTHERWISE NOTED.
5. ALL INSTRUMENTS ARE TO BE INSTALLED AS SHOWN UNLESS OTHERWISE NOTED.
6. ALL INSTRUMENTS ARE TO BE INSTALLED AS SHOWN UNLESS OTHERWISE NOTED.
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18. ALL INSTRUMENTS ARE TO BE INSTALLED AS SHOWN UNLESS OTHERWISE NOTED.
19. ALL INSTRUMENTS ARE TO BE INSTALLED AS SHOWN UNLESS OTHERWISE NOTED.
20. ALL INSTRUMENTS ARE TO BE INSTALLED AS SHOWN UNLESS OTHERWISE NOTED.

| ITEM | NUMBER | DESCRIPTION |
|--------|--------|---------------------|
| P-1.1 | 1.1 | 1.1 AIR COMPRESSOR |
| P-1.2 | 1.2 | 1.2 AIR COMPRESSOR |
| P-1.3 | 1.3 | 1.3 AIR COMPRESSOR |
| P-1.4 | 1.4 | 1.4 AIR COMPRESSOR |
| P-1.5 | 1.5 | 1.5 AIR COMPRESSOR |
| P-1.6 | 1.6 | 1.6 AIR COMPRESSOR |
| P-1.7 | 1.7 | 1.7 AIR COMPRESSOR |
| P-1.8 | 1.8 | 1.8 AIR COMPRESSOR |
| P-1.9 | 1.9 | 1.9 AIR COMPRESSOR |
| P-1.10 | 1.10 | 1.10 AIR COMPRESSOR |
| P-1.11 | 1.11 | 1.11 AIR COMPRESSOR |
| P-1.12 | 1.12 | 1.12 AIR COMPRESSOR |
| P-1.13 | 1.13 | 1.13 AIR COMPRESSOR |
| P-1.14 | 1.14 | 1.14 AIR COMPRESSOR |
| P-1.15 | 1.15 | 1.15 AIR COMPRESSOR |
| P-1.16 | 1.16 | 1.16 AIR COMPRESSOR |
| P-1.17 | 1.17 | 1.17 AIR COMPRESSOR |
| P-1.18 | 1.18 | 1.18 AIR COMPRESSOR |
| P-1.19 | 1.19 | 1.19 AIR COMPRESSOR |
| P-1.20 | 1.20 | 1.20 AIR COMPRESSOR |

NOTE

1. G.L.A. 100 COMMON TO 1.1-1.4
2. G.L.A. 100 COMMON TO 1.1-1.3
3. G.L.A. 100 COMMON TO 1.1-1.4

REVISIONS

| NO. | DATE | DESCRIPTION |
|-----|------|-------------|
| 1 | | |
| 2 | | |
| 3 | | |
| 4 | | |
| 5 | | |
| 6 | | |
| 7 | | |
| 8 | | |
| 9 | | |
| 10 | | |

UNITED CONCRETE CORPORATION

514-54720-1

DATE: 11/10/08

PROJECT: FLY ASH REMOVAL SYS

PRECIPITATOR NO. 1

SCALE: AS SHOWN

DESIGNED BY: [Name]

CHECKED BY: [Name]

APPROVED BY: [Name]

DATE: 11/10/08

PROJECT: FLY ASH REMOVAL SYS

PRECIPITATOR NO. 1

SCALE: AS SHOWN

DESIGNED BY: [Name]

CHECKED BY: [Name]

APPROVED BY: [Name]

DATE: 11/10/08

PROJECT: FLY ASH REMOVAL SYS

PRECIPITATOR NO. 1

SCALE: AS SHOWN

DESIGNED BY: [Name]

CHECKED BY: [Name]

APPROVED BY: [Name]

DATE: 11/10/08

PROJECT: FLY ASH REMOVAL SYS

PRECIPITATOR NO. 1

SCALE: AS SHOWN

DESIGNED BY: [Name]

CHECKED BY: [Name]

APPROVED BY: [Name]

DATE: 11/10/08

PROJECT: FLY ASH REMOVAL SYS

PRECIPITATOR NO. 1

Attachment D

Source Table and Equipment Table

1.0. Emission Units

| Emission Unit ID | Emission Point ID | Emission Unit Description | Year Installed ¹ | Design Capacity ² | Control Device ³ |
|--|-------------------|--|-----------------------------|-------------------------------|-----------------------------|
| Boiler & Associated Equipment | | | | | |
| Unit 1 | CS012 | Boiler: Babcock & Wilcox, Model # RB-154 | 1953 | 1950 mmBtu/hr | High efficiency ESP, LNB |
| Unit 2 | CS012 | Boiler: Babcock & Wilcox, Model # RB-154 | 1953 | 1950 mmBtuthr | High efficiency ESP, LNB |
| Coal & Ash handling Equipment | | | | | |
| BU | BU | Barge Unloader (barge to F-I, C-I) | 2007 | 750 TPH | MC, WS |
| Station I | Sta-I | BU thou F-I to C-I | 1953 | NA | MC, WS, PE |
| Feeder I | F-I | BU to C-I | 1953 | 750 TPH | MC, PE |
| Conveyor I | C-I | BU to Sta-II | 1953 | 750 TPH | MC, PE |
| Station II | Sta-II | C-I thru CRI, CRII, Scn-I to C-II | 1953 | NA | MC, FE |
| Crusher I | CR-I | Optional Path from C-I to C-II | 1953 | 400 TPH | MC, FE |
| Crusher II | CR-II | Optional Path from C-I to C-II | 1953 | 400 TPH | MC, FE |
| Screen I | Scn-I | Optional Path from C-I to C-II | 1953 | 800 TPH | MC, FE |
| Conveyor II | C-II | Sta-II to CSA | 1953 | 750 TPH | MC, PE |
| CSA | CSA | Coal Storage Area | 1953 | 325,000 Tons | MC, WS |
| CTU | CTU | Coal Truck Unloading onto CSA | 1953 | Max - 200 Coal Trucks per day | MC, WS |
| Station III | Sta- III | CSA thru F-II, F-III, F-IV, F-V to C-III | 1953 | NA | MC, FE |
| Feeder II | F-II | CSA to C-III | 1953 | 750 TPH | MC, FE |
| Feeder III | F-III | CSA to C-III | 1953 | 750 TPH | MC, FE |
| Feeder IV | F-IV | CSA to C-III | 1953 | 750 TPH | MC, FE |
| Feeder V | F-V | CSA to C-III | 1953 | 750 TPH | MC, FE |
| Station IIIA | Sta-IIIA | CSA thru F-VI to C-III | 1953 | NA | MC, FE |
| Feeder VI | F-VI | CSA to C-III | 1953 | 750 TPH | MC, FE |
| Conveyor III | C-III | CSA thru Feeders II to VI to C-IV | 1953 | 1500 TPH | MC, PE |
| Station IV | Sta-IV | C-III to C-IV | 1953 | NA | MC, FE |
| Conveyor IV | C-IV | C-III to Tripper I | 1953 | 1500 TPH | MC FE |

¹ Year installed" reflects the "commenced" construction or modification date as defined in 40 CFR 60.

² Rated Design Capacity

³ Control Device/Control System abbreviations: ESP Electrostatic Precipitators, LNB = Low NOx System, FE = Full enclosure. PE = Partial Enclosure, BH – Baghouse(s), MC = Moisture Content WS = Wetting Spray, VF; = Vent Filter

| Emission Unit ID | Emission Point ID | Emission Unit Description | Year Installed ¹ | Design Capacity ² | Control Device ³ |
|---------------------|-------------------|--|-----------------------------|--------------------------------|-----------------------------|
| Tripper I | T-1 | C-1V to Unit Coal Bunkers | 1953 | 1500 TPH | MC, FE |
| FA Truck Bin | FA-TB | Flyash Truck Bin | 1968 | 400 Tons | FE, VF |
| FA Silo 1 | FA-S1 | Flyash Storage Silo 1 | 1968 | 200 Tons | FE, VF |
| FA Silo 2 | FA-S2 | Flyash Storage Silo 2 | 1968 | 150 Tons | FE, VF |
| FA Silo 3 | FA-S3 | Flyash Storage Silo 3 | 1968 | 150 Tons | FE, VF |
| FA-Truck Load Out | FA-TL | Flyash load out to trucks. | N/A | Max - 30 Trucks loaded per day | WS, PE |
| Haul Roads | HR | Roads for Coal & Flyash Transport | 1952 | NA | WS |
| Miscellaneous Other | | | | | |
| Pump Engine 1 | PEI | Diesel Engine Fire Pump | 1978 | 300 hp | NA |
| Tank 1 | Tank 1 | Main Fuel Oil Tank | 1953 | 25,000 gallons | NA |
| Tank 2 | Tank 2 | Main Fuel Oil Tank | 1953 | 25,000 gallons | NA |
| Tank 3 | Tank 3 | Main Fuel Oil Tank | 1953 | 25,000 gallons | NA |
| Tank 4 | Tank 4 | Clean Oil Tank (Lube Oil Room) | 1953 | 9,750 gallons | NA |
| Tank 5 | Tank 5 | Dirty Oil Tank (Lube Oil Room) | 1953 | 9,750 gallons | NA |
| Tank 6 | Tank 6 | Clean Oil Makeup Tank (Cube Oil Room) | 1953 | 1,000 gallons | NA |
| Tank 7 | Tank 7 | U1 Main Turbine Oil Tank | 1953 | 6,000 gallons | NA |
| Tank 8 | Tank 8 | U2 Main Turbine Oil Tank | 1953 | 6,000 gallons | NA |
| Tank 9 | Tank 9 | Misc. Oil Storage Room Tank | 1953 | 2,500 gallons | NA |
| Tank 10 | Tank 10 | Main Transformers Insulating Oil Tanks - Two per Unit | 1953 | 4,225 gallons | NA |
| Tank 11 | Tank 11 | UI HP Transformer Insulating Oil Tank | 1953 | 4,600 gallons | NA |
| Tank 12 | Tank 12 | U2 HP Transformer Insulating Oil Tank | 1953 | 4,600 gallons | NA |
| Tank 13 | Tank 13 | HP Spare Transformer Insulating Oil Tank | 1953 | 4,600 gallons | NA |
| Tank 14 | Tank 14 | U1 — 101 Transformer insulating Oil Tank | 1953 | 4,810 gallons | NA |
| Tank 15 | Tank 15 | U2 — 101 Transformer Insulating Oil Tank | 1953 | 4,810 gallons | NA |
| Tank 16 | Tank 16 | Aux Transformers Insulating Oil Tanks - Three per Unit | 1953 | 1,575 gallons | NA |

| Emission Unit ID | Emission Point ID | Emission Unit Description | Year Installed ¹ | Design Capacity ² | Control Device ³ |
|------------------|-------------------|---|-----------------------------|------------------------------|-----------------------------|
| Tank 17 | Tank 17 | Turbine Room Basement Aux. Transformers - Six Units | 1953 | 215 gallons | NA |
| Tank 18 | Tank 18 | U1 - ESP Transformers Insulating Oil Tank | 1968 | 322 gallons | NA |
| Tank 19 | Tank 19 | U2 - ESP Transformer Insulating Oil Tanks - Two Units | 1968 | 374 gallons | NA |
| Tank 20 | Tank 20 | U 1 & 2 TR Set Insulating Oil Tanks- Twenty Four Total Transformers | 1968 | 152 gallons | NA |
| Tank 21 | Tank 21 | Coal Tractor Shed #2 Diesel Tank | 1990 | 10,000 gallons | NA |
| Tank 22 | Tank 22 | Coal Tractor Shed Kerosene Tank | 1990 | 4,000 gallons | NA |
| Tank 23 | Tank 23 | Plant Gasoline Tank | 1990 | 2,500 gallons | NA |
| Tank 24 | Tank 24 | Used Oil Tank #1 | 1953 | 1,200 gallons | NA |
| Tank 25 | Tank 25 | Used Oil Tank #2 | 1953 | 1,200 gallons | NA |
| Tank 26 | Tank 26 | Ash Contractor Diesel Fuel Tank | 2002 | 3,000 gallons | FE |
| Tank 27 | Tank 27 | U1 Mill Gear Boxes Lube Oil Tanks - Eight per Unit | 1953 | 135 gallons | NA |
| Tank 28 | Tank 28 | U2 Mill Gear Boxes Lube Oil Tank - Eight per Unit | 1953 | 135 gallons | NA |
| Tank 29 | Tank 29 | U1 ID Fan Oil Tanks | 1986 | 220 gallons | NA |
| Tank 30 | Tank 30 | U2 ID Fan Oil Tanks | 1986 | 220 gallons | NA |
| Tank 31 | Tank 31 | U1 Generator Seal Oil Tank | 1953 | 1,000 gallons | NA |
| Tank 32 | Tank 32 | U2 Generator Seal Oil Tank | 1953 | 1,000 gallons | NA |
| Tank 33 | Tank 33 | Diesel Tank (Fire Pump) | 1953 | 200 gallons | NA |
| Tank 34 | Tank 34 | CO2 Cylinder Storage Turbine Room | 1953 | 1,200 lbs | NA |
| Tank 35 | Tank 35 | Hydrogen Cylinder Storage | 1997 | 55,000 cu ft | NA |
| Tank 36 | Tank 36 | Nitrogen Cylinder Rack | 1953 | 3,000 cu ft | NA |
| Tank 37 | Tank 37 | Used Oil Tank - Plant Heaters/ Two Units - Turbine Room | 1992 | 500 gallons | NA |
| Tank 38 | Tank 38 | Used Oil Tank - Plant Heater- Machine Shop | 1992 | 200 gallons | NA |
| Tank 39 | Tank 39 | Sodium Hydroxide, 20% Aqueous | 1988 | 15,000 gallons | FE |

Attachment E
Emission Unit Forms

| ATTACHMENT E - Emission Unit Form | | | |
|--|--|---|----------------------|
| Emission Unit Description: Steam Generator #1 | | | |
| Emission unit ID number: IS | Emission unit name: Unit 1 Main Boiler | List any control devices associated with this emission unit: ESP, LNB | |
| Provide a description of the emission unit (type, method of operation, design parameters, etc.): Pulverized coal-fired dry bottom boiler. | | | |
| Manufacturer: Babcock and Wilcox | Model number: RB-154 | Serial number: Custom | |
| Construction date: N/A | Installation date: 7/16/1953 (Commercial Date) | Modification date(s): N/A | |
| Design Capacity (examples: furnaces - tons/hr, tanks - gallons): Nominal – 1950 mmBTU/hr This heat input value is for operation at the nominal boiler rating. Boiler design enables the boiler to be operated above the nominal rated capacity. | | | |
| Maximum Hourly Throughput: Nominal Hourly Throughput is 1,335,000 lb/hr steam. | Maximum Annual Throughput: 11,694,600,000 lbs. steam | Maximum Operating Schedule: 8760 hrs/year | |
| Fuel Usage Data (fill out all applicable fields) | | | |
| Does this emission unit combust fuel? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No | | If yes, is it? <input checked="" type="checkbox"/> Indirect Fired <input type="checkbox"/> Direct Fired | |
| Maximum design heat input and/or maximum horsepower rating: 2413 mmBTU/hr | | Type and Btu/hr rating of burners: Nominal Boiler Rating – 1950 mmBTU/hr | |
| List the primary fuel type(s) and if applicable, the secondary fuel type(s). For each fuel type listed, provide the maximum hourly and annual fuel usage for each. This steam generator will burn coal and utilize fuel oil for startup/shutdown and for flame stabilization. Other materials burned include non-hazardous water treatment resins, non-hazardous metal cleaning waste, and waste oils. | | | |
| Describe each fuel expected to be used during the term of the permit. | | | |
| Fuel Type | Max. Sulfur Content | Max. Ash Content | BTU Value |
| Coal (including Bituminous and blended Bituminous with PRB) | 1.6 lb/mmBTU SO2 | 15% | 12,500 BTU/lb (max.) |
| Fuel Oil | 1% Sulfur | Trace | 148,000 BTU/gal |
| | | | |

| <i>Emissions Data</i> | | |
|---|---------------------|---------|
| Criteria Pollutants | Potential Emissions | |
| | PPH | TPY |
| Carbon Monoxide (CO) | 154.7 | 677.5 |
| Nitrogen Oxides (NO _x) | 1,930.4 | 8,455 |
| Lead (Pb) | 0.121 | 0.53 |
| Particulate Matter (PM _{2.5}) | 29.3 | 128.1 |
| Particulate Matter (PM ₁₀) | 65.8 | 288.2 |
| Total Particulate Matter (TSP) | 97.5 | 427 |
| Sulfur Dioxide (SO ₂) | 3,120.0 | 13,666 |
| Volatile Organic Compounds (VOC) | 34.0 | 149 |
| Hazardous Air Pollutants | Potential Emissions | |
| | PPH | TPY |
| Arsenic | 0.187 | 0.82 |
| Beryllium | 0.445 | 1.95 |
| Chromium | 0.067 | 0.29 |
| Cobalt | 0.024 | 0.11 |
| Manganese | 0.125 | 0.55 |
| Mercury | 0.058 | 0.25 |
| Nickel | 0.056 | 0.25 |
| Selenium | 1.61 | 7.06 |
| Hydrogen Chloride | 410.5 | 1,797.8 |
| Hydrogen Fluoride | 35.6 | 156.0 |
| Regulated Pollutants other than Criteria and HAP | Potential Emissions | |
| | PPH | TPY |
| | | |
| | | |
| | | |

List the method(s) used to calculate the potential emissions (include dates of any stack tests conducted, versions of software used, source and dates of emission factors, etc.).

Potential emission estimates are based on a combination of regulatory limitations, use of AP-42 emission factors, and operational and engineering knowledge.

Applicable Requirements

List all applicable requirements for this emission unit. For each applicable requirement, include the underlying rule/regulation citation and/or **construction permit** with the condition number. (Note: Title V permit condition numbers alone are not the underlying applicable requirements). If an emission limit is calculated based on the type of source and design capacity or if a standard is based on a design parameter, this information should also be included.

See Attachment I for recommended language from existing Reg. 30 permit.

The following permit conditions are considered the applicable requirements for this emission unit. Where appropriate, the actual permit is attached to provide the applicable language along with the underlying rule/regulatory citation and calculation basis is provided. For existing limitations previously captured in a permit, the calculations were provided in the previous permit application(s). No changes to existing permit limits are being requested at this time.

See Proposed Regulation 30 Permit (attached) Conditions 4.1.2 through 4.1.6.

Permit Shield

For all applicable requirements listed above, provide monitoring/testing/recordkeeping/reporting which shall be used to demonstrate compliance. If the method is based on a permit or rule, include the condition number or citation. (Note: Each requirement listed above must have an associated method of demonstrating compliance. If there is not already a required method in place, then a method must be proposed.)

The following permit conditions are considered the applicable requirements for monitoring, testing, recordkeeping and reporting for this emission unit. Where appropriate, the actual permits are attached to provide the actual language along with the underlying rule/regulatory citation. No changes are being requested at this time.

See Proposed Regulation 30 Permit (attached) Conditions 4.2.1 through 4.2.3; Section 4.3; Section 4.4; and Section 4.5.

Are you in compliance with all applicable requirements for this emission unit? Yes No

If no, complete the **Schedule of Compliance Form** as ATTACHMENT F.

ATTACHMENT E - Emission Unit Form

36.

| | | | |
|--|--|---|----------------------|
| Emission Unit Description: Steam Generator #2 | | | |
| Emission unit ID number: 2S | Emission unit name: Unit 2 Main Boiler | List any control devices associated with this emission unit: ESP, LNB | |
| Provide a description of the emission unit (type, method of operation, design parameters, etc.): Pulverized coal-fired dry bottom boiler. | | | |
| Manufacturer: Babcock and Wilcox | Model number: RB-154 | Serial number: Custom | |
| Construction date: N/A | Installation date: 12/31/1953 (Commercial Date) | Modification date(s): N/A | |
| Design Capacity (examples: furnaces - tons/hr, tanks - gallons): Nominal – 1950 mmBTU/hr This heat input value is for operation at the nominal boiler rating. Boiler design enables the boiler to be operated above the nominal rated capacity. | | | |
| Maximum Hourly Throughput: Nominal Hourly Throughput is 1,335,000 lb/hr steam. | Maximum Annual Throughput: 11,694,600,000 lbs. steam | Maximum Operating Schedule: 8760 hrs/year | |
| Fuel Usage Data (fill out all applicable fields) | | | |
| Does this emission unit combust fuel? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No | | If yes, is it? <input checked="" type="checkbox"/> Indirect Fired <input type="checkbox"/> Direct Fired | |
| Maximum design heat input and/or maximum horsepower rating: 2413 mmBTU/hr | | Type and Btu/hr rating of burners: Nominal Boiler Rating – 1950 mmBTU/hr | |
| List the primary fuel type(s) and if applicable, the secondary fuel type(s). For each fuel type listed, provide the maximum hourly and annual fuel usage for each. This steam generator will burn coal and utilize fuel oil for startup/shutdown and for flame stabilization. Other materials burned include non-hazardous water treatment resins, non-hazardous metal cleaning waste, and waste oils. | | | |
| Describe each fuel expected to be used during the term of the permit. | | | |
| Fuel Type | Max. Sulfur Content | Max. Ash Content | BTU Value |
| Coal (including Bituminous and blended Bituminous with PRB) | 1.6 lb/mmBTU SO ₂ | 15% | 12,500 BTU/lb (max.) |
| Fuel Oil | 1% Sulfur | Trace | 148,000 BTU/gal |
| | | | |

| <i>Emissions Data</i> | | |
|---|---------------------|---------|
| Criteria Pollutants | Potential Emissions | |
| | PPH | TPY |
| Carbon Monoxide (CO) | 154.7 | 677.5 |
| Nitrogen Oxides (NO _x) | 1,930.4 | 8,455 |
| Lead (Pb) | 0.121 | 0.53 |
| Particulate Matter (PM _{2.5}) | 29.3 | 128.1 |
| Particulate Matter (PM ₁₀) | 65.8 | 288.2 |
| Total Particulate Matter (TSP) | 97.5 | 427 |
| Sulfur Dioxide (SO ₂) | 3,120.0 | 13,666 |
| Volatile Organic Compounds (VOC) | 34.0 | 149 |
| Hazardous Air Pollutants | Potential Emissions | |
| | PPH | TPY |
| Arsenic | 0.187 | 0.82 |
| Beryllium | 0.445 | 1.95 |
| Chromium | 0.067 | 0.29 |
| Cobalt | 0.024 | 0.11 |
| Manganese | 0.125 | 0.55 |
| Mercury | 0.058 | 0.25 |
| Nickel | 0.056 | 0.25 |
| Selenium | 1.61 | 7.06 |
| Hydrogen Chloride | 410.5 | 1,797.8 |
| Hydrogen Fluoride | 35.6 | 156.0 |
| Regulated Pollutants other than Criteria and HAP | Potential Emissions | |
| | PPH | TPY |
| | | |
| | | |
| | | |

List the method(s) used to calculate the potential emissions (include dates of any stack tests conducted, versions of software used, source and dates of emission factors, etc.).

Potential emission estimates are based on a combination of regulatory limitations, use of AP-42 emission factors, and operational and engineering knowledge.

Applicable Requirements

List all applicable requirements for this emission unit. For each applicable requirement, include the underlying rule/regulation citation and/or **construction permit** with the condition number. (Note: Title V permit condition numbers alone are not the underlying applicable requirements). If an emission limit is calculated based on the type of source and design capacity or if a standard is based on a design parameter, this information should also be included.

See Attachment I for recommended language from existing Reg. 30 permit.

The following permit conditions are considered the applicable requirements for this emission unit. Where appropriate, the actual permit is attached to provide the applicable language along with the underlying rule/regulatory citation and calculation basis is provided. For existing limitations previously captured in a permit, the calculations were provided in the previous permit application(s). No changes to existing permit limits are being requested at this time.

See Proposed Regulation 30 Permit (attached) Conditions 4.1.2 through 4.1.6.

Permit Shield

For all applicable requirements listed above, provide monitoring/testing/recordkeeping/reporting which shall be used to demonstrate compliance. If the method is based on a permit or rule, include the condition number or citation. (Note: Each requirement listed above must have an associated method of demonstrating compliance. If there is not already a required method in place, then a method must be proposed.)

The following permit conditions are considered the applicable requirements for monitoring, testing, recordkeeping and reporting for this emission unit. Where appropriate, the actual permits are attached to provide the actual language along with the underlying rule/regulatory citation. No changes are being requested at this time.

See Proposed Regulation 30 Permit (attached) Conditions 4.2.1 through 4.2.3; Section 4.3; Section 4.4; and Section 4.5.

Are you in compliance with all applicable requirements for this emission unit? Yes No

If no, complete the **Schedule of Compliance Form** as **ATTACHMENT F**.

ATTACHMENT E - Emission Unit Form

39.

| | | | |
|---|--|---|-----------|
| Emission Unit Description: System Wide – Ash Handling System | | | |
| Emission unit ID number: 3S | Emission unit name: Ash Handling System | List any control devices associated with this emission unit: Silo vents, mechanical controls, water sprays | |
| Provide a description of the emission unit (type, method of operation, design parameters, etc.): This system consists of the ash vacuum removal system, silo storage, truck loadout, and truck travel to the landfill. Bottom ash removal includes a wet transport system along with removal and disposal of the settled ash into a landfill. | | | |
| Manufacturer: Various | Model number: Custom | Serial number: N/A | |
| Construction date: N/A | Installation date: 1979 | Modification date(s): N/A | |
| Design Capacity (examples: furnaces - tons/hr, tanks - gallons): Vacuum Transfer Capacity (nominal) – 20 to 70 ton/hr (Units 1-2) | | | |
| Maximum Hourly Throughput: Nominal – 79.4 ton/hr flyash | Maximum Annual Throughput: 216,799 tons flyash | Maximum Operating Schedule: 8760 hrs/year | |
| Fuel Usage Data (fill out all applicable fields) | | | |
| Does this emission unit combust fuel? __ Yes <input checked="" type="checkbox"/> No | | If yes, is it? __ Indirect Fired ___ Direct Fired | |
| Maximum design heat input and/or maximum horsepower rating: N/A | | Type and Btu/hr rating of burners: N/A | |
| List the primary fuel type(s) and if applicable, the secondary fuel type(s). For each fuel type listed, provide the maximum hourly and annual fuel usage for each. N/A | | | |
| Describe each fuel expected to be used during the term of the permit. | | | |
| Fuel Type | Max. Sulfur Content | Max. Ash Content | BTU Value |
| N/A | N/A | N/A | N/A |
| | | | |
| | | | |

| <i>Emissions Data</i> | | |
|---|---------------------|-------|
| Criteria Pollutants | Potential Emissions | |
| | PPH | TPY |
| Carbon Monoxide (CO) | N/A | N/A |
| Nitrogen Oxides (NO _x) | N/A | N/A |
| Lead (Pb) | N/A | N/A |
| Particulate Matter (PM _{2.5}) | 0.11 | 0.49 |
| Particulate Matter (PM ₁₀) | 0.96 | 4.19 |
| Total Particulate Matter (TSP) | 4.09 | 17.92 |
| Sulfur Dioxide (SO ₂) | N/A | N/A |
| Volatile Organic Compounds (VOC) | N/A | N/A |
| Hazardous Air Pollutants | Potential Emissions | |
| | PPH | TPY |
| N/A | N/A | N/A |
| | | |
| | | |
| | | |
| Regulated Pollutants other than Criteria and HAP | Potential Emissions | |
| | PPH | TPY |
| N/A | N/A | N/A |
| | | |
| | | |

List the method(s) used to calculate the potential emissions (include dates of any stack tests conducted, versions of software used, source and dates of emission factors, etc.).

Potential emissions were calculated using the path of maximum emissions the system is capable. The amount of coal estimated for daily usage was 4949.7 tpd, the typical coal burn for full load operation. No controls other than those that are inherent to the system were included in the calculations.

Applicable Requirements

List all applicable requirements for this emission unit. For each applicable requirement, include the underlying rule/regulation citation and/or **construction permit** with the condition number. (Note: Title V permit condition numbers alone are not the underlying applicable requirements). If an emission limit is calculated based on the type of source and design capacity or if a standard is based on a design parameter, this information should also be included.

The following permit conditions are considered the applicable requirements. The actual permits are attached to provide the applicable language along with the underlying rule/regulatory citation. No additional calculations are provided since the calculations are all included in the permit applications provided previously. No changes are being requested at this time.

See Permit R30-03900006-2004 Section 5.0
45 CSR 30-5.1.c – Minimizing emissions, dust suppressants

Permit Shield

For all applicable requirements listed above, provide monitoring/testing/recordkeeping/reporting which shall be used to demonstrate compliance. If the method is based on a permit or rule, include the condition number or citation. (Note: Each requirement listed above must have an associated method of demonstrating compliance. If there is not already a required method in place, then a method must be proposed.)

The following permit conditions are considered the applicable requirements for monitoring, testing, recordkeeping and reporting. The actual permits are attached to provide the applicable language along with the underlying rule/regulatory citation. No changes are being requested at this time.

See Permit R30-03900006-2004 Section 3.3.4
45 CSR 30-5.1.c Inspections and records of dust suppressants.

Are you in compliance with all applicable requirements for this emission unit? Yes No

If no, complete the **Schedule of Compliance Form** as ATTACHMENT F.

ATTACHMENT E - Emission Unit Form

42.

| | | | |
|---|--|---|-----------|
| Emission Unit Description: System Wide – Coal Handling System | | | |
| Emission unit ID number: 4S | Emission unit name: Coal Handling System | List any control devices associated with this emission unit: Conveyor covers, partial and full enclosures, mechanical controls, water sprays | |
| Provide a description of the emission unit (type, method of operation, design parameters, etc.): This system consists of the barge unloader, chutes and conveyors, transfer stations, crushers, storage piles and silos for coal. See attached description of the coal handling system. | | | |
| Manufacturer: Various | Model number: Custom | Serial number: N/A | |
| Construction date: N/A | Installation date: 1953 | Modification date(s): N/A | |
| Design Capacity (examples: furnaces - tons/hr, tanks - gallons): Conveyor Transfer Capacity (nominal) – 375 to 1,500 ton/hr. | | | |
| Maximum Hourly Throughput: Nominal – 1,500 ton/hr Coal | Maximum Annual Throughput: 2,131,656 tons coal | Maximum Operating Schedule: 8760 hrs/year | |
| Fuel Usage Data (fill out all applicable fields) | | | |
| Does this emission unit combust fuel? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No | | If yes, is it? <input type="checkbox"/> Indirect Fired <input type="checkbox"/> Direct Fired | |
| Maximum design heat input and/or maximum horsepower rating: N/A | | Type and Btu/hr rating of burners: N/A | |
| List the primary fuel type(s) and if applicable, the secondary fuel type(s). For each fuel type listed, provide the maximum hourly and annual fuel usage for each. N/A | | | |
| Describe each fuel expected to be used during the term of the permit. | | | |
| Fuel Type | Max. Sulfur Content | Max. Ash Content | BTU Value |
| N/A | N/A | N/A | N/A |
| | | | |
| | | | |
| | | | |

| <i>Emissions Data</i> | | |
|--|---------------------|-------|
| Criteria Pollutants | Potential Emissions | |
| | PPH | TPY |
| Carbon Monoxide (CO) | N/A | N/A |
| Nitrogen Oxides (NO _x) | N/A | N/A |
| Lead (Pb) | N/A | N/A |
| Particulate Matter (PM _{2.5}) | 2.5 | 1.26 |
| Particulate Matter (PM ₁₀) | 16.35 | 7.65 |
| Total Particulate Matter (TSP) | 35.48 | 27.12 |
| Sulfur Dioxide (SO ₂) | N/A | N/A |
| Volatile Organic Compounds (VOC) | N/A | N/A |
| Hazardous Air Pollutants | Potential Emissions | |
| | PPH | TPY |
| N/A | N/A | N/A |
| | | |
| | | |
| | | |
| Regulated Pollutants other than Criteria and HAP | Potential Emissions | |
| | PPH | TPY |
| N/A | N/A | N/A |
| | | |
| | | |

List the method(s) used to calculate the potential emissions (include dates of any stack tests conducted, versions of software used, source and dates of emission factors, etc.).

Potential emissions were calculated using the path of maximum emissions the system is capable of handling. The facility may unload both barges and trucks. The maximum emissions were determined using the truck and barge unloader conveyor routings. The coal from those systems would be placed onto the storage pile then reclaimed through the reclaim hoppers then transferred to the units. The amount of coal estimated for unloading was 1,806,656 tpy and the usage was 2,131,656 tpy, the coal burn for full load operation. No controls other than those that are inherent to the system were included in the calculations.

Applicable Requirements

List all applicable requirements for this emission unit. For each applicable requirement, include the underlying rule/regulation citation and/or **construction permit** with the condition number. (Note: Title V permit condition numbers alone are not the underlying applicable requirements). If an emission limit is calculated based on the type of source and design capacity or if a standard is based on a design parameter, this information should also be included.

The following permit conditions are considered the applicable requirements. The actual permits are attached to provide the applicable language along with the underlying rule/regulatory citation. No additional calculations are provided since the calculations are all included in the permit applications provided previously. No changes are being requested at this time.

See Permit R30-03900006-2004 Section 5.0
45 CSR 30-5.1.c – Minimizing emissions, dust suppressants
45 CSR 2-5 – Control of Fugitive Particulate Matter

Permit Shield

For all applicable requirements listed above, provide monitoring/testing/recordkeeping/reporting which shall be used to demonstrate compliance. If the method is based on a permit or rule, include the condition number or citation. (Note: Each requirement listed above must have an associated method of demonstrating compliance. If there is not already a required method in place, then a method must be proposed.)

The following permit conditions are considered the applicable requirements for monitoring, testing, recordkeeping and reporting. The actual permits are attached to provide the applicable language along with the underlying rule/regulatory citation. No changes are being requested at this time.

See Permit R30-03900006-2004 Section 3.3.4
45 CSR 30-5.1.c Inspections and records of dust suppressants.
45 CSR 2-5 – Control of Fugitive Particulate Matter

Are you in compliance with all applicable requirements for this emission unit? Yes No

If no, complete the **Schedule of Compliance Form** as ATTACHMENT F.

Attachment F
Schedule of Compliance Forms

Attachment F
Schedule of Compliance Forms

The emission sources at the Kanawha River Plant that meet the applicability of the Title V permitting program (45 CSR 30) are in compliance with the existing permit conditions and regulatory requirements. No compliance schedule is required for the sources covered by this permit.

Attachment G
Air Pollution Control Device Forms

| ATTACHMENT G - Air Pollution Control Device Form | | |
|--|---|--|
| Control device ID number: ESP 1 | List all emission units associated with this control device. Unit 1 Steam Generator | |
| Manufacturer: Buell | Model number: 1.2Xx54K 3331/3-3P | Installation date: ESP installed in 1968, Collection size doubled in 1977. |
| Type of Air Pollution Control Device: | | |
| <input type="checkbox"/> Baghouse/Fabric Filter | <input type="checkbox"/> Venturi Scrubber | <input type="checkbox"/> Multiclone |
| <input type="checkbox"/> Carbon Bed Adsorber | <input type="checkbox"/> Packed Tower Scrubber | <input type="checkbox"/> Single Cyclone |
| <input type="checkbox"/> Carbon Drum(s) | <input type="checkbox"/> Other Wet Scrubber | <input type="checkbox"/> Cyclone Bank |
| <input type="checkbox"/> Catalytic Incinerator | <input type="checkbox"/> Condenser | <input type="checkbox"/> Settling Chamber |
| <input type="checkbox"/> Thermal Incinerator | <input type="checkbox"/> Flare | <input type="checkbox"/> Other (describe) _____ |
| <input type="checkbox"/> Wet Plate Electrostatic Precipitator | <input checked="" type="checkbox"/> Dry Plate Electrostatic Precipitator | |
| List the pollutants for which this device is intended to control and the capture and control efficiencies. | | |
| Pollutant | Capture Efficiency | Control Efficiency |
| PM | 100% | 99.8% |
| | | |
| | | |
| Explain the characteristic design parameters of this control device (flow rates, pressure drops, number of bags, size, temperatures, etc.). | | |
| Average Pressure Drop – 0.30 inches H ₂ O Average Gas Flow Rate – 775,000 acfm @ 325 °F Average Operating Temperature - 370 °F Design Removal Efficiency – 99.5% Design Plate Surface Area – 212,072 sq.ft. | | |
| Is this device subject to the CAM requirements of 40 C.F.R. 64? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No | | |
| If Yes, Complete ATTACHMENT H If No, Provide justification. | | |
| Describe the parameters monitored and/or methods used to indicate performance of this control device. | | |
| Monitor Opacity as an indicator of precipitator performance. Periodic stack tests are performed to assure compliance with the mass standard. | | |

ATTACHMENT G - Air Pollution Control Device Form

49.

| | |
|---|---|
| Control device ID number: ESP 2 | List all emission units associated with this control device. Unit 2 Steam Generator |
|---|---|

| | | |
|-------------------------------|---|--|
| Manufacturer: Buell | Model number: 1.2X54K 3331/3-3P | Installation date: The ESP installed in 1968 then doubled collection size in 1977. |
|-------------------------------|---|--|

Type of Air Pollution Control Device:

| | | |
|---|--|---|
| <input type="checkbox"/> Baghouse/Fabric Filter | <input type="checkbox"/> Venturi Scrubber | <input type="checkbox"/> Multiclone |
| <input type="checkbox"/> Carbon Bed Adsorber | <input type="checkbox"/> Packed Tower Scrubber | <input type="checkbox"/> Single Cyclone |
| <input type="checkbox"/> Carbon Drum(s) | <input type="checkbox"/> Other Wet Scrubber | <input type="checkbox"/> Cyclone Bank |
| <input type="checkbox"/> Catalytic Incinerator | <input type="checkbox"/> Condenser | <input type="checkbox"/> Settling Chamber |
| <input type="checkbox"/> Thermal Incinerator | <input type="checkbox"/> Flare | <input type="checkbox"/> Other (describe) _____ |
| <input type="checkbox"/> Wet Plate Electrostatic Precipitator | <input checked="" type="checkbox"/> Dry Plate Electrostatic Precipitator | |

List the pollutants for which this device is intended to control and the capture and control efficiencies.

| Pollutant | Capture Efficiency | Control Efficiency |
|-----------|--------------------|--------------------|
| PM | 100% | 99.8% |
| | | |
| | | |
| | | |

Explain the characteristic design parameters of this control device (flow rates, pressure drops, number of bags, size, temperatures, etc.).

Average Pressure Drop – 0.30 inches H₂O
 Average Gas Flow Rate – 775,000 acfm @ 325 °F
 Average Operating Temperature - 370 °F
 Design Removal Efficiency – 99.5%
 Design Plate Surface Area – 212,072 sq.ft.

Is this device subject to the CAM requirements of 40 C.F.R. 64? Yes No

If Yes, **Complete ATTACHMENT H**

If No, **Provide justification.**

Describe the parameters monitored and/or methods used to indicate performance of this control device.

Monitor Opacity as an indicator of precipitator performance. Periodic stack tests are performed to assure compliance with the mass standard.

Attachment H

Compliance Assurance Monitoring (CAM) Forms

ATTACHMENT H - Compliance Assurance Monitoring (CAM) Plan Form

51.

For definitions and information about the CAM rule, please refer to 40 CFR Part 64. Additional information (including guidance documents) may also be found at <http://www.epa.gov/ttn/emc/cam.html>

CAM APPLICABILITY DETERMINATION

1) Does the facility have a PSEU (Pollutant-Specific Emissions Unit considered separately with respect to **EACH** regulated air pollutant) that is subject to CAM (40 CFR Part 64), which must be addressed in this CAM plan submittal? To determine applicability, a PSEU must meet **all** of the following criteria (*If No, then the remainder of this form need not be completed*): YES NO

- a. The PSEU is located at a major source that is required to obtain a Title V permit;
- b. The PSEU is subject to an emission limitation or standard for the applicable regulated air pollutant that is **NOT** exempt;

LIST OF EXEMPT EMISSION LIMITATIONS OR STANDARDS:

- NSPS (40 CFR Part 60) or NESHAP (40 CFR Parts 61 and 63) proposed after 11/15/1990.
 - Stratospheric Ozone Protection Requirements.
 - Acid Rain Program Requirements.
 - Emission Limitations or Standards for which a WVDEP Division of Air Quality Title V permit specifies a continuous compliance determination method, as defined in 40 CFR §64.1.
 - An emission cap that meets the requirements specified in 40 CFR §70.4(b)(12).
- c. The PSEU uses an add-on control device (as defined in 40 CFR §64.1) to achieve compliance with an emission limitation or standard;
 - d. The PSEU has potential pre-control device emissions of the applicable regulated air pollutant that are equal to or greater than the Title V Major Source Threshold Levels; AND
 - e. The PSEU is **NOT** an exempt backup utility power emissions unit that is municipally-owned.

BASIS OF CAM SUBMITTAL

2) Mark the appropriate box below as to why this CAM plan is being submitted as part of an application for a Title V permit:

- RENEWAL APPLICATION.** **ALL** PSEUs for which a CAM plan has **NOT** yet been approved need to be addressed in this CAM plan submittal.
- INITIAL APPLICATION** (submitted after 4/20/98). **ONLY** large PSEUs (i. e., PSEUs with potential post-control device emissions of an applicable regulated air pollutant that are equal to or greater than Major Source Threshold Levels) need to be addressed in this CAM plan submittal.
- SIGNIFICANT MODIFICATION TO LARGE PSEUs.** **ONLY** large PSEUs being modified after 4/20/98 need to be addressed in this cam plan submittal. For large PSEUs with an approved CAM plan, **Only** address the appropriate monitoring requirements affected by the significant modification.

3) ^a BACKGROUND DATA AND INFORMATION

Complete the following table for all PSEUs that need to be addressed in this CAM plan submittal. This section is to be used to provide background data and information for each PSEU. In order to supplement the submittal requirements specified in 40 CFR §64.4. If additional space is needed, attach and label accordingly.

| PSEU DESIGNATION | DESCRIPTION | POLLUTANT | CONTROL DEVICE | ^b EMISSION LIMITATION or STANDARD | ^c MONITORING REQUIREMENT |
|--------------------------------|--------------------|-----------|----------------|--|---|
| Unit 1 & 2 | Coal Fired Boilers | PM | ESP | 45 CSR 2-4.1.a | Monitor Opacity using COMs |
| | | | | | |
| | | | | | |
| | | | | | |
| | | | | | |
| | | | | | |
| | | | | | |
| <u>EXAMPLE</u> Boiler No. 1 | Wood-Fired Boiler | PM | Multiclone | 45CSR§2-4.1.c.; 9.0 lb/hr | Monitor pressure drop across multiclone; Weekly inspection of multiclone |

^a If a control device is common to more than one PSEU, one monitoring plan may be submitted for the control device with the affected PSEUs identified and any conditions that must be maintained or monitored in accordance with 40 CFR §64.3(a). If a single PSEU is controlled by more than one control device similar in design and operation, one monitoring plan for the applicable control devices may be submitted with the applicable control devices identified and any conditions that must be maintained or monitored in accordance with 40 CFR §64.3(a).

^b Indicate the emission limitation or standard for any applicable requirement that constitutes an emission limitation, emission standard, or standard of performance (as defined in 40 CFR §64.1).

^c Indicate the monitoring requirements for the PSEU that are required by an applicable regulation or permit condition.

CAM MONITORING APPROACH CRITERIA

Complete this section for EACH PSEU that needs to be addressed in this CAM plan submittal. This section may be copied as needed for each PSEU. This section is to be used to provide monitoring data and information for EACH indicator selected for EACH PSEU in order to meet the monitoring design criteria specified in 40 CFR §64.3 and §64.4. If more than two indicators are being selected for a PSEU or if additional space is needed, attach and label accordingly with the appropriate PSEU designation, pollutant, and indicator numbers.

| 4a) PSEU Designation: <i>Unit 1 & 2</i> | 4b) Pollutant: <i>PM</i> | 4c) ^a Indicator No. 1: <i>Opacity</i> | 4d) ^a Indicator No. 2: <i>Opacity</i> |
|--|-----------------------------|---|---|
| 5a) GENERAL CRITERIA Describe the <u>MONITORING APPROACH</u> used to measure the indicators: | | <i>Opacity data is measured and recorded by a certified continuous opacity monitoring system (COMS). The 6-minute average data is recorded and will be used to calculate 3-hour average opacity values.</i> | <i>Opacity data is measured and recorded by a certified continuous opacity monitoring system (COMS). The 6-minute average data is recorded and will be used to calculate 3-hour average opacity values.</i> |
| ^b Establish the appropriate <u>INDICATOR RANGE</u> or the procedures for establishing the indicator range which provides a reasonable assurance of compliance: | | <i>Opacity data has been collected during Method 5 particulate emission testing. The plan will incorporate existing tests along with CAM Stack Testing to provide a conservative indicator range.</i> | <i>Excess short duration opacity increases occurring during any calendar quarter are not to exceed 5% of the total operating time.</i> |
| 5b) PERFORMANCE CRITERIA Provide the <u>SPECIFICATIONS FOR OBTAINING REPRESENTATIVE DATA</u> , such as detector location, installation specifications, and minimum acceptable accuracy: | | <i>COM sis located in stack downstream of ESP in accordance with 40 CFR Part 60, Appendix B, PS-1; COMs is operated, maintained and provides accuracy in accordance with 40 CFR 75.</i> | <i>COM sis located in stack downstream of ESP in accordance with 40 CFR Part 60, Appendix B, PS-1; COMs is operated, maintained and provides accuracy in accordance with 40 CFR 75.</i> |
| ^c For new or modified monitoring equipment, provide <u>VERIFICATION PROCEDURES</u> , including manufacturer's recommendations, <u>TO CONFIRM THE OPERATIONAL STATUS</u> of the monitoring: | | N/A | N/A |
| Provide <u>QUALITY ASSURANCE AND QUALITY CONTROL (QA/QC) PRACTICES</u> that are adequate to ensure the continuing validity of the data, (i.e., daily calibrations, visual inspections, routine maintenance, RATA, etc.): | | <i>QA/QC is performed in accordance with 40 CFR 75.</i> | <i>QA/QC is performed in accordance with 40 CFR 75.</i> |
| ^d Provide the <u>MONITORING FREQUENCY</u> : | | <i>Opacity is measured continuously except for periods of monitor malfunction or downtime (e.g. QA/QC, calibration, repairs, etc.)</i> | <i>Opacity is measured continuously except for periods of monitor malfunction or downtime (e.g. QA/QC, calibration, repairs, etc.)</i> |
| Provide the <u>DATA COLLECTION PROCEDURES</u> that will be used: | | <i>Opacity data will be collected and stored in a Data Acquisition System (DAS) on a 6-minute average and 3-hour average basis.</i> | <i>Opacity data will be collected and stored in a Data Acquisition System (DAS) on a 6-minute average and 3-hour average basis.</i> |
| Provide the <u>DATA AVERAGING PERIOD</u> for the purpose of determining whether an excursion or exceedance has occurred: | | <i>The opacity values used to compare with the indicator range are the 3-hour average opacity (short duration opacity increase).</i> | <i>The opacity values used to compare with the indicator range are the sum of all 3-hour average opacity (short duration opacity increase) and the total operating time of the units.</i> |

^a Describe all indicators to be monitored which satisfies 40 CFR §64.3(a). Indicators of emission control performance for the control device and associated capture system may include measured or predicted emissions (including visible emissions or opacity), process and control device operating parameters that affect control device (and capture system) efficiency or emission rates, or recorded findings of inspection and maintenance activities.

^b Indicator Ranges may be based on a single maximum or minimum value or at multiple levels that are relevant to distinctly different operating conditions, expressed as a function of process variables, expressed as maintaining the applicable indicator in a particular operational status or designated condition, or established as interdependent between more than one indicator. For CEMS, COMS, or PEMS, include the most recent certification test for the monitor.

^c The verification for operational status should include procedures for installation, calibration, and operation of the monitoring equipment, conducted in accordance with the manufacturer's recommendations, necessary to confirm the monitoring equipment is operational prior to the commencement of the required monitoring.

^d Emission units with post-control PTE ≥ 100 percent of the amount classifying the source as a major source (i.e., Large PSEU) must collect four or more values per hour to be averaged. A reduced data collection frequency may be approved in limited circumstances. Other emission units must collect data at least once per 24 hour period.

RATIONALE AND JUSTIFICATION

Complete this section for EACH PSEU that needs to be addressed in this CAM plan submittal. This section may be copied as needed for each PSEU. This section is to be used to provide rationale and justification for the selection of EACH indicator and monitoring approach and EACH indicator range in order to meet the submittal requirements specified in 40 CFR §64.4.

6a) PSEU Designation:
Unit 1 & 2

6b) Regulated Air Pollutant:
PM

7) **INDICATORS AND THE MONITORING APPROACH:** Provide the rationale and justification for the selection of the indicators and the monitoring approach used to measure the indicators. Also provide any data supporting the rationale and justification. Explain the reasons for any differences between the verification of operational status or the quality assurance and control practices proposed, and the manufacturer's recommendations. (If additional space is needed, attach and label accordingly with the appropriate PSEU designation and pollutant):

Appalachian Power believes that the continuous opacity monitoring system (COMS) data is the most appropriate and readily available indicator for continuously evaluating the performance and operations of the electrostatic precipitator and thereby assessing compliance with the applicable particulate emission rate limitation between periodic Method 5 compliance testing. Monitoring of other ESP operating parameters such as TR set voltage and current levels may be beneficial in evaluating ESP performance as well, however, neither are direct indicators of conditions in the stack prior to release of the flue gas. For this reason, a specific corrective action plan has been developed based upon opacity monitoring. This corrective action plan will be implemented at any time there is a significant or sudden increase in stack opacity above normal operating levels.

For purposes of this corrective action plan:

A **significant increase** in opacity above normal operating levels is defined as a repetitive, non-exempt, six-minute average COMS value which measures greater than the indicator range determined by CAM stack testing.

A **short duration opacity increase** is defined as a significant increase in opacity that persists for at least a three-hour period (30 consecutive 6-minute periods), which measures greater than the indicator range determined by CAM stack testing.

A **sustained opacity increase** is defined as a significant increase in opacity that persists for two three-hour periods (2 consecutive Short Duration Opacity Increases), which measures greater than the indicator range determined by CAM stack testing.

This plan outlines specific corrective action procedures to be implemented by plant personnel for the following scenarios:

Case A: Upon alarm of a short duration opacity increase.

Case B: Upon alarm of a sustained opacity increase.

These corrective action procedures do not apply to opacity increases that occur during exempt periods.

Assignment of personnel to carry out each step of this plan will be the sole responsibility of Plant Management and may change based upon specific conditions.

Case A: (Short duration opacity increase.)

Plant personnel will continue to observe the COMS data and at the same time initiate a review of other available information (such as: TR set status, voltage, current, operating parameters, etc.) in order to validate and/or identify the cause of the opacity increase.

1. If the cause of the opacity increase is not already known, unit-operating data will be collected for the purpose of determining the cause of the opacity increase.
2. If the opacity increase occurs after normal working hours, on weekends, or holidays; the unit-operations data may be collected the following working day.
3. Once the cause of the opacity increase is determined, plant personnel will take necessary steps to mitigate the unit operating condition or equipment failure that is found to be causing the short duration opacity increase. Plant personnel will initiate the corrective actions as necessary to reduce stack opacity to normal operating levels. Examples of corrective actions include:
 - a. If the ESPs are operating at reduced power, the power levels will be increased to optimal achievable levels. Any individual TR sets that are out-of-service or not operating at optimum power levels shall be repaired and/or adjusted as appropriate.
 - b. ESP rapping procedures may be initiated and/or adjusted as necessary.
 - c. Flue gas conditioning systems will be placed in service or adjusted as necessary.
 - d. Depending on the specific events found to be the cause of the opacity increase, other corrective actions will be implemented as necessary to reduce the opacity to normal operating levels.

Case B: (Sustained opacity increase.)

1. If the opacity does not return and remain at normal operating levels, and the cause of the opacity increase is not already known, further analysis of the unit, and auxiliary operating data will be undertaken for the purpose of determining the cause of the opacity increase.
2. If the opacity increase occurs after normal working hours, on weekends, or holidays, off-shift personnel may be required to determine the cause of the opacity increase and initiate appropriate corrective actions.
3. If the opacity level continues to exceed the indicator range after the corrective actions as outlined above for Case A are implemented, plant personnel will contact appropriate management staff to obtain necessary approvals to reduce load, or in extreme cases, commence a unit shutdown in order to remediate the cause of the opacity increase.

8) **INDICATOR RANGES:** Provide the rationale and justification for the selection of the indicator ranges. The rationale and justification shall indicate how EACH indicator range was selected by either a COMPLIANCE OR PERFORMANCE TEST, a TEST PLAN AND SCHEDULE, or by ENGINEERING ASSESSMENTS. Depending on which method is being used for each indicator range, include the specific information required below for that specific indicator range. (If additional space is needed, attach and label accordingly with the appropriate PSEU designation and pollutant):

- **COMPLIANCE OR PERFORMANCE TEST** (Indicator ranges determined from control device operating parameter data obtained during a compliance or performance test conducted under regulatory specified conditions or under conditions representative of maximum potential emissions under anticipated operating conditions. Such data may be supplemented by engineering assessments and manufacturer's recommendations). The rationale and justification shall **INCLUDE** a summary of the compliance or performance test results that were used to determine the indicator range, and documentation indicating that no changes have taken place that could result in a significant change in the control system performance or the selected indicator ranges since the compliance or performance test was conducted.
- **TEST PLAN AND SCHEDULE** (Indicator ranges will be determined from a proposed implementation plan and schedule for installing, testing, and performing any other appropriate activities prior to use of the monitoring). The rationale and justification shall **INCLUDE** the proposed implementation plan and schedule that will provide for use of the monitoring as expeditiously as practicable after approval of this CAM plan, except that in no case shall the schedule for completing installation and beginning operation of the monitoring exceed 180 days after approval.
- **ENGINEERING ASSESSMENTS** (Indicator Ranges or the procedures for establishing indicator ranges are determined from engineering assessments and other data, such as manufacturers' design criteria and historical monitoring data, because factors specific to the type of monitoring, control device, or PSEU make compliance or performance testing unnecessary). The rationale and justification shall **INCLUDE** documentation demonstrating that compliance testing is not required to establish the indicator range.

RATIONALE AND JUSTIFICATION:

Appalachian Power Company is proposing that a "test and cap" method be used to conduct compliance assurance monitoring. Under such a method, stack opacity, measured using COMs will be the primary monitoring indicator. The indicator is based upon an opacity/mass relationship of the emissions units at full boiler load. It is anticipated that the 0.05 lb/mmBTU based particulate limit will not be reached until stack opacity values are greater than the 10% opacity limit. Once the cap value is selected, the Kanawha River units can demonstrate a reasonable assurance of compliance with the particulate mass emissions limit as long as the three-hour average stack opacity is maintained below the cap value.

Initially, Appalachian Power Company is proposing that the opacity/mass relationship be established using existing particulate mass emissions test results. The existing historic data will be used until it can be supplemented with additional test results at a higher mass emission rate. Based on previous compliance or performance testing of the electrostatic precipitator (ESP) using 40 CFR 60 test methods, Appalachian Power Company believes that compliance with the indicator range threshold (3-hour average) will reasonably assure compliance with the particulate mass emissions standard. The threshold will be determined by graphing the existing test data (listed below) and the CAM Stack Testing (described below), developing the best fit linear regression line through the data, extrapolating to determine the estimated opacity at the particulate mass emission limit, and then multiplying the resulting opacity value by 90 percent. The 90 percent threshold was chosen to provide a conservative reasonable assurance of compliance with the particulate mass emission limit. The three-hour averaging time was chosen to provide adequate time to make operational corrections to allow compliance with the particulate mass emission standard. Historic baseline test data collected in past recent years, submitted to WV DEP, and used in this evaluation is summarized below:

| Test Date | Measured Emission Rate | Average Opacity |
|------------|------------------------|-----------------|
| 03/16/2006 | 0.0193 lb/mmBTU | 5.5% |
| 01/29/2004 | 0.0182 lb/mmBTU | 5.8% |
| 03/01/2001 | 0.0114 lb/mmBTU | 7.3% |

No mechanical or operational changes have been made to the ESPs that would cause a significant negative impact on ESP performance since these tests were completed.

While the above test data will be used as baseline tests representing routine source operation, additional full load testing will be conducted to supplement the data set with data points at or near the 0.05 lb/mmBTU particulate mass emission limit and at least one other point between the previously collected data and the "high level" test (CAM Stack Testing). These points will be established by "de-tuning" the electrostatic precipitator (i.e. reducing and/or eliminating power to various portions of the precipitator) and/or making other operational adjustments of the unit(s) to increase the particulate mass loading and opacity downstream of the precipitator. The data set used to establish a opacity/mass relationship and the indicator range shall consist of the previously collected particulate mass emissions data and the data collected during the CAM testing program. Appalachian Power Company is proposing that the various elevated particulate test conditions be sampled for a minimum of one 2-hour test run (as opposed to a full 6-hour time period typically sampled during a compliance test). Limiting the test periods to 2-hours of data collection will minimize the environmental impacts of operating the particulate control equipment under less than normal operating conditions. Nevertheless, it is understood that more than one run under specific unit operating conditions may be necessary.

The indicator range based on the CAM stack testing results will be included in the testing report and provided to the WV Division of Air Quality. Appalachian Power Company will implement monitoring provisions of this CAM plan within 180 days of the plan being approved in the renewed Title V permit. Further, Appalachian Power Company will undertake the CAM stack testing program in a timely manner. The CAM related testing and CAM Plan implementation shall be conducted according to the following schedule:

1. Appalachian Power Company shall submit a CAM testing protocol to the Department at least 30 days prior to the stack testing.
2. Appalachian Power Company shall complete the CAM testing within 120 days of approval of issuance of the permit.
3. Testing results, including the excursion limits, and the generated opacity to total suspended particulate relationship shall be submitted to the Department within 60 days after completion of the testing.
4. Within 180 days of issuance of the permit, Appalachian Power shall begin implementation of the CAM Plan.

Because CAM stack testing will be conducted at elevated opacity and particulate mass emissions levels, it is likely that excess opacity and potentially excess particulate mass emissions may occur. Appalachian Power Company requires a written exemption from the WV Division of Air Quality for any excess opacity or particulate mass emissions that may result from the test program prior to performing the testing. A separate request for this exemption will be made in writing at the time the testing protocol is submitted to the WV Division of Air Quality.

Attachment I

Suggested Permit Language
NO_x Budget Permit Application
CAIR Permit Application
Title IV Phase II Acid Rain Permit Renewal
Reg. 2 and 10 Monitoring and Recordkeeping Plan

Attachment I
Appendix A

Suggested Permit Language

1.0. Emission Units

| Emission Unit ID | Emission Point ID | Emission Unit Description | Year Installed ¹ | Design Capacity ² | Control Device ³ |
|--|-------------------|--|-----------------------------|-------------------------------|-----------------------------|
| Boiler & Associated Equipment | | | | | |
| Unit 1 | CS012 | Boiler: Babcock & Wilcox, Model # RB-154 | 1953 | 1950 mmBtu/hr | High efficiency ESP, LNB |
| Unit 2 | CS012 | Boiler: Babcock & Wilcox, Model # RB-154 | 1953 | 1950 mmBtu/hr | High efficiency ESP, LNB |
| Coal & Ash Handling Equipment | | | | | |
| BU | BU | Barge Unloader (barge to F-I, C-I) | <u>2007</u> | 750 TPH | MC, WS |
| Station I | Sta-I | BU thru F-I to C-I | 1953 | NA | MC, WS, PE |
| Feeder I | F-I | BU to C-I | 1953 | 750 TPH | MC, PE |
| Conveyor I | C-I | BU to Sta-II | 1953 | 750 TPH | MC, PE |
| Station II | Sta-II | C-I thru CRI, CRII, Scn-I to C-II | 1953 | NA | MC, FE |
| Crusher I | CR-I | Optional Path from C-I to C-II | 1953 | 400 TPH | MC, FE |
| Crusher II | CR-II | Optional Path from C-I to C-II | 1953 | 400 TPH | MC, FE |
| Screen I | Scn-I | Optional Path from C-I to C-II | 1953 | 800 TPH | MC, FE |
| Conveyor II | C-II | Sta-II to CSA | 1953 | 750 TPH | MC, PE |
| CSA | CSA | Coal Storage Area | 1953 | 325,000 Tons | MC, WS |
| CTU | CTU | Coal Truck Unloading onto CSA | 1953 | Max - 200 Coal Trucks per day | MC, WS |
| Station III | Sta-III | CSA thru F-II, F-III, F-IV, F-V to C-III | 1953 | NA | MC, FE |
| Feeder II | F-II | CSA to C-III | 1953 | 750 TPH | MC, FE |
| Feeder III | F-III | CSA to C-III | 1953 | 750 TPH | MC, FE |
| Feeder IV | F-IV | CSA to C-III | 1953 | 750 TPH | MC, FE |
| Feeder V | F-V | CSA to C-III | 1953 | 750 TPH | MC, FE |
| Station IIIA | Sta-IIIA | CSA thru F-VI to C-III | 1953 | NA | MC, FE |
| Feeder VI | F-VI | CSA to C-III | 1953 | 750 TPH | MC, FE |
| Conveyor III | C-III | CSA thru Feeders II to VI to C-IV | 1953 | 1500 TPH | MC, PE |
| Station IV | Sta-IV | C-III to C-IV | 1953 | NA | MC, FE |
| Conveyor IV | C-IV | C-III to Tripper I | 1953 | 1500 TPH | MC, FE |
| Tripper I | T-I | C-IV to Unit Coal Bunkers | 1953 | 1500 TPH | MC, FE |

¹ "Year Installed" reflects the "commenced" construction or modification date as defined in 40 CFR 60.

² Rated Design Capacity

³ Control Device/Control System abbreviations: ESP = Electrostatic Precipitators, LNB = Low NOx System, FE = Full enclosure, PE = Partial Enclosure, BH = Baghouse(s), MC = Moisture Content, WS = Wetting Spray, VF = Vent Filter

| Emission Unit ID | Emission Point ID | Emission Unit Description | Year Installed ¹ | Design Capacity ² | Control Device ³ |
|----------------------------|-------------------|--|-----------------------------|--------------------------------|-----------------------------|
| FA Truck Bin | FA-TB | Flyash Truck Bin | 1968 | 400 Tons | FE, VF |
| FA Silo 1 | FA-S1 | Flyash Storage Silo 1 | 1968 | 200 Tons | FE, VF |
| FA Silo 2 | FA-S2 | Flyash Storage Silo 2 | 1968 | 150 Tons | FE, VF |
| FA Silo 3 | FA-S3 | Flyash Storage Silo 3 | 1968 | 150 Tons | FE, VF |
| FA-Truck Load Out | FA-TL | Flyash load out to trucks. | NA | Max – 20 Trucks loaded per day | WS, PE |
| Haul Roads | HR | Roads for Coal & Flyash Transport | 1952 | NA | WS |
| Miscellaneous Other | | | | | |
| Pump Engine 1 | PE1 | Diesel Engine Fire Pump | 1978 | 300 hp | NA |
| Tank 1 | Tank 1 | Main Fuel Oil Tank | 1953 | 25,000 gallons | NA |
| Tank 2 | Tank 2 | Main Fuel Oil Tank | 1953 | 25,000 gallons | NA |
| Tank 3 | Tank 3 | Main Fuel Oil Tank | 1953 | 25,000 gallons | NA |
| Tank 4 | Tank 4 | Clean Oil Tank (Lube Oil Room) | 1953 | 9,750 gallons | NA |
| Tank 5 | Tank 5 | Dirty Oil Tank (Lube Oil Room) | 1953 | 9,750 gallons | NA |
| Tank 6 | Tank 6 | Clean Oil Makeup Tank (Lube Oil Room) | 1953 | 1,000 gallons | NA |
| Tank 7 | Tank 7 | U1 Main Turbine Oil Tank | 1953 | 6,000 gallons | NA |
| Tank 8 | Tank 8 | U2 Main Turbine Oil Tank | 1953 | 6,000 gallons | NA |
| Tank 9 | Tank 9 | Misc. Oil Storage Room Tank | 1953 | 2,500 gallons | NA |
| Tank 10 | Tank 10 | Main Transformers Insulating Oil Tanks - Two per Unit | 1953 | 4,225 gallons | NA |
| Tank 11 | Tank 11 | U1 HP Transformer Insulating Oil Tank | 1953 | 4,600 gallons | NA |
| Tank 12 | Tank 12 | U2 HP Transformer Insulating Oil Tank | 1953 | 4,600 gallons | NA |
| Tank 13 | Tank 13 | HP Spare Transformer Insulating Oil Tank | 1953 | 4,600 gallons | NA |
| Tank 14 | Tank 14 | U1 – 101 Transformer Insulating Oil Tank | 1953 | 4,810 gallons | NA |
| Tank 15 | Tank 15 | U2 – 101 Transformer Insulating Oil Tank | 1953 | 4,810 gallons | NA |
| Tank 16 | Tank 16 | Aux Transformers Insulating Oil Tanks - Three per Unit | 1953 | 1,575 gallons | NA |
| Tank 17 | Tank 17 | Turbine Room Basement Aux. Transformers – Six Units | 1953 | 215 gallons | NA |
| Tank 18 | Tank 18 | U1 - ESP Transformers Insulating Oil Tank | 1968 | 322 gallons | NA |

| Emission Unit ID | Emission Point ID | Emission Unit Description | Year Installed ¹ | Design Capacity ² | Control Device ³ |
|------------------|-------------------|---|-----------------------------|------------------------------|-----------------------------|
| Tank 19 | Tank 19 | U2 – ESP Transformer Insulating Oil Tanks – Two Units | 1968 | 374 gallons | NA |
| Tank 20 | Tank 20 | U1& 2 TR Set Insulating Oil Tanks– Twenty Four Total Transformers | 1968 | 152 gallons | NA |
| Tank 21 | Tank 21 | Coal Tractor Shed #2 Diesel Tank | 1990 | 10,000 gallons | NA |
| Tank 22 | Tank 22 | Coal Tractor Shed Kerosene Tank | 1990 | 4,000 gallons | NA |
| Tank 23 | Tank 23 | Plant Gasoline Tank | 1990 | 2,500 gallons | NA |
| Tank 24 | Tank 24 | Used Oil Tank #1 | 1953 | 1,200 gallons | NA |
| Tank 25 | Tank 25 | Used Oil Tank #2 | 1953 | 1,200 gallons | NA |
| Tank 26 | Tank 26 | LMS (Ash Contractor) Diesel Fuel Tank | 2002 | 3,000 gallons | FE |
| Tank 27 | Tank 27 | U1 Mill Gear Boxes Lube Oil Tanks – Eight per Unit | 1953 | 135 gallons | NA |
| Tank 28 | Tank 28 | U2 Mill Gear Boxes Lube Oil Tank – Eight per Unit | 1953 | 135 gallons | NA |
| Tank 29 | Tank 29 | U1 ID Fan Oil Tanks | 1986 | 220 gallons | NA |
| Tank 30 | Tank 30 | U2 ID Fan Oil Tanks | 1986 | 220 gallons | NA |
| Tank 31 | Tank 31 | U1 Generator Seal Oil Tank | 1953 | 1,000 gallons | NA |
| Tank 32 | Tank 32 | U2 Generator Seal Oil Tank | 1953 | 1,000 gallons | NA |
| Tank 33 | Tank 33 | Diesel Tank (Fire Pump) | 1953 | 200 gallons | NA |
| Tank 34 | Tank 34 | CO2 Cylinder Storage Turbine Room | 1953 | 1,200 lbs | NA |
| Tank 35 | Tank 35 | Hydrogen Cylinder Storage | 1997 | 55,000 cu ft | NA |
| Tank 36 | Tank 36 | Nitrogen Cylinder Rack | 1953 | 3,000 cu ft | NA |
| Tank 37 | Tank 37 | Used Oil Tank – Plant Heaters/ Two Units – Turbine Room | 1992 | 500 gallons | NA |
| Tank 38 | Tank 38 | Used Oil Tank – Plant Heater – Machine Shop | 1992 | 200 gallons | NA |
| Tank 39 | Tank 39 | Sodium Hydroxide, 20% Aqueous | 1988 | 15,000 gallons | FE |

2.0. General Conditions

2.1. Definitions

- 2.1.1. All references to the "West Virginia Air Pollution Control Act" or the "Air Pollution Control Act" mean those provisions contained in W.Va. Code §§ 22-5-1 to 22-5-18.
- 2.1.2. The "Clean Air Act" means those provisions contained in 42 U.S.C. §§ 7401 to 7671q, and regulations promulgated thereunder.
- 2.1.3. "Secretary" means the Secretary of the Department of Environmental Protection or such other person to whom the Secretary has delegated authority or duties pursuant to W.Va. Code §§ 22-1-6 or 22-1-8 (45CSR§30-2.12.). The Director of the Division of Air Quality is the Secretary's designated representative for the purposes of this permit.

2.2. Acronyms

| | | | |
|----------------------|---|------------------|---|
| CAAA | Clean Air Act Amendments | PM ₁₀ | Particulate Matter less than 10µm in diameter |
| CBI | Confidential Business Information | | |
| CEM | Continuous Emission Monitor | pph | Pounds per Hour |
| CES | Certified Emission Statement | ppm | Parts per Million |
| C.F.R. or CFR | Code of Federal Regulations | PSD | Prevention of Significant Deterioration |
| CO | Carbon Monoxide | | |
| C.S.R. or CSR | Codes of State Rules | psi | Pounds per Square Inch |
| DAQ | Division of Air Quality | SIC | Standard Industrial Classification |
| DEP | Department of Environmental Protection | SIP | State Implementation Plan |
| FOIA | Freedom of Information Act | | |
| HAP | Hazardous Air Pollutant | SO ₂ | Sulfur Dioxide |
| HON | Hazardous Organic NESHAP | TAP | Toxic Air Pollutant |
| HP | Horsepower | TPY | Tons per Year |
| lbs/hr or lb/hr | Pounds per Hour | TRS | Total Reduced Sulfur |
| LDAR | Leak Detection and Repair | TSP | Total Suspended Particulate |
| M | Thousand | | |
| MACT | Maximum Achievable Control Technology | USEPA | United States Environmental Protection Agency |
| MM | Million | | |
| MMBtu/hr or mmbtu/hr | Million British Thermal Units per Hour | UTM | Universal Transverse Mercator |
| MMCF/hr or mmcf/hr | Million Cubic Feet Burned per Hour | VEE | Visual Emissions Evaluation |
| NA | Not Applicable | VOC | Volatile Organic Compounds |
| NAAQS | National Ambient Air Quality Standards | | |
| NESHAPS | National Emissions Standards for Hazardous Air Pollutants | | |
| NO _x | Nitrogen Oxides | | |
| NSPS | New Source Performance Standards | | |
| PM | Particulate Matter | | |

2.3. Permit Expiration and Renewal

- 2.3.1. Permit duration. This permit is issued for a fixed term of five (5) years and shall expire on the date specified on the cover of this permit, except as provided in 45CSR§30-6.3.b. and 45CSR§30-6.3.c. [45CSR§30-5.1.b.]
- 2.3.2. A permit renewal application is timely if it is submitted at least six (6) months prior to the date of permit expiration. [45CSR§30-4.1.a.3.]
- 2.3.3. Permit expiration terminates the source's right to operate unless a timely and complete renewal application has been submitted consistent with 45CSR§30-6.2. and 45CSR§30-4.1.a.3. [45CSR§30-6.3.b.]
- 2.3.4. If the Secretary fails to take final action to deny or approve a timely and complete permit application before the end of the term of the previous permit, the permit shall not expire until the renewal permit has been issued or denied, and any permit shield granted for the permit shall continue in effect during that time. [45CSR§30-6.3.c.]

2.4. Permit Actions

- 2.4.1. This permit may be modified, revoked, reopened and reissued, or terminated for cause. The filing of a request by the permittee for a permit modification, revocation and reissuance, or termination, or of a notification of planned changes or anticipated noncompliance does not stay any permit condition. [45CSR§30-5.1.f.3.]

2.5. Reopening for Cause

- 2.5.1. This permit shall be reopened and revised under any of the following circumstances:
- a. Additional applicable requirements under the Clean Air Act or the Secretary's legislative rules become applicable to a major source with a remaining permit term of three (3) or more years. Such a reopening shall be completed not later than eighteen (18) months after promulgation of the applicable requirement. No such reopening is required if the effective date of the requirement is later than the date on which the permit is due to expire, unless the original permit or any of its terms and conditions has been extended pursuant to 45CSR§§30-6.6.a.1.A. or B.
 - b. Additional requirements (including excess emissions requirements) become applicable to an affected source under Title IV of the Clean Air Act (Acid Deposition Control) or other legislative rules of the Secretary. Upon approval by U.S. EPA, excess emissions offset plans shall be incorporated into the permit.
 - c. The Secretary or U.S. EPA determines that the permit contains a material mistake or that inaccurate statements were made in establishing the emissions standards or other terms or conditions of the permit.
 - d. The Secretary or U.S. EPA determines that the permit must be revised or revoked and reissued to assure compliance with the applicable requirements.

[45CSR§30-6.6.a.]

2.6. Administrative Permit Amendments

- 2.6.1. The permittee may request an administrative permit amendment as defined in and according to the procedures specified in 45CSR§30-6.4.
[45CSR§30-6.4.]

2.7. Minor Permit Modifications

- 2.7.1. The permittee may request a minor permit modification as defined in and according to the procedures specified in 45CSR§30-6.5.a.
[45CSR§30-6.5.a.]

2.8. Significant Permit Modification

- 2.8.1. The permittee may request a significant permit modification, in accordance with 45CSR§30-6.5.b., for permit modifications that do not qualify for minor permit modifications or as administrative amendments.
[45CSR§30-6.5.b.]

2.9. Emissions Trading

- 2.9.1. No permit revision shall be required, under any approved economic incentives, marketable permits, emissions trading, and other similar programs or processes for changes that are provided for in the permit and that are in accordance with all applicable requirements.
[45CSR§30-5.1.h.]

2.10. Off-Permit Changes

- 2.10.1. Except as provided below, a facility may make any change in its operations or emissions that is not addressed nor prohibited in its permit and which is not considered to be construction nor modification under any rule promulgated by the Secretary without obtaining an amendment or modification of its permit. Such changes shall be subject to the following requirements and restrictions:
- a. The change must meet all applicable requirements and may not violate any existing permit term or condition.
 - b. The permittee must provide a written notice of the change to the Secretary and to U.S. EPA within two (2) business days following the date of the change. Such written notice shall describe each such change, including the date, any change in emissions, pollutants emitted, and any applicable requirement that would apply as a result of the change.
 - c. The change shall not qualify for the permit shield.
 - d. The permittee shall keep records describing all changes made at the source that result in emissions of regulated air pollutants, but not otherwise regulated under the permit, and the emissions resulting from those changes.

- e. No permittee may make any change subject to any requirement under Title IV of the Clean Air Act (Acid Deposition Control) pursuant to the provisions of 45CSR§30-5.9.
- f. No permittee may make any changes which would require preconstruction review under any provision of Title I of the Clean Air Act (including 45CSR14 and 45CSR19) pursuant to the provisions of 45CSR§30-5.9.

[45CSR§30-5.9.]

2.11. Operational Flexibility

- 2.11.1. The permittee may make changes within the facility as provided by § 502(b)(10) of the Clean Air Act. Such operational flexibility shall be provided in the permit in conformance with the permit application and applicable requirements. No such changes shall be a modification under any rule or any provision of Title I of the Clean Air Act (including 45CSR14 and 45CSR19) promulgated by the Secretary in accordance with Title I of the Clean Air Act and the change shall not result in a level of emissions exceeding the emissions allowable under the permit.

[45CSR§30-5.8]

- 2.11.2. Before making a change under 45CSR§30-5.8., the permittee shall provide advance written notice to the Secretary and to U.S. EPA, describing the change to be made, the date on which the change will occur, any changes in emissions, and any permit terms and conditions that are affected. The permittee shall thereafter maintain a copy of the notice with the permit, and the Secretary shall place a copy with the permit in the public file. The written notice shall be provided to the Secretary and U.S. EPA at least seven (7) days prior to the date that the change is to be made, except that this period may be shortened or eliminated as necessary for a change that must be implemented more quickly to address unanticipated conditions posing a significant health, safety, or environmental hazard. If less than seven (7) days notice is provided because of a need to respond more quickly to such unanticipated conditions, the permittee shall provide notice to the Secretary and U.S. EPA as soon as possible after learning of the need to make the change.

[45CSR§30-5.8.a.]

- 2.11.3. The permit shield shall not apply to changes made under 45CSR§30-5.8., except those provided for in 45CSR§30-5.8.d. However, the protection of the permit shield will continue to apply to operations and emissions that are not affected by the change, provided that the permittee complies with the terms and conditions of the permit applicable to such operations and emissions. The permit shield may be reinstated for emissions and operations affected by the change:

- a. If subsequent changes cause the facility's operations and emissions to revert to those authorized in the permit and the permittee resumes compliance with the terms and conditions of the permit, or
- b. If the permittee obtains final approval of a significant modification to the permit to incorporate the change in the permit.

[45CSR§30-5.8.c.]

- 2.11.4. "Section 502(b)(10) changes" are changes that contravene an express permit term. Such changes do not include changes that would violate applicable requirements or contravene enforceable permit terms and conditions that are monitoring (including test methods), recordkeeping, reporting, or compliance certification requirements.

[45CSR§30-2.39]

2.12. Reasonably Anticipated Operating Scenarios

- 2.12.1. The following are terms and conditions for reasonably anticipated operating scenarios identified in this permit.
- a. Contemporaneously with making a change from one operating scenario to another, the permittee shall record in a log at the permitted facility a record of the scenario under which it is operating and to document the change in reports submitted pursuant to the terms of this permit and 45CSR30.
 - b. The permit shield shall extend to all terms and conditions under each such operating scenario; and
 - c. The terms and conditions of each such alternative scenario shall meet all applicable requirements and the requirements of 45CSR30.

[45CSR§30-5.1.i.]

2.13. Duty to Comply

- 2.13.1. The permittee must comply with all conditions of this permit. Any permit noncompliance constitutes a violation of the West Virginia Code and the Clean Air Act and is grounds for enforcement action by the Secretary or USEPA; for permit termination, revocation and reissuance, or modification; or for denial of a permit renewal application.

[45CSR§30-5.1.f.1.]

2.14. Inspection and Entry

- 2.14.1. The permittee shall allow any authorized representative of the Secretary, upon the presentation of credentials and other documents as may be required by law, to perform the following:
- a. At all reasonable times (including all times in which the facility is in operation) enter upon the permittee's premises where a source is located or emissions related activity is conducted, or where records must be kept under the conditions of this permit;
 - b. Have access to and copy, at reasonable times, any records that must be kept under the conditions of this permit;
 - c. Inspect at reasonable times (including all times in which the facility is in operation) any facilities, equipment (including monitoring and air pollution Control equipment), practices, or operations regulated or required under the permit;
 - d. Sample or monitor at reasonable times substances or parameters to determine compliance with the permit or applicable requirements or ascertain the amounts and types of air pollutants discharged.

[45CSR§30-5.3.b.]

2.15. Schedule of Compliance

- 2.15.1. For sources subject to a compliance schedule, certified progress reports shall be submitted consistent with the applicable schedule of compliance set forth in this permit and 45CSR§30-4.3.h., but at least every six (6) months, and no greater than once a month, and shall include the following:
- a. Dates for achieving the activities, milestones, or compliance required in the schedule of compliance, and dates when such activities, milestones or compliance were achieved; and
 - b. An explanation of why any dates in the schedule of compliance were not or will not be met, and any preventative or corrective measure adopted.

[45CSR§30-5.3.d.]

2.16. Need to Halt or Reduce Activity not a Defense

- 2.16.1. It shall not be a defense for a permittee in an enforcement action that it would have been necessary to halt or reduce the permitted activity in order to maintain compliance with the conditions of this permit. However, nothing in this paragraph shall be construed as precluding consideration of a need to halt or reduce activity as a mitigating factor in determining penalties for noncompliance if the health, safety, or environmental impacts of halting or reducing operations would be more serious than the impacts of continued operations.

[45CSR§30-5.1.f.2.]

2.17. Emergency

- 2.17.1. An "emergency" means any situation arising from sudden and reasonably unforeseeable events beyond the control of the source, including acts of God, which situation requires immediate corrective action to restore normal operation, and that causes the source to exceed a technology-based emission limitation under the permit, due to unavoidable increases in emissions attributable to the emergency. An emergency shall not include noncompliance to the extent caused by improperly designed equipment, lack of preventative maintenance, careless or improper operation, or operator error.

[45CSR§30-5.7.a.]

- 2.17.2. Effect of any emergency. An emergency constitutes an affirmative defense to an action brought for noncompliance with such technology-based emission limitations if the conditions of 45CSR§30-5.7.c. are met.

[45CSR§30-5.7.b.]

- 2.17.3. The affirmative defense of emergency shall be demonstrated through properly signed, contemporaneous operating logs, or other relevant evidence that:

- a. An emergency occurred and that the permittee can identify the cause(s) of the emergency;
- b. The permitted facility was at the time being properly operated;

- c. During the period of the emergency the permittee took all reasonable steps to minimize levels of emissions that exceeded the emission standards, or other requirements in the permit; and
- d. Subject to the requirements of 45CSR§30-5.1.c.3.C.1, the permittee submitted notice of the emergency to the Secretary within one (1) working day of the time when emission limitations were exceeded due to the emergency and made a request for variance, and as applicable rules provide. This notice, report, and variance request fulfills the requirement of 45CSR§30-5.1.c.3.B. This notice must contain a detailed description of the emergency, any steps taken to mitigate emissions, and corrective actions taken.

[45CSR§30-5.7.c.]

- 2.17.4. In any enforcement proceeding, the permittee seeking to establish the occurrence of an emergency has the burden of proof.

[45CSR§30-5.7.d.]

- 2.17.5. This provision is in addition to any emergency or upset provision contained in any applicable requirement.

[45CSR§30-5.7.e.]

2.18. Federally-Enforceable Requirements

- 2.18.1. All terms and conditions in this permit, including any provisions designed to limit a source's potential to emit and excepting those provisions that are specifically designated in the permit as "State-enforceable only", are enforceable by the Secretary, USEPA, and citizens under the Clean Air Act.

[45CSR§30-5.2.a.]

- 2.18.2. Those provisions specifically designated in the permit as "State-enforceable only" shall become "Federally-enforceable" requirements upon SIP approval by the USEPA.

2.19. Duty to Provide Information

- 2.19.1. The permittee shall furnish to the Secretary within a reasonable time any information the Secretary may request in writing to determine whether cause exists for modifying, revoking and reissuing, or terminating the permit or to determine compliance with the permit. Upon request, the permittee shall also furnish to the Secretary copies of records required to be kept by the permittee. For information claimed to be confidential, the permittee shall furnish such records to the Secretary along with a claim of confidentiality in accordance with 45CSR31. If confidential information is to be sent to USEPA, the permittee shall directly provide such information to USEPA along with a claim of confidentiality in accordance with 40 C.F.R. Part 2.

[45CSR§30-5.1.f.5.]

2.20. Duty to Supplement and Correct Information

- 2.20.1. Upon becoming aware of a failure to submit any relevant facts or a submittal of incorrect information in any permit application, the permittee shall promptly submit to the Secretary such supplemental facts or corrected information.

[45CSR§30-4.2.]

2.21. Permit Shield

2.21.1. Compliance with the conditions of this permit shall be deemed compliance with any applicable requirements as of the date of permit issuance provided that such applicable requirements are included and are specifically identified in this permit or the Secretary has determined that other requirements specifically identified are not applicable to the source and this permit includes such a determination or a concise summary thereof.

[45CSR§30-5.6.a.]

2.21.2. Nothing in this permit shall alter or affect the following:

a. The liability of an owner or operator of a source for any violation of applicable requirements prior to or at the time of permit issuance; or

b. The applicable requirements of the Code of West Virginia and Title IV of the Clean Air Act (Acid Deposition Control), consistent with § 408 (a) of the Clean Air Act.

c. The authority of the Administrator of U.S. EPA to require information under § 114 of the Clean Air Act or to issue emergency orders under § 303 of the Clean Air Act.

[45CSR§30-5.6.c.]

2.22. Credible Evidence

2.22.1. Nothing in this permit shall alter or affect the ability of any person to establish compliance with, or a violation of, any applicable requirement through the use of credible evidence to the extent authorized by law. Nothing in this permit shall be construed to waive any defenses otherwise available to the permittee including but not limited to any challenge to the credible evidence rule in the context of any future proceeding.

[45CSR§30-5.3.e.3.B. and 45CSR38]

2.23. Severability

2.23.1. The provisions of this permit are severable. If any provision of this permit, or the application of any provision of this permit to any circumstance is held invalid by a court of competent jurisdiction, the remaining permit terms and conditions or their application to other circumstances shall remain in full force and effect.

[45CSR§30-5.1.e.]

2.24. Property Rights

2.24.1. This permit does not convey any property rights of any sort or any exclusive privilege.

[45CSR§30-5.1.f.4]

2.25. Acid Deposition Control

2.25.1. Emissions shall not exceed any allowances that the source lawfully holds under Title IV of the Clean Air Act (Acid Deposition Control) or rules of the Secretary promulgated thereunder.

- a. No permit revision shall be required for increases in emissions that are authorized by allowances acquired pursuant to the acid deposition control program, provided that such increases do not require a permit revision under any other applicable requirement.
- b. No limit shall be placed on the number of allowances held by the source. The source may not, however, use allowances as a defense to noncompliance with any other applicable requirement.
- c. Any such allowance shall be accounted for according to the procedures established in rules promulgated under Title IV of the Clean Air Act.

[45CSR§30-5.1.d.]

- 2.25.2. Where applicable requirements of the Clean Air Act are more stringent than any applicable requirement of regulations promulgated under Title IV of the Clean Air Act (Acid Deposition Control), both provisions shall be incorporated into the permit and shall be enforceable by the Secretary and U. S. EPA.

[45CSR§30-5.1.a.2.]

3.0. Facility-Wide Requirements

3.1. Limitations and Standards

- 3.1.1. **Open burning.** The open burning of refuse by any person, firm, corporation, association or public agency is prohibited except as noted in 45CSR§6-3.1.
[45CSR§6-3.1.]
- 3.1.2. **Open burning exemptions.** The exemptions listed in 45CSR§6-3.1 are subject to the following stipulation: Upon notification by the Secretary, no person shall cause, suffer, allow or permit any form of open burning during existing or predicted periods of atmospheric stagnation. Notification shall be made by such means as the Secretary may deem necessary and feasible.
[45CSR§6-3.2.]
- 3.1.3. **Asbestos.** The permittee is responsible for thoroughly inspecting the facility, or part of the facility, prior to commencement of demolition or renovation for the presence of asbestos and complying with 40 C.F.R. § 61.145, 40 C.F.R. § 61.148, and 40 C.F.R. § 61.150. The permittee must notify the Secretary at least ten (10) working days prior to the commencement of any asbestos removal on the forms prescribed by the Secretary if the permittee is subject to the notification requirements of 40 C.F.R. § 61.145(b)(3)(i). A copy of this notice is required to be sent to the USEPA, the Division of Waste Management and the Bureau for Public Health - Environmental Health.
[40 C.F.R. 61]
- 3.1.4. **Odor.** No person shall cause, suffer, allow or permit the discharge of air pollutants which cause or contribute to an objectionable odor at any location occupied by the public.
[45CSR§4-3.1 State-Enforceable only.]
- 3.1.5. **Permanent shutdown.** A source which has not operated at least 500 hours in one 12-month period within the previous five (5) year time period may be considered permanently shutdown, unless such source can provide to the Secretary, with reasonable specificity, information to the contrary. All permits may be modified or revoked and/or reapplication or application for new permits may be required for any source determined to be permanently shutdown.
[45CSR§13-10.5]
- 3.1.6. **Standby plan for reducing emissions.** When requested by the Secretary, the permittee shall prepare standby plans for reducing the emissions of air pollutants in accordance with the objectives set forth in Tables I, II, and III of 45CSR11.
[45CSR§11-5.2]
- 3.1.7. **Emission inventory.** The permittee is responsible for submitting, on an annual basis, an emission inventory in accordance with the submittal requirements of the Division of Air Quality.
[W.Va. Code § 22-5-4(a)(14)]
- 3.1.8. **Ozone-depleting substances.** For those facilities performing maintenance, service, repair or disposal of appliances, the permittee shall comply with the standards for recycling and emissions reduction pursuant to 40 C.F.R. Part 82, Subpart F, except as provided for Motor Vehicle Air Conditioners (MVACs) in Subpart B:
- a. Persons opening appliances for maintenance, service, repair, or disposal must comply with the prohibitions and required practices pursuant to 40 C.F.R. §§ 82.154 and 82.156.

- b. Equipment used during the maintenance, service, repair, or disposal of appliances must comply with the standards for recycling and recovery equipment pursuant to 40 C.F.R. § 82.158.
- c. Persons performing maintenance, service, repair, or disposal of appliances must be certified by an approved technician certification program pursuant to 40 C.F.R. § 82.161.

[40 C.F.R. 82, Subpart F]

- 3.1.9. **Risk Management Plan.** Should this stationary source, as defined in 40 C.F.R. § 68.3, become subject to Part 68, then the owner or operator shall submit a risk management plan (RMP) by the date specified in 40 C.F.R. § 68.10 and shall certify compliance with the requirements of Part 68 as part of the annual compliance certification as required by 40 C.F.R. Part 70 or 71.

[40 C.F.R. 68]

- 3.1.10. **NO_x Budget Trading Program (Unit 1 & Unit 2).** The permittee shall comply with the standard requirements set forth in the attached NO_x Budget Permit Application (see Appendix A) and the NO_x Budget Permit requirements set forth in 45CSR26 for each NO_x budget source. The complete NO_x Budget Permit Application shall be the NO_x Budget Permit portion of the Title V permit administered in accordance with 45CSR30.

[45CSR§§26-6.1.b. and 20.1.]

- a. The NO_x Budget portion of this permit is deemed to incorporate automatically the definitions of terms under 45CSR§26-2 and, upon recordation by the Administrator under 45CSR§26-50 through 45CSR§26-57 or 45CSR§26-60 through 45CSR§26-62, every allocation, transfer or deduction of a NO_x allowance to or from the compliance accounts of the NO_x Budget units covered by the permit or the overdraft account of the NO_x budget source covered by the permit.
[45CSR§26-23.2.]

- b. Except as provided in 45CSR§26-23.2, the Secretary will revise the NO_x Budget portion of this permit, as necessary, in accordance with the operating permit revision requirements set forth in 45CSR30.

[45CSR§26-24.1.]

- 3.1.11. **Fugitive Particulate Matter Control.** No person shall cause, suffer, allow, or permit any source of fugitive particulate matter to operate that is not equipped with a fugitive particulate matter control system. This system shall be operated and maintained in such a manner as to minimize the emission of fugitive particulate matter. Sources of fugitive particulate matter associated with fuel burning units shall include, but not be limited to, the following:

- a. Stockpiling of ash or fuel either in the open or in enclosures such as silos;
- b. Transport of ash in vehicles or on conveying systems, to include spillage, tracking, or blowing of particulate matter from or by such vehicles or equipment; and
- c. Ash or fuel handling systems and ash disposal areas.

[45CSR§2-5.]

- 3.1.12. **CAMR Mercury Budget Trading Program (Unit 1, Unit 2).** The owners and operators of each Hg Budget source required to have a Title V operating permit and each Hg Budget unit required to have a

Title V operating permit at the source must have a Hg Budget permit issued by the Secretary under 45CSR§37-20 through 45CSR§37-24 for the source and operate the source and the unit in compliance with such Hg Budget permit. For each Hg Budget source required to have a Title V operating permit, such permit must include a Hg Budget permit administered by the Secretary. The Hg Budget portion of the Title V permit will be administered in accordance with 45CSR30, except as provided otherwise by 45CSR§37-20 through 45CSR§37-24. **[45CSR§§37-6.1.b. and 20.1.]**

a. Duty to apply. -- The Hg designated representative of any Hg Budget source required to have a Title V operating permit must submit to the Secretary a complete Hg Budget permit application under 45CSR§37-22 for the source covering each Hg Budget unit at the source at least 18 months (or such lesser time provided by the Secretary) before the later of January 1, 2010 or the date on which the Hg Budget unit commences operation. **[45CSR§37-21.1.]**

b. Duty to reapply. -- For a Hg Budget source required to have a Title V operating permit, the Hg designated representative must submit a complete Hg Budget permit application under 45CSR§37-22 for the source covering each Hg Budget unit at the source to renew the Hg Budget permit in accordance with the Title V provisions addressing permit renewal. **[45CSR§37-21.2.]**

c. A complete Hg Budget permit application must include the following elements concerning the Hg Budget source for which the application is submitted, in a format prescribed by the Secretary:

- c.1. Identification of the Hg Budget source;
- c.2. Identification of each Hg Budget unit at the Hg Budget source; and
- c.3. The standard requirements under 45CSR§37-6.
- c.4. A copy of the certificate of representation submitted to the Administrator in accordance with 45CSR§37-13.

[45CSR§37-22.1.]

d. Each Hg Budget permit is deemed to incorporate automatically the definitions of terms under 45CSR§37-2 and, upon recordation by the Administrator under 45CSR§37-51 through 45CSR§37-62, every allocation, transfer or deduction of a Hg allowance to or from the compliance account of the Hg Budget source covered by the permit. **[45CSR§37-23.2.]**

e. Except as provided in 45CSR§37-23.2, the Secretary will revise the Hg Budget permit, as necessary, in accordance with the provisions of 45CSR 30 addressing permit revisions. **[45CSR§37-24.1.]**

3.1.13. **CAIR NO_x Annual Trading Program (Unit 1, Unit 2).** The owners and operators of each CAIR NO_x Annual source required to have a Title V operating permit and each CAIR NO_x Annual unit required to have a Title V operating permit at the source will have a CAIR permit issued by the Secretary under 45CSR§39-20 through 45CSR§39-24 for the source and operate the source and the unit in compliance with such CAIR permit. For each CAIR NO_x Annual source required to have a Title V operating permit, such permit must include a CAIR permit administered by the Secretary for the Title V operating permit. The CAIR portion of the Title V operating permit will be administered in accordance with 45CSR30 and any other applicable rule, except as provided otherwise by 45CSR§39-5 and 45CSR§39-20 through 45CSR§39-24 **[45CSR§§39-6.1.b. and 20.1.]**

a. Duty to apply. -- The CAIR designated representative of any CAIR NO_x Annual source

required to have a Title V operating permit will submit to the Secretary a complete CAIR permit application under 45CSR§39-22 for the source covering each CAIR NO_x Annual unit at the source at least 18 months (or such lesser time provided by the Secretary) before the later of January 1, 2009 or the date on which the CAIR NO_x Annual unit commences operation. [45CSR§39-21.1.]

b. Duty to reapply. -- For a CAIR NO_x Annual source required to have a Title V operating permit, the CAIR designated representative will submit a complete CAIR permit application under 45CSR§39-22 for the source covering each CAIR NO_x Annual unit at the source to renew the CAIR permit in accordance with 45CSR30. [45CSR§39-21.2.]

c. A complete CAIR permit application will include the following elements concerning the CAIR NO_x Annual source for which the application is submitted, in a format prescribed by the Secretary:

- c.1. Identification of the CAIR NO_x Annual source;
- c.2. Identification of each CAIR NO_x Annual unit at the CAIR NO_x Annual source;
- c.3. The standard requirements under section 45CSR§39-6; and
- c.4. A copy of the complete certificate of representation under 45CSR§39-13.

[45CSR§39-22.1.]

d. Each CAIR permit is deemed to incorporate automatically the definitions of terms under 45CSR§39-2 and, upon recordation by the Administrator under 45CSR§39-51 through 45CSR§39-57, 45CSR§39-60 through 45CSR§39-62, every allocation, transfer, or deduction of a CAIR NO_x Annual allowance to or from the compliance account of the CAIR NO_x Annual source covered by the permit. [45CSR§39-23.2.]

e. Except as provided in 45CSR§39-23.2, the Secretary will revise the CAIR permit, as necessary, in accordance with 45CSR30 or any other applicable rule addressing permit revisions. [45CSR§39-24.1.]

3.1.14. **CAIR NO_x Ozone Season Trading Program (Unit 1, Unit 2).** The owners and operators of each CAIR NO_x Ozone Season source required to have a Title V operating permit and each CAIR NO_x Ozone Season unit required to have a Title V operating permit at the source will have a CAIR permit issued by the Secretary under 45CSR§40-20 through 45CSR§40-24 for the source and operate the source and the unit in compliance with such CAIR permit. For each CAIR NO_x Ozone Season source required to have a Title V operating permit such permit must include a CAIR permit administered by the Secretary for the Title V operating permit. The CAIR portion of the Title V operating permit will be administered in accordance with 45CSR30 and any other applicable rule, except as provided otherwise by 45CSR§40-5 and 45CSR§40-20 through 45CSR§40-24. [45CSR§§40-6.1.b. and 20.1.]

a. Duty to apply. -- The CAIR designated representative of any CAIR NO_x Ozone Season source required to have a Title V operating permit will submit to the Secretary a complete CAIR permit application under 45CSR§40-22 for the source covering each CAIR NO_x Ozone Season unit at the source at least 18 months (or such lesser time provided by the Secretary) before the later of January 1, 2009 or the date on which the CAIR NO_x Ozone Season unit commences operation. [45CSR§40-21.1.]

b. Duty to reapply. -- For a CAIR NO_x Ozone Season source required to have a Title V

operating permit, the CAIR designated representative will submit a complete CAIR permit application under 45CSR§40-22 for the source covering each CAIR NO_x Ozone Season unit at the source to renew the CAIR permit in accordance with 45CSR30. [45CSR§40-21.2.]

c. A complete CAIR permit application will include the following elements concerning the CAIR NO_x Ozone Season source for which the application is submitted, in a format prescribed by the Secretary:

- c.1. Identification of the CAIR NO_x Ozone Season source;
- c.2. Identification of each CAIR NO_x Ozone Season unit at the CAIR NO_x Ozone Season source;
- c.3. The standard requirements under section 45CSR§40-6; and
- c.4. A copy of the complete certificate of representation submitted to the Administrator under subsection 45CSR§40-10.3.

[45CSR§40-22.1.]

d. Each CAIR permit is deemed to incorporate automatically the definitions of terms under 45CSR§40-2 and, upon recordation by the Administrator under 45CSR§40-51 through 45CSR§40-57, 45CSR§40-60 through 45CSR§40-62, every allocation, transfer, or deduction of a CAIR NO_x Ozone Season allowance to or from the compliance account of the CAIR NO_x Ozone Season source covered by the permit. [45CSR§40-23.2.]

e. Except as provided in 45CSR§40-23.2, the Secretary will revise the CAIR permit, as necessary, in accordance with 45CSR30 or any other applicable rule addressing permit revisions. [45CSR§40-24.1]

13.1.15. **CAIR SO₂ Trading Program (Unit 1, Unit 2).** The owners and operators of each CAIR SO₂ source required to have a Title V operating permit and each CAIR SO₂ unit required to have a Title V operating permit at the source will have a CAIR permit issued by the Secretary under 45CSR§41-20 through 45CSR§41-24 for the source and operate the source and the unit in compliance with such CAIR permit. For each CAIR SO₂ source required to have a Title V operating permit, such permit must include a CAIR permit administered by the Secretary for the Title V operating permit. The CAIR portion of the Title V operating permit will be administered in accordance with 45CSR30 and any other applicable rule, except as provided otherwise by 45CSR§41-5 and 45CSR§41-20 through 45CSR§41-24. [45CSR§§41-6.1.b. and 20.1.]

a. Duty to apply. -- The CAIR designated representative of any CAIR SO₂ source required to have a Title V operating permit will submit to the Secretary a complete CAIR permit application under 45CSR§41-22 for the source covering each CAIR SO₂ unit at the source at least 18 months (or such lesser time provided by the Secretary) before the later of January 1, 2010 or the date on which the CAIR SO₂ unit commences operation. [45CSR§41-21.1.]

b. Duty to reapply. -- For a CAIR SO₂ source required to have a Title V operating permit, the CAIR designated representative will submit a complete CAIR permit application under 45CSR§41-22 for the source covering each CAIR SO₂ unit at the source to renew the CAIR permit in accordance with 45CSR30. [45CSR§41-21.2.]

c. A complete CAIR permit application will include the following elements concerning the CAIR SO₂ source for which the application is submitted, in a format prescribed by the

Secretary:

- c.1. Identification of the CAIR SO₂ source;
- c.2. Identification of each CAIR SO₂ unit at the CAIR SO₂ source;
- c.3. The standard requirements under 45CSR§41-6; and
- c.4. A copy of the complete certificate of representation under 45CSR§41-13.

[45CSR§41-22.1.]

d. Each CAIR permit is deemed to incorporate automatically the definitions of terms under 45CSR§41-2 and, upon recordation by the Administrator under 45CSR§41-51 through 45CSR§41-57, 45CSR§41-60 through 45CSR§41-62, every allocation, transfer, or deduction of a CAIR SO₂ allowance to or from the compliance account of the CAIR SO₂ source covered by the permit. **[45CSR§41-23.2.]**

e. Except as provided in 45CSR§41-23.2, the Secretary will revise the CAIR permit, as necessary, in accordance with 45CSR30 or any other applicable rule addressing permit revisions. **[45CSR§41-24.1.]**

3.2. Monitoring Requirements

- 3.2.1. No facility-wide requirements.

3.3. Testing Requirements

- 3.3.1. **Stack testing.** As per provisions set forth in this permit or as otherwise required by the Secretary, in accordance with the West Virginia Code, underlying regulations, permits and orders, the permittee shall conduct test(s) to determine compliance with the emission limitations set forth in this permit and/or established or set forth in underlying documents. The Secretary, or his duly authorized representative, may at his option witness or conduct such test(s). Should the Secretary exercise his option to conduct such test(s), the operator shall provide all necessary sampling connections and sampling ports to be located in such manner as the Secretary may require, power for test equipment and the required safety equipment, such as scaffolding, railings and ladders, to comply with generally accepted good safety practices. Such tests shall be conducted in accordance with the methods and procedures set forth in this permit or as otherwise approved or specified by the Secretary in accordance with the following:
 - a. The Secretary may on a source-specific basis approve or specify additional testing or alternative testing to the test methods specified in the permit for demonstrating compliance with 40 C.F.R. Parts 60, 61, and 63, if applicable, in accordance with the Secretary's delegated authority and any established equivalency determination methods which are applicable. If a testing method is specified or approved which effectively replaces a test method specified in the permit, the permit will be revised in accordance with 45CSR§30-6.4. or 45CSR§30-6.5 as applicable.
 - b. The Secretary may on a source-specific basis approve or specify additional testing or alternative testing to the test methods specified in the permit for demonstrating compliance with applicable requirements which do not involve federal delegation. In specifying or approving such alternative testing to the test methods, the Secretary, to the extent possible, shall utilize the same equivalency

criteria as would be used in approving such changes under Section 3.3.1.a. of this permit. If a testing method is specified or approved which effectively replaces a test method specified in the permit, the permit will be revised in accordance with 45CSR§30-6.4. or 45CSR§30-6.5 as applicable.

- c. All periodic tests to determine mass emission limits from or air pollutant concentrations in discharge stacks and such other tests as specified in this permit shall be conducted in accordance with an approved test protocol. Unless previously approved, such protocols shall be submitted to the Secretary in writing at least thirty (30) days prior to any testing and shall contain the information set forth by the Secretary. In addition, the permittee shall notify the Secretary at least fifteen (15) days prior to any testing so the Secretary may have the opportunity to observe such tests. This notification shall include the actual date and time during which the test will be conducted and, if appropriate, verification that the tests will fully conform to a referenced protocol previously approved by the Secretary.

[WV Code § 22-5-4(a)(15) 45CSR2, 45CSR10]

3.4. Recordkeeping Requirements

- 3.4.1. **Monitoring information.** The permittee shall keep records of monitoring information that include the following:
 - a. The date, place as defined in this permit and time of sampling or measurements;
 - b. The date(s) analyses were performed;
 - c. The company or entity that performed the analyses;
 - d. The analytical techniques or methods used;
 - e. The results of the analyses; and
 - f. The operating conditions existing at the time of sampling or measurement.

[45CSR§30-5.1.c.2.A.]

- 3.4.2. **Retention of records.** The permittee shall retain records of all required monitoring data and support information for a period of at least five (5) years from the date of monitoring sample, measurement, report, application, or record creation date. Support information includes all calibration and maintenance records and all original strip-chart recordings for continuous monitoring instrumentation, and copies of all reports required by the permit. Where appropriate, records may be maintained in computerized form in lieu of the above records.

[45CSR§30-5.1.c.2.B.]

- 3.4.3. **Odors.** For the purposes of 45CSR4, the permittee shall maintain a record of all odor complaints received. Such record shall contain an assessment of the validity of the complaints as well as any corrective actions taken.

[45CSR§30-5.1.c. State-Enforceable only.]

- 3.4.4. The permittee shall maintain records indicating the use of any dust suppressants or any other suitable dust control measures applied at the facility. The permittee shall also inspect all fugitive dust control systems weekly from May 1 through September 30 and monthly from October 1 through April 30 to ensure that they are operated as necessary and maintained in good working order. The permittee shall maintain records of all scheduled and non-scheduled maintenance and shall state any maintenance or corrective actions taken as a result of the weekly and/or monthly inspections, the times the fugitive dust control system(s) were inoperable and any corrective actions taken.
[45CSR§30-5.1.c.]

3.5. Reporting Requirements

- 3.5.1. **Responsible official.** Any application form, report, or compliance certification required by this permit to be submitted to the DAQ and/or USEPA shall contain a certification by the responsible official that states that, based on information and belief formed after reasonable inquiry, the statements and information in the document are true, accurate and complete.
[45CSR§§30-4.4. and 5.1.c.3.D.]
- 3.5.2. A permittee may request confidential treatment for the submission of reporting required under 45CSR§30-5.1.c.3. pursuant to the limitations and procedures of W.Va. Code § 22-5-10 and 45CSR31.
[45CSR§30-5.1.c.3.E.]
- 3.5.3. All notices, requests, demands, submissions and other communications required or permitted to be made to the Secretary of DEP and/or USEPA shall be made in writing and shall be deemed to have been duly given when delivered by hand, or mailed first class with postage prepaid to the address(es) set forth below or to such other person or address as the Secretary of the Department of Environmental Protection may designate:

If to the DAQ:

Director
WVDEP
Division of Air Quality
601 57th Street, SW
Charleston, WV 25304-2345

Phone: 304/926-3727
FAX: 304/926-3739

If to the US EPA:

Associate Director
Office of Enforcement and Permits Review
(3AP12)
U. S. Environmental Protection Agency
Region III
1650 Arch Street
Philadelphia, PA 19103-2029

- 3.5.4. **Certified emissions statement.** The permittee shall submit a certified emissions statement and pay fees on an annual basis in accordance with the submittal requirements of the Division of Air Quality. A receipt for the appropriate fee shall be maintained on the premises for which the receipt has been issued, and shall be made immediately available for inspection by the Secretary or his/her duly authorized representative.
[45CSR§30-8.]

3.5.5. **Compliance certification.** The permittee shall certify compliance with the conditions of this permit on the forms provided by the DAQ. In addition to the annual compliance certification, the permittee may be required to submit certifications more frequently under an applicable requirement of this permit. The annual certification shall be submitted to the DAQ and USEPA on or before March 15 of each year, and shall certify compliance for the period ending December 31. The permittee shall maintain a copy of the certification on site for five (5) years from submittal of the certification.

[45CSR§30-5.3.e.]

3.5.6. **Semi-annual monitoring reports.** The permittee shall submit reports of any required monitoring on or before September 15 for the reporting period January 1 to June 30 and March 15 for the reporting period July 1 to December 31. All instances of deviation from permit requirements must be clearly identified in such reports. All required reports must be certified by a responsible official consistent with 45CSR§30-4.4.

[45CSR§30-5.1.c.3.A.]

3.5.7. **Emergencies.** For reporting emergency situations, refer to Section 2.17 of this permit.

3.5.8. **Deviations.**

a. In addition to monitoring reports required by this permit, the permittee shall promptly submit supplemental reports and notices in accordance with the following:

1. Any deviation resulting from an emergency or upset condition, as defined in 45CSR§30-5.7., shall be reported by telephone or telefax within one (1) working day of the date on which the permittee becomes aware of the deviation, if the permittee desires to assert the affirmative defense in accordance with 45CSR§30-5.7. A written report of such deviation, which shall include the probable cause of such deviations, and any corrective actions or preventative measures taken, shall be submitted and certified by a responsible official within ten (10) days of the deviation.
2. Any deviation that poses an imminent and substantial danger to public health, safety, or the environment shall be reported to the Secretary immediately by telephone or telefax. A written report of such deviation, which shall include the probable cause of such deviation, and any corrective actions or preventative measures taken, shall be submitted by the responsible official within ten (10) days of the deviation.
3. Deviations for which more frequent reporting is required under this permit shall be reported on the more frequent basis.
4. All reports of deviations shall identify the probable cause of the deviation and any corrective actions or preventative measures taken.

[45CSR§30-5.1.c.3.C.]

b. The permittee shall, in the reporting of deviations from permit requirements, including those attributable to upset conditions as defined in this permit, report the probable cause of such deviations and any corrective actions or preventive measures taken in accordance with any rules of the Secretary.

[45CSR§30-5.1.c.3.B.]

- c. Every report submitted under this subsection shall be certified by a responsible official.
[45CSR§30.5.1.c.3.D.]

- 3.5.9. **New applicable requirements.** If any applicable requirement is promulgated during the term of this permit, the permittee will meet such requirements on a timely basis, or in accordance with a more detailed schedule if required by the applicable requirement.
[45CSR§30-4.3.h.1.B.]

3.6. Permit Shield

- 3.6.1. The permittee is hereby granted a permit shield in accordance with 45CSR§30-5.6. The permit shield applies provided the permittee operates in accordance with the information contained within this permit.
- 3.6.2. The following requirements specifically identified are not applicable to the source based on the determinations set forth below. The permit shield shall apply to the following requirements provided the conditions of the determinations are met.
- a. 45CSR1 – *NO_x Budget Trading Program As A Means Of Control And Reduction Of Nitrogen Oxides From Non-Electric Generating Units*: The Kanawha River Plant does not have any fossil fuel-fired “Non-Electric Generating Units” as defined in this rule.
 - b. 45CSR5 – *To Prevent And Control Air Pollution From The Operation Of Coal Preparation Plants, Coal Handling Operations And Coal Refuse Disposal Areas*: The Kanawha River Plant is subject to the requirements of 45CSR2 and is therefore exempt from the provisions of 45CSR5 as outlined in 45CSR§§5-2.4.b. & 14.
 - c. 45CSR17 – *To Prevent And Control Particulate Matter Air Pollution From Materials Handling, Preparation, Storage And Other Sources Of Fugitive Particulate Matter*: The Kanawha River Plant is subject to the fugitive particulate matter emission requirements of 45CSR2 and is therefore exempt from the provisions of 45CSR17 as outlined in 45CSR§17-6.1.
 - d. 40 C.F.R. 60 Subpart D – *Standards of Performance for Fossil-Fuel-Fired Steam Generators for which Construction is Commenced After August 17, 1971*: Kanawha River’s steam generators commenced construction prior to 1971.
 - e. 40 C.F.R. 60 Subpart Da – *Standards of Performance for Electric Utility Steam Generating Units for which Construction is Commenced After September 18, 1978*: Kanawha River’s steam generators commenced construction prior to September 18, 1978.
 - f. 40 C.F.R. 60 Subpart K – *Standards of Performance for Storage Vessels for Petroleum Liquids for which Construction, Reconstruction, or Modification Commenced After June 11, 1973, and Prior May 18, 1978*: The facility does not include storage vessels that are used to store petroleum liquids (as defined in 40 CFR 60.111(b)) and that have a storage capacity greater than 40,000 gallons for which construction, reconstruction or modification was commenced after June 11, 1973 and prior to May 19, 1978.
 - g. 40 C.F.R. 60 Subpart Ka – *Standards of Performance for Storage Vessels for Petroleum Liquids for which Construction, Reconstruction, or Modification Commenced After May 18, 1978 and*

Prior to July 23, 1984: The facility does not include storage vessels that are used to store petroleum liquids (as defined in 40 CFR 60.111a(b)) and that have a storage capacity greater than 40,000 gallons for which construction, reconstruction or modification was commenced after May 18, 1978 and prior to July 23, 1984.

- h. 40 C.F.R. 60 Subpart Kb – *Standards of Performance for Volatile Organic Liquid Storage Vessels (Including Petroleum Liquid Storage Vessels) for which Construction, Reconstruction, or Modification Commenced after July 23, 1984:* Storage vessels potentially affected by this rule are exempted because they contain liquids with a maximum true vapor pressure of less than 3.5 kPa, have a storage capacity of less than 75 cubic meters, or have not commenced construction, reconstruction or modification after July 23, 1984.
- i. 40 C.F.R. 60 Subpart Y – *Standards of Performance for Coal Preparation Plants:* The coal handling equipment potentially affected by this rule has not been constructed or modified after October 24, 1974.
- j. 40 C.F.R. 63 Subpart Q – *National Emission Standards for Hazardous Air Pollutants for Industrial Process Cooling Towers:* The facility does not include industrial process cooling towers that have operated with chromium-based water treatment chemicals on or after September 8, 1994.
- k. 40 C.F.R. 63 Subpart ZZZZ – *National Emission Standards for Hazardous Air Pollutants for Stationary Reciprocating Internal Combustion Engines:* The diesel fire pump at this facility is considered an existing compression ignition RICE and is not subject to the requirements of this subpart per 40 CFR §63.6590(b)(3).

4.0. Source-Specific Requirements [Boilers (*Emission Point CS012*)]

4.0.1. Emergency Operating Scenarios

- a. In the event of an unavoidable shortage of fuel having characteristics or specifications necessary to comply with the visible emission requirements or any emergency situation or condition creating a threat to public safety or welfare, the Secretary may grant an exemption to the otherwise applicable visible emission standards for a period not to exceed fifteen (15) days, provided that visible emissions during that period do not exceed a maximum six (6) minute average of thirty (30) percent and that a reasonable demonstration is made by the owner or operator that the weight emission requirements will not be exceeded during the exemption period.
[45CSR§2-10.1.]
- b. Due to unavoidable malfunction of equipment or inadvertent fuel shortages, SO₂ emissions from the auxiliary boilers exceeding those provided for in 45CSR§10-3.3.f. may be permitted by the Secretary for periods not to exceed ten (10) days upon specific application to the Secretary. Such application shall be made within twenty-four (24) hours of the equipment malfunction or fuel shortage. In cases of major equipment failure or extended shortages of conforming fuels, additional time periods may be granted by the Secretary, provided a corrective program has been submitted by the owner or operator and approved by the Secretary.
[45CSR§10-9.1.]

4.0.2. Thermal Decomposition Of Boiler Cleaning Solutions

The thermal decomposition of boiler cleaning solutions is permitted in accordance with the WVDAQ letter dated September 3, 2002 addressed to Mr. Greg Wooten and signed by Jesse D. Adkins and subject to the DAQ notification requirements as outlined in the document titled "American Electric Power Boiler Chemical Cleaning Process Evaporation Notification Procedure." Records pertaining to the thermal decomposition of boiler cleaning solutions shall be kept on site for a period of no less than five (5) years and shall be made available, in a suitable form for inspection, to the Secretary upon request.

[WVDAQ Letter dated September 3, 2002 addressed to Mr. Greg Wooten and signed by Jesse D. Adkins - State-Enforceable only]

4.0.3. Combustion of Demineralizer Resins

The combustion of demineralizer resins is permitted in accordance with the WVDAQ letter dated January 21, 2004 addressed to Mr. Frank Blake and signed by Jesse D. Adkins and subject to the DAQ notification requirements as outlined in the document titled "American Electric Power Demineralizer Resin Burn Notification Procedure." Records pertaining to the combustion of demineralizer resins shall be kept on site for a period of no less than five (5) years and shall be made available, in a suitable form for inspection, to the Secretary upon request.

[WVDAQ Letter dated January 21, 2004 addressed to Mr. Frank Blake and signed by Jesse D. Adkins - State-Enforceable only]

4.1. Limitations and Standards

- 4.1.1. Any fuel burning unit(s) including associated air pollution control equipment, shall at all times, including periods of start-up, shutdowns, and malfunctions, to the extent practicable, be maintained and operated in a manner consistent with good air pollution control practice for minimizing emissions.
[45CSR§2-9.2.]

Unit 1 & Unit 2 Steam Generators (CS012)

Visible Emissions and Particulate Matter

- 4.1.2. Visible Emissions from Unit 1 & 2 stack (CS012) shall not exceed ten (10) percent opacity based on a six minute block average.
[45CSR§2-3.1.]
- 4.1.3. The visible emission standards shall apply at all times except in periods of start-ups, shutdowns and malfunctions.
[45CSR§2-9.1.]
- 4.1.4. Particulate matter emissions from Unit 1 & 2 stack (CS012) shall not exceed 195.0 lb/hr. The averaging time shall be as outlined in 45CSR2 Appendix §§ 4.1.b. & 4.1.c.
[45CSR§2-4.1.a., 45CSR2-Appendix §§ 4.1.b. & 4.1.c.]

Sulfur Dioxide (SO₂)

- 4.1.5. Sulfur dioxide emissions from Unit 1 & 2 stack (CS012) shall not exceed 6,240.0 lb/hr.
[45CSR§§10-3.2. & 3.2.b.]
- 4.1.6. Compliance with the allowable sulfur dioxide emission limitations from the Unit 1 & 2 boilers shall be based on a continuous twenty-four (24) hour averaging time. Emissions shall not be allowed to exceed the weight emissions standards for sulfur dioxide as set forth in 45CSR10, except during one (1) continuous twenty-four (24) hour period in each calendar month. During this one (1) continuous twenty-four hour period, emissions shall not be allowed to exceed such weight emission standards by more than ten percent (10%) without causing a violation of 45CSR10. A continuous twenty-four (24) hour period is defined as one (1) calendar day.
[45CSR§10-3.8.]

4.2. Monitoring Requirements

- 4.2.1. Compliance with the visible emission requirements for CS012 shall be determined as outlined in section I.A.2. of the DAQ approved “45CSR2 Monitoring Plan” attached in Appendix B of this permit.
[45CSR§§2-3.2., 8.1.a & 8.2., 45CSR§2A-6]
- 4.2.2. The owner or operator shall install, calibrate, certify, operate, and maintain continuous monitoring systems that measure opacity and all SO₂, and NO_x, emissions from emission point CS012 as specified in 40 C.F.R. Part 75 and measure CO₂ emissions from emission point CS012 as specified in 40 C.F.R. Part 75.
[45CSR33, 40 C.F.R. § 75.10]
- 4.2.3. Compliance with the operating and fuel usage requirements for Units 1 & 2 shall be demonstrated as outlined in section I.A.3. of the DAQ approved “45CSR2 Monitoring Plan” attached in Appendix B of this permit.
[45CSR§§2-8.3.c., 8.4.a. & 8.4.a.1.]
- 4.2.4. The owner or operator shall implement a Compliance Assurance Monitoring program in accordance with the following:
- (a) The permittee shall maintain 6 minute opacity averages measured by a continuous opacity

monitoring system, operated and maintained pursuant to 40 CFR 75.

[45CSR§30-5.1.c. and 40 C.F.R. § 64.6(c)(1)(i) and (ii)]

- (b) The COM QA/QC procedures shall be consistent with the applicable requirements of 40 CFR Part 75.

[40 C.F.R. §75.21 and 40 C.F.R. § 64.6(c)(iii)]

- (c) The 6-minute opacity averages shall be used to calculate 3-hour block average opacity values. An excursion of the indicator range shall be identified as a 3-hour block average opacity value that exceeds the upper threshold value of the defined indicator range. The upper threshold value of the indicator range will be determined using existing particulate matter test results and additional CAM testing. The definition of the upper threshold value of the indicator range will be provided to the Secretary in accordance with Section 4.2.6(c) of this permit.

[45CSR§30-5.1.c. and 40 C.F.R. § 64.6(c)(2)]

[45CSR§30-5.1.c. and 40 C.F.R. § 64.3(b)(1)]

- 4.2.5. The CAM related testing and CAM Plan implementation shall be conducted according to the following schedule:

1. Appalachian Power Company shall submit a CAM testing protocol to the Department at least 30 days prior to the proposed stack testing date.
2. Appalachian Power Company shall complete the CAM testing and implement the CAM monitoring within 180 days of the issuance of the permit.
3. A test report presenting the test results, including the indicator range and the generated opacity to total suspended particulate relationship curve shall be submitted to the Secretary within 60 days after completion of the testing.

[45 CSR 30-5.1.c. and 40 CFR Part 64.4(e)]

4.3. Testing Requirements

- 4.4. The owner or operator shall conduct, or have conducted, tests to determine the compliance of Unit 1 & Unit 2 with the particulate matter mass emission limitations. Such tests shall be conducted in accordance with the appropriate method set forth in 45CSR2 Appendix - Compliance Test Procedures for 45CSR2 or other equivalent EPA approved method approved by the Secretary. Such tests shall be conducted in accordance with the schedule set forth in the following table. The most recent compliance test was completed on March 16, 2006 and the test results were ≤50% of the weight emission standard. The testing frequency is therefore “Once/3 years.” Subsequent testing shall be based on the schedule below.

| Test | Test Results | Retesting Frequency |
|------------------|--|---------------------|
| Initial Baseline | ≤50% of weight emission standard | Once/3 years |
| Initial Baseline | between 50% and 80 % of weight emission standard | Once/2 years |
| Initial Baseline | ≥80% of weight emission standard | Annual |
| Annual | after three successive tests indicate mass emission rates ≤50% of weight emission standard | Once/3 years |
| Annual | after two successive tests indicate mass emission rates <80 % of weight emission standard | Once/2 years |
| Annual | any tests indicates a mass emission rate ≥80% of weight emission standard | Annual |

| Test | Test Results | Retesting Frequency |
|--------------|---|---------------------|
| Once/2 years | after two successive tests indicate mass emission rates $\leq 50\%$ of weight emission standard | Once/3 years |
| Once/2 years | any tests indicates a mass emission rate $< 80\%$ of weight emission standard | Once/2 years |
| Once/2 years | any tests indicates a mass emission rate $\geq 80\%$ of weight emission standard | Annual |
| Once/3 years | any tests indicates a mass emission rate $\leq 50\%$ of weight emission standard | Once/3 years |
| Once/3 years | any test indicates mass emission rates between 50% and 80 % of weight emission standard | Once/2 years |
| Once/3 years | any test indicates a mass emission rate $\geq 80\%$ of weight emission standard | Annual |

[45CSR§2-8.1., 45CSR§2A-5.2.]

- 4.3.1. If five (5) percent or greater of the three (3) hour average COMS opacity values, determined in accordance with 4.2.4(c) of this permit, indicate excursions of the upper end of the opacity indicator range during a calendar quarter, the permittee shall perform a particulate matter stack test in the following calendar quarter to demonstrate compliance with the particulate standard while operating at representative conditions. The permittee shall submit a compliance test protocol as required by Section 3.3.1 of this permit before conducting the test. The Secretary may waive this testing requirement upon a demonstration that the cause(s) of the excursions have been corrected, or may require stack tests at any time pursuant to Section 3.3.1 of this permit.

[45CSR§30-5.1.c. and 40 C.F.R. § 64.7]

4.3.2.

4.4 Recordkeeping Requirements

- 4.4.1. Records of monitored data established in the monitoring plan (see Appendix B) shall be maintained on site and shall be made available to the Secretary or his duly authorized representative upon request. **[45CSR§2-8.3.a.]**
- 4.4.2. Records of the operating schedule and the quantity and quality of fuel consumed in each fuel burning unit, shall be maintained on-site in a manner to be established by the Secretary and made available to the Secretary or his duly authorized representative upon request. **[45CSR§2-8.3.c.]**
- 4.4.3. Records of the block 3-hour COMS opacity averages and corrective actions taken during excursions of the CAM plan indicator range shall be maintained on site and shall be made available to the Secretary or his duly authorized representative upon request. COMS performance data will be maintained in accordance with 40 CFR 75 recordkeeping requirements.

[45 CSR 30-5.1.c. and 40 CFR Part 64.9(b)]

4.5 Reporting Requirements

4.5.1. The designated representative shall electronically report SO₂, NO_x, and CO₂ emissions data and information as specified in 40 C.F.R. § 75.64 to the Administrator of USEPA, quarterly. Each electronic report must be submitted within thirty (30) days following the end of each calendar quarter.
[45CSR33, 40 C.F.R. § 75.64]

4.5.2. A periodic exception report shall be submitted to the Secretary, in a manner and at a frequency to be established by the Secretary. Compliance with this periodic exception reporting requirement shall be demonstrated as outlined in sections I.A.4. of the DAQ approved “45CSR2 Monitoring Plan” attached in Appendix B of this permit.
[45CSR§2-8.3.b.]

4.5.3. Excess opacity periods resulting from any malfunction of Unit 1 or Unit 2 or their air pollution control equipment, meeting the following conditions, may be reported on a quarterly basis unless otherwise required by the Secretary:

- a. The excess opacity period does not exceed thirty (30) minutes within any twenty-four (24) hour period; and
- b. Excess opacity does not exceed forty percent (40%).

[45CSR§2-9.3.a.]

4.5.4. Except as provided in permit condition 4.5.3. above, the owner or operator shall report to the Secretary by telephone, telefax, or e-mail any malfunction of Unit 1 or Unit 2 or their associated air pollution control equipment, which results in any excess particulate matter or excess opacity, by the end of the next business day after becoming aware of such condition. The owner or operator shall file a certified written report concerning the malfunction with the Secretary within thirty (30) days providing the following information:

- a. A detailed explanation of the factors involved or causes of the malfunction;
- b. The date, and time of duration (with starting and ending times) of the period of excess emissions;
- c. An estimate of the mass of excess emissions discharged during the malfunction period;
- d. The maximum opacity measured or observed during the malfunction;
- e. Immediate remedial actions taken at the time of the malfunction to correct or mitigate the effects of the malfunction; and
- f. A detailed explanation of the corrective measures or program that will be implemented to prevent a recurrence of the malfunction and a schedule for such implementation.

[45CSR§2-9.3.b.]

Acid Rain Program

- 4.5.5. Unit 1 & Unit 2 are Phase II Acid Rain affected units under 45CSR33, as defined by 40 C.F.R § 72.6, and as such are required to meet the requirements of 40 C.F.R. Parts 72, 73, 74, 75, 76, 77 and 78. These requirements include, but are not limited to:
- a. Hold an Acid Rain permit (Acid Rain Permit is included in Appendix C);
 - b. Hold allowances, as of the allowance transfer deadline, in the unit's compliance sub-account of not less than the total annual emissions of sulfur dioxide for the previous calendar year from the unit;
 - c. Comply with the applicable Acid Rain emissions for sulfur dioxide;
 - d. Comply with the applicable Acid Rain emissions for nitrogen oxides;
 - e. Comply with the monitoring requirements of 40 C.F.R. Part 75 and section 407 of the Clean Air Act of 1990 and regulations implementing section 407 of the Act;
 - f. Submit the reports and compliance certifications required under the Acid Rain Program, including those under 40 C.F.R. Part 72, Subpart I and 40 C.F.R. Part 75.

[45CSR33, 40 C.F.R. Parts 72, 73, 74, 75, 76, 77, 78.]

- 4.5.6. A periodic monitoring report providing the number, duration and cause of the CAM plan indicator range excursion, and the corrective actions taken shall be reported in accordance with 40 C.F.R §70.6(a)(3)(iii) and 40 C.F.R §64.9(a)(2). Excursions shall be reported as part of the semi-annual monitoring and deviation report submitted under Section 3.4.6 of this permit.
[45CSR§30-5.1.c. and 40 C.F.R. § 64.9(a)] [CS013]

5.0 Source-Specific Requirements [Coal & Ash Handling (*Emission points listed in section 1.0. Table*)]

5.1. Limitations and Standards

- 5.1.1. The Coal and Ash handling systems are subject to 45CSR§2-5 as outlined in the facility wide section of this permit (condition 3.1.11) regarding fugitive dust control system:

5.2. Monitoring Requirements

- 5.2.1. Compliance with the fugitive dust requirements is contained in condition 3.4.4. of this permit.

Attachment I
Appendix B

NOx Budget Permit Application

(b) Monitoring Requirements.

(1) The owners and operators and, to the extent applicable, the NO_x authorized account representative of each NO_x Budget source and each NO_x Budget unit at the source shall comply with the monitoring requirements of sections 70 through 76 of 45CSR1 or 45CSR26; and/or subpart H of 40 CFR part 97, as applicable.

(2) The emissions measurements recorded and reported in accordance with sections 70 through 76 of 45CSR1 or 45CSR26, and/or subpart H of 40 CFR part 97 shall be used to determine compliance by the unit with the NO_x Budget emissions limitation under paragraph (c).

(c) Nitrogen Oxides Requirements.

(1) The owners and operators of each NO_x Budget source and each NO_x Budget unit at the source shall hold NO_x allowances available for compliance deductions under subsections 45CSR1-54.1, 54.2, 54.5, or 54.6; 45CSR26-54.1, 54.2, 54.5, or 54.6; and/or § 97.54(a), (b), (e), or (f), as applicable, as of the NO_x allowance transfer deadline, in the unit's compliance account and the source's overdraft account in an amount not less than the total NO_x emissions for the ozone season from the unit, as determined in accordance with sections 70 through 76 of 45CSR1 or 45CSR26 and/or subpart H of 40 CFR part 97, as applicable, plus any amount necessary to account for actual heat input under subsection 42.5 of 45CSR1 or 45CSR26, and/or § 97.42(e) for the ozone season period or to account for excess emissions for a prior ozone season under subsection 54.4 of 45CSR1 or 45CSR26, and/or § 97.54(d), or to account for withdrawal from the NO_x Budget Trading Program, or a change in regulatory status of a NO_x Budget opt-in unit under sections 86 or 87 of 45CSR1, and/or § 97.86 or § 97.87, as applicable.

(2) Each ton of nitrogen oxides emitted in excess of the NO_x Budget emissions limitation shall constitute a separate violation of 45CSR1 or 45CSR26, §§22-5-1 *et seq.*, and/or 40 CFR part 97, and the Clean Air Act.

(3) A NO_x Budget unit shall be subject to the requirements under paragraph (c)(1) starting on the later of: May 31, 2004 for NO_x Budget units under 45CSR1, 45CSR26 and/or 40 CFR part 97; or the date on which the unit commences operation.

(4) NO_x allowances shall be held in, deducted from, or transferred among NO_x Allowance Tracking System accounts in accordance with sections 40 through 43, 50 through 57, 60 through 62, and 70 through 76 of 45CSR1 or 45CSR26; sections 80 through 88 of 45CSR1, and/or subparts E, F, G, and I of 40 CFR part 97, as applicable.

(5) A NO_x allowance shall not be deducted, in order to comply with the requirements under paragraph (c)(1), for an ozone season in a year prior to the year for which the NO_x allowance was allocated.

(6) A NO_x allowance allocated by the Director or EPA Administrator under the NO_x Budget Trading Program is a limited authorization to emit one ton of nitrogen oxides in accordance with the NO_x Budget Trading Program. No provision of the NO_x Budget Trading Program, the NO_x Budget permit application, the NO_x Budget permit, or an exemption under subsection 4.2 or section 5 of 45CSR1 or 45CSR26, and/or § 97.4(b) or § 97.5, as applicable, and no provision of law shall be construed to limit the authority of the Division of Environmental Protection or the United States to terminate or limit such authorization.

(7) A NO_x allowance allocated by the Director or EPA Administrator under the NO_x Budget Trading Program does not constitute a property right.

(8) Upon recordation by the EPA Administrator, every allocation, transfer, or deduction of a NO_x allowance to or from a NO_x Budget unit's compliance account or the overdraft account of the source where the unit is located is incorporated automatically in any NO_x Budget permit of the NO_x Budget unit.

(d) Excess Emissions Requirements.

(1) The owners and operators of a NO_x Budget unit that has excess emissions in any ozone season shall:

(i) Surrender the NO_x allowances required for deduction under subdivision 54.4.a of 45CSR1 or 45CSR26, and/or § 97.54(d)(1) as applicable; and

(ii) Pay any fine, penalty, or assessment or comply with any other remedy imposed under subdivision 54.4.c of 45CSR1 or 45CSR26, and/or § 97.54(d)(3).

(e) Recordkeeping and Reporting Requirements.

(1) Unless otherwise provided, the owners and operators of the NO_x Budget source and each NO_x Budget unit at the source shall keep on site at the source each of the following documents for a period of 5 years from the date the document is created. This period may be extended for cause, at any time prior to the end of 5 years, in writing by the Director or the EPA Administrator.

(i) The account certificate of representation under 45CSR1-13 or 45CSR26-13 and/or § 97.13, as applicable, for the NO_x authorized account representative for the source and each NO_x Budget unit at the source and all documents that demonstrate the truth of the statements in the account certificate of representation; provided that the certificate and documents shall be retained on site at the source beyond such 5-year period until such documents are superseded because of the submission of a new account certificate of representation under 45CSR1-13 or 45CSR26-13 and/or § 97.13 (as applicable) changing the NO_x authorized account representative.

(ii) All emissions monitoring information, in accordance with sections 70 through 76 of 45CSR1 or 45CSR26; and/or subpart H of 40 CFR part 97 (as applicable); provided that to the extent that sections 70 through 76 of 45CSR1 or 45CSR26; and/or subpart H of 40 CFR part 97 (as applicable) provides for a 3-year period for recordkeeping, the 3-year period shall apply.

(iii) Copies of all reports, compliance certifications, and other submissions and all records made or required under the NO_x Budget Trading Program.

(iv) Copies of all documents used to complete a NO_x Budget permit application and any other submission under the NO_x Budget Trading Program or to demonstrate compliance with the requirements of the NO_x Budget Trading Program.

(2) The NO_x authorized account representative of a NO_x Budget source and each NO_x Budget unit at the source shall submit the reports and compliance certifications required under the NO_x Budget Trading Program, including those under sections 30 and 70 through 76 of 45CSR1 or 45CSR26; sections 80 through 88 of 45CSR1, and/or subparts D, H, or I of 40 CFR part 97, as applicable.

91.

(f) Liability.

- (1) Any person who knowingly violates any requirement or prohibition of the NO_x Budget Trading Program, a NO_x Budget permit, or an exemption under subsection 4.2 or section 5 of 45CSR1 or 45CSR26; and/or § 97.4(b) or § 97.5 shall be subject to enforcement pursuant to W. Va. Code §§22-5-1 et seq. or the Clean Air Act.
- (2) Any person who knowingly makes a false material statement in any record, submission, or report under the NO_x Budget Trading Program shall be subject to criminal enforcement pursuant to §§22-5-1 et seq. or the Clean Air Act.
- (3) No permit revision shall excuse any violation of the requirements of the NO_x Budget Trading Program that occurs prior to the date that the revision takes effect.
- (4) Each NO_x Budget source and each NO_x Budget unit shall meet the requirements of the NO_x Budget Trading Program.
- (5) Any provision of the NO_x Budget Trading Program that applies to a NO_x Budget source or the NO_x authorized account representative of a NO_x Budget source shall also apply to the owners and operators of such source and of the NO_x Budget units at the source.
- (6) Any provision of the NO_x Budget Trading Program that applies to a NO_x Budget unit or the NO_x authorized account representative of a NO_x budget unit shall also apply to the owners and operators of such unit. Except with regard to the requirements applicable to units with a common stack under sections 70 through 76 of 45CSR1 or 45CSR26, and/or subpart H of 40 CFR part 97, as applicable, the owners and operators and the NO_x authorized account representative of one NO_x Budget unit shall not be liable for any violation by any other NO_x Budget unit of which they are not owners or operators or the NO_x authorized account representative and that is located at a source of which they are not owners or operators or the NO_x authorized account representative.

(g) Effect on Other Authorities.

No provision of the NO_x Budget Trading Program, a NO_x Budget permit application, a NO_x Budget permit, or an exemption under subsection 4.2 or section 5 of 45CSR1 or 45CSR26; and/or § 97.4(b) or § 97.5, shall be construed as exempting or excluding the owners and operators and, to the extent applicable, the NO_x authorized account representative of a NO_x Budget source or NO_x Budget unit from compliance with any other provision of the applicable, approved State Implementation Plan, a federally enforceable permit, or the Clean Air Act.

Certification

I am authorized to make this submission on behalf of the owners and operators of the NO_x Budget sources or NO_x Budget units for which the submission is made. I certify under penalty of law that I have personally examined, and am familiar with, the statements and information submitted in this document and all its attachments. Based on my inquiry of those individuals with primary responsibility for obtaining the information, I certify that the statements and information are to the best of my knowledge and belief true, accurate, and complete. I am aware that there are significant penalties for submitting false statements and information or omitting required statements and information, including the possibility of fine or imprisonment.

John M. McManus
Name

Signature



Date

11/16/08

STEP 4 (For sources with opt-in units only).

For each unit listed under Step 2 that is an opt-in unit, re-enter the unit ID#, and indicate if this is an initial permit application for that unit by checking the box.

| Unit ID# | Check box if initial permit application |
|----------|---|
| | <input type="checkbox"/> |

Step 5 (For sources with opt-in units only).

Read the certification, enter the name of the NO_x authorized account representative, sign and date.

I certify that each unit for which this permit application is submitted under 45CSR1-80 and/or subpart I of 40 CFR part 97, as applicable, is not a NO_x Budget unit under 45CSR1-4.1 and/or 40 CFR 97.4(a) and is not covered by an exemption under subsection 4.2 or section 5 of 45CSR1, and/or 40 CFR part 97.4(b) or 97.5 that is in effect.

| | |
|-----------|------|
| Name | |
| Signature | Date |

STEP 6 (For sources submitting an initial NO_x Budget opt-in permit application).

Read the certification, enter the name of the NO_x authorized account representative, sign and date.

I certify that each unit for which this permit application is submitted under 45CSR1-80 and/or subpart I of 40 CFR part 97, as applicable, is operating, as that term is defined under 45CSR1-2 and/or 40 CFR 97.2.

| | |
|-----------|------|
| Name | |
| Signature | Date |

Attachment I
Appendix C

CAIR Permit Application



CAIR Permit Application

94.

Page 1

For sources subject to the Clean Air Interstate Rule Trading Programs under 45CSR39, 45CSR40 and 45CSR41, the West Virginia Department of Environmental Protection, Division of Air Quality has prepared this CAIR Permit Application. Please refer to sections 21 and 22 of 45CSR39, 45CSR40 and 45CSR41, as applicable.

This submission is: New Revised

STEP 1
Identify the source by plant name, and ORIS or facility code

| | | | | | |
|------------|----------------------------|-------------------------|------------------|--------------------|-------------|
| Plant Name | Kanawha River Plant | West Virginia ID Number | 039-00006 | ORIS/Facility Code | 3936 |
|------------|----------------------------|-------------------------|------------------|--------------------|-------------|

STEP 2
Enter the unit ID# for each CAIR unit and indicate to which CAIR programs each unit is subject (by placing an "X" in the column)

| Unit ID# | NO _x Annual | NO _x Ozone Season | SO ₂ Annual |
|----------|------------------------|------------------------------|------------------------|
| 1 | X | X | X |
| 2 | X | X | X |
| | | | |
| | | | |
| | | | |
| | | | |

STEP 3
Read the standard requirements and the certification, enter the name of the CAIR designated representative, and sign and date

Standard Requirements

(a) Permit Requirements.

(1) The CAIR designated representative of each CAIR NO_x Annual source, CAIR NO_x Ozone Season source and CAIR SO₂ source (as applicable) required to have a Title V operating permit and each CAIR NO_x Annual unit, CAIR NO_x Ozone Season unit and CAIR SO₂ unit (as applicable) required to have a Title V operating permit at the source shall:

(i) Submit to the Secretary a complete CAIR permit application under 45CSR§39-22, 45CSR§40-22 and 45CSR§41 -22 (as applicable) in accordance with the deadlines specified in 45CSR§39-21, 45CSR§40-21 and 45CSR§41-21 (as applicable); and

(ii) Submit in a timely manner any supplemental information that the Secretary determines is necessary in order to review a CAIR permit application and issue or deny a CAIR permit.

(2) The owners and operators of each CAIR NO_x Annual source, CAIR NO_x Ozone Season source and CAIR SO₂ source (as applicable) required to have a Title V operating permit and each CAIR NO_x Annual unit, CAIR NO_x Ozone Season unit and CAIR SO₂ unit (as applicable) required to have a Title V operating permit at the source shall have a CAIR permit issued by the Secretary under sections 20 through 24 of 45CSR39, 45CSR40 and 45CSR41 (as applicable) for the source and operate the source and the unit in compliance with such CAIR permit.

(3) Except as provided in sections 80 through 88 of 45CSR39, 45CSR40 and 45CSR41, the owners and operators of a CAIR NO_x Annual source, CAIR NO_x Ozone Season source and CAIR SO₂ source (as applicable) that is not otherwise required to have a Title V operating permit and each CAIR NO_x Annual unit, CAIR NO_x Ozone Season unit and CAIR SO₂ unit (as applicable) that is not otherwise required to have a Title V operating permit are not required to submit a CAIR permit application and to have a CAIR permit, under sections 20 through 24 of 45CSR39, 45CSR40 and 45CSR41 (as applicable) for such CAIR NO_x Annual source, CAIR NO_x Ozone Season source and CAIR SO₂ source (as applicable) and such CAIR NO_x Annual unit, CAIR NO_x Ozone Season unit and CAIR SO₂ unit (as applicable).

Plant Name **Kanawha River Plant**STEP 3,
continued

95.

(b) Monitoring, reporting and recordkeeping requirements.

(1) The owners and operators and the CAIR designated representative, of each CAIR NO_x Annual source, CAIR NO_x Ozone Season source and CAIR SO₂ source (as applicable) and each CAIR NO_x Annual unit, CAIR NO_x Ozone Season unit and CAIR SO₂ unit (as applicable) at the source shall comply with the monitoring, reporting and recordkeeping requirements of sections 70 through 75 of 45CSR39, 45CSR40 and 45CSR41 (as applicable).

(2) The emissions measurements recorded and reported in accordance with sections 70 through 75 of 45CSR39, 45CSR40 and 45CSR41 (as applicable) shall be used to determine compliance by each CAIR NO_x Annual source, CAIR NO_x Ozone Season source and CAIR SO₂ source (as applicable) with the CAIR NO_x Annual emissions limitation, CAIR NO_x Ozone Season emissions limitation and CAIR SO₂ emissions limitation (as applicable) under 45CSR§39-6.3, 45CSR§40-6.3 and 45CSR§41-6.3 (as applicable).

(c) Nitrogen oxides annual emissions requirements.

(1) As of the allowance transfer deadline for the 2009 control period and each control period thereafter, the owners and operators of each CAIR NO_x Annual source and each CAIR NO_x Annual unit at the source shall hold, in the source's compliance account, CAIR NO_x Annual allowances available for compliance deductions for the control period under 45CSR§39-54.1 in an amount not less than the tons of total nitrogen oxides emissions for the control period from all CAIR NO_x Annual units at the source, as determined in accordance with sections 70 through 75 of 45CSR39.

(2) A CAIR NO_x Annual unit shall be subject to the requirements under 45CSR§39-6.3.a for the control period starting on the later of January 1, 2009 or the deadline for meeting the unit's monitor certification requirements under subdivisions 70.2.a, 70.2.b, or 70.2.e of 45CSR39, and for each control period thereafter.

(3) A CAIR NO_x Annual allowance shall not be deducted, for compliance with the requirements under 45CSR§39-6.3.a, for the control period in a calendar year before the year for which the CAIR NO_x Annual allowance was allocated.

(4) CAIR NO_x Annual allowances shall be held in, deducted from, or transferred into or among CAIR NO_x Allowance Tracking System accounts in accordance with sections 50 through 62, and 80 through 88 of 45CSR39.

(5) A CAIR NO_x Annual allowance is a limited authorization to emit one ton of nitrogen oxides in accordance with the CAIR NO_x Annual Trading Program. No provision of the CAIR NO_x Annual Trading Program, the CAIR permit application, the CAIR permit, or an exemption under 45CSR§39-5 and no provision of law shall be construed to limit the authority of the state or the United States to terminate or limit such authorization.

(6) A CAIR NO_x Annual allowance does not constitute a property right.

(7) Upon recordation by the Administrator under sections 40 through 62, and 80 through 88 of 45CSR39, every allocation, transfer, or deduction of a CAIR NO_x Annual allowance to or from a CAIR NO_x Annual source's compliance account is incorporated automatically in any CAIR permit of the source.

(d) Nitrogen oxides ozone season emissions requirements.

(1) As of the allowance transfer deadline for the 2009 ozone season and each ozone season thereafter, the owners and operators of each CAIR NO_x Ozone Season source and each CAIR NO_x Ozone Season unit at the source shall hold, in the source's compliance account, CAIR NO_x Ozone Season allowances available for compliance deductions for the ozone season under 45CSR§40-54.1 in an amount not less than the tons of total nitrogen oxides emissions for the ozone season from all CAIR NO_x Ozone Season units at the source, as determined in accordance with sections 70 through 75 of 45CSR40.

(2) A CAIR NO_x Ozone Season unit shall be subject to the requirements under 45CSR§40-6.3.a for the ozone season starting on the later of May 1, 2009 or the deadline for meeting the unit's monitor certification requirements under subdivisions 70.2.a, 70.2.b, 70.2.c or 70.2.g of 45CSR40 and for each ozone season thereafter.

(3) A CAIR NO_x Ozone Season allowance shall not be deducted, for compliance with the requirements under 45CSR§40-6.3.a, for an ozone season in a calendar year before the year for which the CAIR NO_x Ozone Season allowance was allocated.

(4) CAIR NO_x Ozone Season allowances shall be held in, deducted from, or transferred into or among CAIR NO_x Ozone Season Allowance Tracking System accounts in accordance with sections 50 through 62, and 80 through 88 of 45CSR40.

(5) A CAIR NO_x Ozone Season allowance is a limited authorization to emit one ton of nitrogen oxides in accordance with the CAIR NO_x Ozone Season Trading Program. No provision of the CAIR NO_x Ozone Season Trading Program, the CAIR permit application, the CAIR permit, or an exemption under 45CSR§40-5 and no provision of law shall be construed to limit the authority of the state or the United States to terminate or limit such authorization.

(6) A CAIR NO_x Ozone Season allowance does not constitute a property right.

(7) Upon recordation by the Administrator under subdivision 43.3, sections 51 through 57, 60 through 62, and 80 through 88 of 45CSR40, every allocation, transfer, or deduction of a CAIR NO_x Ozone Season allowance to or from a CAIR NO_x Ozone Season source's compliance account is incorporated automatically in any CAIR permit of the source.

(e) Sulfur dioxide annual emission requirements.

(1) As of the allowance transfer deadline for the 2010 control period and each control period thereafter, the owners and operators of each CAIR SO₂ source and each CAIR SO₂ unit at the source shall hold, in the source's compliance account, a tonnage equivalent of CAIR SO₂ allowances available for compliance deductions for the control period, as determined in accordance with subsections 54.1 and 54.2 of 45CSR§41 in an amount not less than the tons of total sulfur dioxide emissions for the control period from all CAIR SO₂ units at the source, as determined in accordance with sections 70 through 75 of 45CSR41.

(2) A CAIR SO₂ unit shall be subject to the requirements under 45CSR§41 -6.3.a for the control period starting on the later of January 1, 2010 or the deadline for meeting the unit's monitor certification requirements under subdivisions 70.2.a, 70.2.b, or 70.2.e of 45CSR41 and for each control period thereafter.

(3) A CAIR SO₂ allowance shall not be deducted, for compliance with the requirements under 45CSR§41 -6.3.a, for a control period in a calendar year before the year for which the CAIR SO₂ allowance was allocated.

(4) CAIR SO₂ allowances shall be held in, deducted from, or transferred into or among CAIR SO₂ Allowance Tracking System accounts in accordance with sections 51 through 62, and 80 through 88 of 45CSR41.

(5) A CAIR SO₂ allowance is a limited authorization to emit sulfur dioxide in accordance with the CAIR SO₂ Trading Program. No provision of the CAIR SO₂ Trading Program, the CAIR permit application, the CAIR permit, or an exemption under 45CSR§41 -5 and no provision of law shall be construed to limit the authority of the state or the United States to terminate or limit such authorization.

(6) A CAIR SO₂ allowance does not constitute a property right.

(7) Upon recordation by the Administrator under sections 51 through 57, 60 through 62, and 80 through 88 of 45CSR41, every allocation, transfer, or deduction of a CAIR SO₂ allowance to or from a CAIR SO₂ source's compliance account is incorporated automatically in any CAIR permit of the source.

Plant Name **Kanawha River Plant**

96.

STEP 3,
continued(f) Excess emissions requirements.

(1) If a CAIR NO_x Annual source emits nitrogen oxides during any control period in excess of the CAIR NO_x Annual emissions limitation, then:

(i) The owners and operators of the source and each CAIR NO_x Annual unit at the source shall surrender the CAIR NO_x Annual allowances required for deduction under 45CSR§39-54.4.a and pay any fine, penalty, or assessment or comply with any other remedy imposed, for the same violations, under the Clean Air Act or West Virginia Code §22-5-1 et seq; and

(ii) Each ton of such excess emissions and each day of such control period shall constitute a separate violation of 45CSR39, the Clean Air Act, and West Virginia Code §22-5-1 et seq.

(2) If a CAIR NO_x Ozone Season source emits nitrogen oxides during any ozone season in excess of the CAIR NO_x Ozone Season emissions limitation, then:

(i) The owners and operators of the source and each CAIR NO_x Ozone Season unit at the source shall surrender the CAIR NO_x Ozone Season allowances required for deduction under 45CSR§40-54.4.a and pay any fine, penalty, or assessment or comply with any other remedy imposed, for the same violations, under the Clean Air Act or West Virginia Code §22-5-1 et seq; and

(ii) Each ton of such excess emissions and each day of such control period shall constitute a separate violation of 45CSR40, the Clean Air Act, and West Virginia Code §22-5-1 et seq.

(3) If a CAIR SO₂ source emits sulfur dioxide during any control period in excess of the CAIR SO₂ emissions limitation, then:

(i) The owners and operators of the source and each CAIR SO₂ unit at the source shall surrender the CAIR SO₂ allowances required for deduction under 45CSR§41 -54.4.a and pay any fine, penalty, or assessment or comply with any other remedy imposed, for the same violations, under the Clean Air Act or West Virginia Code §22-5-1 et seq; and

(ii) Each ton of such excess emissions and each day of such control period shall constitute a separate violation of 45CSR41, the Clean Air Act, and West Virginia Code §22-5-1 et seq.

(g) Recordkeeping and Reporting Requirements.

(1) Unless otherwise provided, the owners and operators of a CAIR NO_x Annual source, CAIR NO_x Ozone Season source and CAIR SO₂ source (as applicable) and each CAIR NO_x Annual unit, CAIR NO_x Ozone Season unit and CAIR SO₂ unit (as applicable) at the source shall keep on site at the source each of the following documents for a period of 5 years from the date the document is created. This period may be extended for cause, at any time before the end of 5 years, in writing by the Secretary or the Administrator.

(i) The certificate of representation under 45CSR§39-1 3, 45CSR§40-1 3 and 45CSR§41 -13 (as applicable) for the CAIR designated representative for the source and each CAIR NO_x Annual unit, CAIR NO_x Ozone Season unit and CAIR SO₂ unit (as applicable) at the source and all documents that demonstrate the truth of the statements in the certificate of representation; provided that the certificate and documents shall be retained on site at the source beyond such 5-year period until such documents are superseded because of the submission of a new certificate of representation under 45CSR§39-1 3, 45CSR§40-1 3 and 45CSR§41 -13 (as applicable) changing the CAIR designated representative.

(ii) All emissions monitoring information, in accordance with sections 70 through 75 of 45CSR39, 45CSR40 and 45CSR41 (as applicable), provided that to the extent that sections 70 through 75 of 45CSR39, 45CSR40 and 45CSR41 (as applicable) provides for a 3-year period for recordkeeping, the 3-year period shall apply.

(iii) Copies of all reports, compliance certifications, and other submissions and all records made or required under the CAIR NO_x Annual Trading Program, CAIR NO_x Ozone Season Trading Program and CAIR SO₂ Trading Program (as applicable).

(iv) Copies of all documents used to complete a CAIR permit application and any other submission under the CAIR NO_x Annual Trading Program, CAIR NO_x Ozone Season Trading Program and CAIR SO₂ Trading Program (as applicable) or to demonstrate compliance with the requirements of the CAIR NO_x Annual Trading Program, CAIR NO_x Ozone Season Trading Program and CAIR SO₂ Trading Program (as applicable).

(2) The CAIR designated representative of a CAIR NO_x Annual source, CAIR NO_x Ozone Season source and CAIR SO₂ source (as applicable) and each CAIR NO_x Annual unit, CAIR NO_x Ozone Season unit and CAIR SO₂ unit (as applicable) at the source shall submit the reports required under the CAIR NO_x Annual Trading Program, CAIR NO_x Ozone Season Trading Program and CAIR SO₂ Trading Program (as applicable) including those under sections 70 through 75 of 45CSR39, 45CSR40 and 45CSR41 (as applicable).

(h) Liability.

(1) Each CAIR NO_x Annual source, CAIR NO_x Ozone Season source and CAIR SO₂ source (as applicable) and each NO_x unit, CAIR NO_x Ozone Season unit and CAIR SO₂ unit (as applicable) shall meet the requirements of the CAIR NO_x Annual Trading Program, CAIR NO_x Ozone Season Trading Program and CAIR SO₂ Trading Program (as applicable).

(2) Any provision of the CAIR NO_x Annual Trading Program, CAIR NO_x Ozone Season Trading Program or CAIR SO₂ Trading Program (as applicable) that applies to a CAIR NO_x Annual source, CAIR NO_x Ozone Season source or CAIR SO₂ source (as applicable) or the CAIR designated representative of a CAIR NO_x Annual source, CAIR NO_x Ozone Season source or CAIR SO₂ source (as applicable) shall also apply to the owners and operators of such source and of the CAIR NO_x Annual units, CAIR NO_x Ozone Season units or CAIR SO₂ units (as applicable) at the source.

(3) Any provision of the CAIR NO_x Annual Trading Program, CAIR NO_x Ozone Season Trading Program or CAIR SO₂ Trading Program (as applicable) that applies to a CAIR NO_x Annual unit, CAIR SO₂ unit or CAIR NO_x Ozone Season unit (as applicable) or the CAIR designated representative of a CAIR NO_x Annual unit, CAIR NO_x Ozone Season unit or CAIR SO₂ unit (as applicable) shall also apply to the owners and operators of such unit.

(i) Effect on Other Authorities.

No provision of the CAIR NO_x Annual Trading Program, CAIR NO_x Ozone Season Trading Program and CAIR SO₂ Trading Program (as applicable), a CAIR permit application, a CAIR permit, or an exemption under 45CSR§39-5, 45CSR§40-5, or 45CSR§41 -5 (as applicable) shall be construed as exempting or excluding the owners and operators, and the CAIR designated representative, of a CAIR NO_x Annual source, CAIR NO_x Ozone Season source and CAIR SO₂ source (as applicable) or CAIR NO_x Annual unit, CAIR NO_x Ozone Season unit and CAIR SO₂ unit (as applicable) from compliance with any other provision of the applicable, approved State implementation plan, a federally enforceable permit, or the Clean Air Act.

Plant Name **Kanawha River Plant**

97.

STEP 3,
continued

Certification

I am authorized to make this submission on behalf of the owners and operators of the source or units for which the submission is made. I certify under penalty of law that I have personally examined, and am familiar with, the statements and information submitted in this document and all its attachments. Based on my inquiry of those individuals with primary responsibility for obtaining the information, I certify that the statements and information are to the best of my knowledge and belief true, accurate, and complete. I am aware that there are significant penalties for submitting false statements and information or omitting required statements and information, including the possibility of fine or imprisonment.

CAIR Designated Representative **John M. McManus**

Signature



Date

11/16/08



American Electric Power
 1 Riverside Plaza
 Columbus, OH 43215
 AEP.com

May 24, 2007

Mr. John A. Benedict, Director
 Division of Air Quality
 West Virginia Department of Environmental Protection
 601 57th Street SE
 Charleston, West Virginia 25304

RE: Initial CAIR Permit Applications

Dear Director Benedict:

In accordance with provisions of 45 CSR 39 (Control of Annual Nitrogen Oxides Emissions), 45 CSR 40 (Control of Ozone Season Nitrogen Oxides Emissions), 45 CSR 41 (Control of Annual Sulfur Dioxide Emissions), CAIR Permit Applications for units at American Electric Power's John E. Amos, Kammer, Kanawha River, Mitchell, Mountaineer, Philip Sporn, and Ceredo Generating Plants are hereby submitted.

The respective Certificates of Representation have been revised such that John M. McManus has been established as the CAIR Designated Representative and Patrick A. Dal Porto has been established as the CAIR Alternate Designative Representative. Pursuant to section 22 of 45 CSR 39, 45 CSR 40, and 45 CSR 41, a copy of the complete Certificate of Representation has been appended to each permit application.

If there are any questions on this submittal, feel free to contact me at 614-716-1268.

Sincerely,

A handwritten signature in black ink, appearing to read 'J. M. McManus', is written over a horizontal line.

J. M. McManus
 Designated Representative

cc: G. W. Massey/N. L. Fowler – Amos Plant w/att
 W. L. Irons/J. W. Palmer – Kammer/Mitchell Plant w/att
 J. A. Karrasch/M. P. Deemer – Kanawha River Plant w/att
 C. A. Powell/R. D. Thompson – Mountaineer Plant w/att
 R. L. Gail/J. L. MacKnight – Sporn Plant w/att
 P. C. Myers/L. S. Adkins – Ceredo Plant w/att
 J. J. Henry - Legal
 T. P. Mallan - Charleston
 P. A. DalPorto/J. P. Novotny/G. J. Wooten - AQS



CAIR Permit Application

Page 1

For sources subject to the Clean Air Interstate Rule Trading Programs under 45CSR39, 45CSR40 and 45CSR41, the West Virginia Department of Environmental Protection, Division of Air Quality has prepared this CAIR Permit Application. Please refer to sections 21 and 22 of 45CSR39, 45CSR40 and 45CSR41, as applicable.

This submission is: New Revised

STEP 1
Identify the source by plant name, and ORIS or facility code

| | | |
|---------------------|-------------------------|--------------------|
| Kanawha River Plant | 039-00006 | 3936 |
| Plant Name | West Virginia ID Number | ORIS/Facility Code |

STEP 2
Enter the unit ID# for each CAIR unit and indicate to which CAIR programs each unit is subject (by placing an "X" in the column)

| Unit ID# | NO _x Annual | NO _x Ozone Season | SO ₂ Annual |
|----------|------------------------|------------------------------|------------------------|
| 1 | X | X | X |
| 2 | X | X | X |
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STEP 3
Read the standard requirements and the certification, enter the name of the CAIR designated representative, and sign and date

Standard Requirements

(a) Permit Requirements.

(1) The CAIR designated representative of each CAIR NO_x Annual source, CAIR NO_x Ozone Season source and CAIR SO₂ source (as applicable) required to have a Title V operating permit and each CAIR NO_x Annual unit, CAIR NO_x Ozone Season unit and CAIR SO₂ unit (as applicable) required to have a Title V operating permit at the source shall:

(i) Submit to the Secretary a complete CAIR permit application under 45CSR§39-22, 45CSR§40-22 and 45CSR§41-22 (as applicable) in accordance with the deadlines specified in 45CSR§39-21, 45CSR§40-21 and 45CSR§41-21 (as applicable); and

(ii) Submit in a timely manner any supplemental information that the Secretary determines is necessary in order to review a CAIR permit application and issue or deny a CAIR permit.

(2) The owners and operators of each CAIR NO_x Annual source, CAIR NO_x Ozone Season source and CAIR SO₂ source (as applicable) required to have a Title V operating permit and each CAIR NO_x Annual unit, CAIR NO_x Ozone Season unit and CAIR SO₂ unit (as applicable) required to have a Title V operating permit at the source shall have a CAIR permit issued by the Secretary under sections 20 through 24 of 45CSR39, 45CSR40 and 45CSR41 (as applicable) for the source and operate the source and the unit in compliance with such CAIR permit.

(3) Except as provided in sections 80 through 88 of 45CSR39, 45CSR40 and 45CSR41, the owners and operators of a CAIR NO_x Annual source, CAIR NO_x Ozone Season source and CAIR SO₂ source (as applicable) that is not otherwise required to have a Title V operating permit and each CAIR NO_x Annual unit, CAIR NO_x Ozone Season unit and CAIR SO₂ unit (as applicable) that is not otherwise required to have a Title V operating permit are not required to submit a CAIR permit application and to have a CAIR permit, under sections 20 through 24 of 45CSR39, 45CSR40 and 45CSR41 (as applicable) for such CAIR NO_x Annual source, CAIR NO_x Ozone Season source and CAIR SO₂ source (as applicable) and such CAIR NO_x Annual unit, CAIR NO_x Ozone Season unit and CAIR SO₂ unit (as applicable).

| |
|---------------------|
| Kanawha River Plant |
| Plant Name |

STEP 3,
continued(b) Monitoring, reporting and recordkeeping requirements.

(1) The owners and operators and the CAIR designated representative, of each CAIR NO_x Annual source, CAIR NO_x Ozone Season source and CAIR SO₂ source (as applicable) and each CAIR NO_x Annual unit, CAIR NO_x Ozone Season unit and CAIR SO₂ unit (as applicable) at the source shall comply with the monitoring, reporting and recordkeeping requirements of sections 70 through 75 of 45CSR39, 45CSR40 and 45CSR41 (as applicable).

(2) The emissions measurements recorded and reported in accordance with sections 70 through 75 of 45CSR39, 45CSR40 and 45CSR41 (as applicable) shall be used to determine compliance by each CAIR NO_x Annual source, CAIR NO_x Ozone Season source and CAIR SO₂ source (as applicable) with the CAIR NO_x Annual emissions limitation, CAIR NO_x Ozone Season emissions limitation and CAIR SO₂ emissions limitation (as applicable) under 45CSR§39-6.3, 45CSR§40-6.3 and 45CSR§41-6.3 (as applicable).

(c) Nitrogen oxides annual emissions requirements.

(1) As of the allowance transfer deadline for the 2009 control period and each control period thereafter, the owners and operators of each CAIR NO_x Annual source and each CAIR NO_x Annual unit at the source shall hold, in the source's compliance account, CAIR NO_x Annual allowances available for compliance deductions for the control period under 45CSR§39-54.1 in an amount not less than the tons of total nitrogen oxides emissions for the control period from all CAIR NO_x Annual units at the source, as determined in accordance with sections 70 through 75 of 45CSR39.

(2) A CAIR NO_x Annual unit shall be subject to the requirements under 45CSR§39-6.3.a for the control period starting on the later of January 1, 2009 or the deadline for meeting the unit's monitor certification requirements under subdivisions 70.2.a, 70.2.b, or 70.2.e of 45CSR39, and for each control period thereafter.

(3) A CAIR NO_x Annual allowance shall not be deducted, for compliance with the requirements under 45CSR§39-6.3.a, for the control period in a calendar year before the year for which the CAIR NO_x Annual allowance was allocated.

(4) CAIR NO_x Annual allowances shall be held in, deducted from, or transferred into or among CAIR NO_x Allowance Tracking System accounts in accordance with sections 50 through 62, and 80 through 88 of 45CSR39.

(5) A CAIR NO_x Annual allowance is a limited authorization to emit one ton of nitrogen oxides in accordance with the CAIR NO_x Annual Trading Program. No provision of the CAIR NO_x Annual Trading Program, the CAIR permit application, the CAIR permit, or an exemption under 45CSR§39-5 and no provision of law shall be construed to limit the authority of the state or the United States to terminate or limit such authorization.

(6) A CAIR NO_x Annual allowance does not constitute a property right.

(7) Upon recordation by the Administrator under sections 40 through 62, and 80 through 88 of 45CSR39, every allocation, transfer, or deduction of a CAIR NO_x Annual allowance to or from a CAIR NO_x Annual source's compliance account is incorporated automatically in any CAIR permit of the source.

(d) Nitrogen oxides ozone season emissions requirements.

(1) As of the allowance transfer deadline for the 2009 ozone season and each ozone season thereafter, the owners and operators of each CAIR NO_x Ozone Season source and each CAIR NO_x Ozone Season unit at the source shall hold, in the source's compliance account, CAIR NO_x Ozone Season allowances available for compliance deductions for the ozone season under 45CSR§40-54.1 in an amount not less than the tons of total nitrogen oxides emissions for the ozone season from all CAIR NO_x Ozone Season units at the source, as determined in accordance with sections 70 through 75 of 45CSR40.

(2) A CAIR NO_x Ozone Season unit shall be subject to the requirements under 45CSR§40-6.3.a for the ozone season starting on the later of May 1, 2009 or the deadline for meeting the unit's monitor certification requirements under subdivisions 70.2.a, 70.2.b, 70.2.c or 70.2.g of 45CSR40 and for each ozone season thereafter.

(3) A CAIR NO_x Ozone Season allowance shall not be deducted, for compliance with the requirements under 45CSR§40-6.3.a, for an ozone season in a calendar year before the year for which the CAIR NO_x Ozone Season allowance was allocated.

(4) CAIR NO_x Ozone Season allowances shall be held in, deducted from, or transferred into or among CAIR NO_x Ozone Season Allowance Tracking System accounts in accordance with sections 50 through 62, and 80 through 88 of 45CSR40.

(5) A CAIR NO_x Ozone Season allowance is a limited authorization to emit one ton of nitrogen oxides in accordance with the CAIR NO_x Ozone Season Trading Program. No provision of the CAIR NO_x Ozone Season Trading Program, the CAIR permit application, the CAIR permit, or an exemption under 45CSR§40-5 and no provision of law shall be construed to limit the authority of the state or the United States to terminate or limit such authorization.

(6) A CAIR NO_x Ozone Season allowance does not constitute a property right.

(7) Upon recordation by the Administrator under subdivision 43.3, sections 51 through 57, 60 through 62, and 80 through 88 of 45CSR40, every allocation, transfer, or deduction of a CAIR NO_x Ozone Season allowance to or from a CAIR NO_x Ozone Season source's compliance account is incorporated automatically in any CAIR permit of the source.

(e) Sulfur dioxide annual emission requirements.

(1) As of the allowance transfer deadline for the 2010 control period and each control period thereafter, the owners and operators of each CAIR SO₂ source and each CAIR SO₂ unit at the source shall hold, in the source's compliance account, a tonnage equivalent of CAIR SO₂ allowances available for compliance deductions for the control period, as determined in accordance with subsections 54.1 and 54.2 of 45CSR§41 in an amount not less than the tons of total sulfur dioxide emissions for the control period from all CAIR SO₂ units at the source, as determined in accordance with sections 70 through 75 of 45CSR41.

(2) A CAIR SO₂ unit shall be subject to the requirements under 45CSR§41-6.3.a for the control period starting on the later of January 1, 2010 or the deadline for meeting the unit's monitor certification requirements under subdivisions 70.2.a, 70.2.b, or 70.2.e of 45CSR41 and for each control period thereafter.

(3) A CAIR SO₂ allowance shall not be deducted, for compliance with the requirements under 45CSR§41-6.3.a, for a control period in a calendar year before the year for which the CAIR SO₂ allowance was allocated.

(4) CAIR SO₂ allowances shall be held in, deducted from, or transferred into or among CAIR SO₂ Allowance Tracking System accounts in accordance with sections 51 through 62, and 80 through 88 of 45CSR41.

(5) A CAIR SO₂ allowance is a limited authorization to emit sulfur dioxide in accordance with the CAIR SO₂ Trading Program. No provision of the CAIR SO₂ Trading Program, the CAIR permit application, the CAIR permit, or an exemption under 45CSR§41-5 and no provision of law shall be construed to limit the authority of the state or the United States to terminate or limit such authorization.

(6) A CAIR SO₂ allowance does not constitute a property right.

(7) Upon recordation by the Administrator under sections 51 through 57, 60 through 62, and 80 through 88 of 45CSR41, every allocation, transfer, or deduction of a CAIR SO₂ allowance to or from a CAIR SO₂ source's compliance account is incorporated automatically in any CAIR permit of the source.

STEP 3,
continued

(f) Excess emissions requirements.

(1) If a CAIR NO_x Annual source emits nitrogen oxides during any control period in excess of the CAIR NO_x Annual emissions limitation, then:

(i) The owners and operators of the source and each CAIR NO_x Annual unit at the source shall surrender the CAIR NO_x Annual allowances required for deduction under 45CSR§39-54.4.a and pay any fine, penalty, or assessment or comply with any other remedy imposed, for the same violations, under the Clean Air Act or West Virginia Code §22-5-1 et seq; and

(ii) Each ton of such excess emissions and each day of such control period shall constitute a separate violation of 45CSR39, the Clean Air Act, and West Virginia Code §22-5-1 et seq.

(2) If a CAIR NO_x Ozone Season source emits nitrogen oxides during any ozone season in excess of the CAIR NO_x Ozone Season emissions limitation, then:

(i) The owners and operators of the source and each CAIR NO_x Ozone Season unit at the source shall surrender the CAIR NO_x Ozone Season allowances required for deduction under 45CSR§40-54.4.a and pay any fine, penalty, or assessment or comply with any other remedy imposed, for the same violations, under the Clean Air Act or West Virginia Code §22-5-1 et seq; and

(ii) Each ton of such excess emissions and each day of such control period shall constitute a separate violation of 45CSR40, the Clean Air Act, and West Virginia Code §22-5-1 et seq.

(3) If a CAIR SO₂ source emits sulfur dioxide during any control period in excess of the CAIR SO₂ emissions limitation, then:

(i) The owners and operators of the source and each CAIR SO₂ unit at the source shall surrender the CAIR SO₂ allowances required for deduction under 45CSR§41-54.4.a and pay any fine, penalty, or assessment or comply with any other remedy imposed, for the same violations, under the Clean Air Act or West Virginia Code §22-5-1 et seq; and

(ii) Each ton of such excess emissions and each day of such control period shall constitute a separate violation of 45CSR41, the Clean Air Act, and West Virginia Code §22-5-1 et seq.

(g) Recordkeeping and Reporting Requirements.

(1) Unless otherwise provided, the owners and operators of a CAIR NO_x Annual source, CAIR NO_x Ozone Season source and CAIR SO₂ source (as applicable) and each CAIR NO_x Annual unit, CAIR NO_x Ozone Season unit and CAIR SO₂ unit (as applicable) at the source shall keep on site at the source each of the following documents for a period of 5 years from the date the document is created. This period may be extended for cause, at any time before the end of 5 years, in writing by the Secretary or the Administrator.

(i) The certificate of representation under 45CSR§39-13, 45CSR§40-13 and 45CSR§41-13 (as applicable) for the CAIR designated representative for the source and each CAIR NO_x Annual unit, CAIR NO_x Ozone Season unit and CAIR SO₂ unit (as applicable) at the source and all documents that demonstrate the truth of the statements in the certificate of representation; provided that the certificate and documents shall be retained on site at the source beyond such 5-year period until such documents are superseded because of the submission of a new certificate of representation under 45CSR§39-13, 45CSR§40-13 and 45CSR§41-13 (as applicable) changing the CAIR designated representative.

(ii) All emissions monitoring information, in accordance with sections 70 through 75 of 45CSR39, 45CSR40 and 45CSR41 (as applicable), provided that to the extent that sections 70 through 75 of 45CSR39, 45CSR40 and 45CSR41 (as applicable) provides for a 3-year period for recordkeeping, the 3-year period shall apply.

(iii) Copies of all reports, compliance certifications, and other submissions and all records made or required under the CAIR NO_x Annual Trading Program, CAIR NO_x Ozone Season Trading Program and CAIR SO₂ Trading Program (as applicable).

(iv) Copies of all documents used to complete a CAIR permit application and any other submission under the CAIR NO_x Annual Trading Program, CAIR NO_x Ozone Season Trading Program and CAIR SO₂ Trading Program (as applicable) or to demonstrate compliance with the requirements of the CAIR NO_x Annual Trading Program, CAIR NO_x Ozone Season Trading Program and CAIR SO₂ Trading Program (as applicable).

(2) The CAIR designated representative of a CAIR NO_x Annual source, CAIR NO_x Ozone Season source and CAIR SO₂ source (as applicable) and each CAIR NO_x Annual unit, CAIR NO_x Ozone Season unit and CAIR SO₂ unit (as applicable) at the source shall submit the reports required under the CAIR NO_x Annual Trading Program, CAIR NO_x Ozone Season Trading Program and CAIR SO₂ Trading Program (as applicable) including those under sections 70 through 75 of 45CSR39, 45CSR40 and 45CSR41 (as applicable).

(h) Liability.

(1) Each CAIR NO_x Annual source, CAIR NO_x Ozone Season source and CAIR SO₂ source (as applicable) and each NO_x unit, CAIR NO_x Ozone Season unit and CAIR SO₂ unit (as applicable) shall meet the requirements of the CAIR NO_x Annual Trading Program, CAIR NO_x Ozone Season Trading Program and CAIR SO₂ Trading Program (as applicable).

(2) Any provision of the CAIR NO_x Annual Trading Program, CAIR NO_x Ozone Season Trading Program or CAIR SO₂ Trading Program (as applicable) that applies to a CAIR NO_x Annual source, CAIR NO_x Ozone Season source or CAIR SO₂ source (as applicable) or the CAIR designated representative of a CAIR NO_x Annual source, CAIR NO_x Ozone Season source or CAIR SO₂ source (as applicable) shall also apply to the owners and operators of such source and of the CAIR NO_x Annual units, CAIR NO_x Ozone Season units or CAIR SO₂ units (as applicable) at the source.

(3) Any provision of the CAIR NO_x Annual Trading Program, CAIR NO_x Ozone Season Trading Program or CAIR SO₂ Trading Program (as applicable) that applies to a CAIR NO_x Annual unit, CAIR SO₂ unit or CAIR NO_x Ozone Season unit (as applicable) or the CAIR designated representative of a CAIR NO_x Annual unit, CAIR NO_x Ozone Season unit or CAIR SO₂ unit (as applicable) shall also apply to the owners and operators of such unit.

(i) Effect on Other Authorities.

No provision of the CAIR NO_x Annual Trading Program, CAIR NO_x Ozone Season Trading Program and CAIR SO₂ Trading Program (as applicable), a CAIR permit application, a CAIR permit, or an exemption under 45CSR§39-5, 45CSR§40-5, or 45CSR§41-5 (as applicable) shall be construed as exempting or excluding the owners and operators, and the CAIR designated representative, of a CAIR NO_x Annual source, CAIR NO_x Ozone Season source and CAIR SO₂ source (as applicable) or CAIR NO_x Annual unit, CAIR NO_x Ozone Season unit and CAIR SO₂ unit (as applicable) from compliance with any other provision of the applicable, approved State implementation plan, a federally enforceable permit, or the Clean Air Act.

Kanawha River Plant
Plant Name

STEP 3,
continued

Certification

I am authorized to make this submission on behalf of the owners and operators of the source or units for which the submission is made. I certify under penalty of law that I have personally examined, and am familiar with, the statements and information submitted in this document and all its attachments. Based on my inquiry of those individuals with primary responsibility for obtaining the information, I certify that the statements and information are to the best of my knowledge and belief true, accurate, and complete. I am aware that there are significant penalties for submitting false statements and information or omitting required statements and information, including the possibility of fine or imprisonment.

| | |
|---|---------------------|
| CAIR Designated Representative John M. McManus | |
| Signature <i>John M. McManus</i> | Date <i>5/25/07</i> |



Reports and Queries

Certificate of Representation
05/23/2007

Facility Information

Facility ID (ORISPL): 3936 **Facility Name:** Kanawha River **State:** WV
County: Kanawha **EPA AIRS ID:** 5403900006 **Latitude:** 38.2056 **Longitude:** -81.4211

[Facility Detail \(Mini Detail\)](#)

Representative Information

Name: Patrick A DalPorto
Company: American Electric Power Service
Title: Manager-Air Quality
Address: 1 Riverside Plaza

City: Columbus **State:** OH **Zip:** 43215
Phone: (614) 716-1267 **Fax:** (614) 716-1252
Email: padalporto@aep.com

Name: John M McManus
Company: American Electric Power Service
Title: VP - Environmental Services
Address: 1 Riverside Plaza

City: Columbus **State:** OH **Zip:** 43215

Phone: (614) 716-1268 Fax: (614) 716-1252

Email: jimmcmanus@aep.com

People Detail Layout (Multiple)

Current Representatives

| Program | Primary Representative, Effective Date | Alternate Representative, Effective Date | Primary Representative, End Date | Alternate Representative, End Date |
|---------|--|--|----------------------------------|------------------------------------|
| ARP | John M McManus, 02/09/1993 | Patrick A DalPorto, 11/14/2005 | | |
| CAIRNOX | John M McManus, 04/27/2007 | Patrick A DalPorto, 04/27/2007 | | |
| CAIROS | John M McManus, 04/27/2007 | Patrick A DalPorto, 04/27/2007 | | |
| CAIRSO2 | John M McManus, 04/27/2007 | Patrick A DalPorto, 04/27/2007 | | |
| NBP | John M McManus, 10/31/2001 | Patrick A DalPorto, 11/14/2005 | | |

Basic Table Layout

Units

| Unit ID | Program | Unit Classification | Operating Status | Unit Type | Source Category | NAICS Code | Commence Operation Date | Commence Operation Date Code | Comm. Commercial Operation Date | Commence Commercial Operation Date Code | Unit Monitor Certification Begin Date |
|---------|---------|---------------------|------------------|-----------|------------------|---------------------------------------|-------------------------|------------------------------|---------------------------------|---|---------------------------------------|
| 1 | ARP | Phase 2 | Operating | DVF | Electric Utility | Fossil fuel electric power generation | 07/16/1953 | A | 07/16/1953 | A | 01/01/1995 |
| 1 | CAIRNOX | Affected | Operating | DVF | Electric Utility | Fossil fuel electric power generation | 07/16/1953 | A | 07/16/1953 | A | 01/01/2008 |
| 1 | CAIROS | Affected | Operating | DVF | Electric Utility | Fossil fuel electric power generation | 07/16/1953 | A | 07/16/1953 | A | 05/01/2008 |
| 1 | CAIRSO2 | Affected | Operating | DVF | Electric | Fossil fuel electric power generation | 07/16/1953 | A | 07/16/1953 | A | 01/01/2009 |

| | | | | | Utility | electric power generation | | | | | | |
|---|---------|----------|-----------|-----|------------------|---------------------------------------|------------|---|------------|---|--|------------|
| 1 | NBP | Affected | Operating | DVF | Electric Utility | Fossil fuel electric power generation | 07/16/1953 | A | 07/16/1953 | A | | 05/01/2003 |
| 2 | ARP | Phase 2 | Operating | DVF | Electric Utility | Fossil fuel electric power generation | 12/31/1953 | A | 12/31/1953 | A | | 01/01/1995 |
| 2 | CAIRNOX | Affected | Operating | DVF | Electric Utility | Fossil fuel electric power generation | 12/31/1953 | A | 12/31/1953 | A | | 01/01/2008 |
| 2 | CAIROS | Affected | Operating | DVF | Electric Utility | Fossil fuel electric power generation | 12/31/1953 | A | 12/31/1953 | A | | 05/01/2008 |
| 2 | CAIRSO2 | Affected | Operating | DVF | Electric Utility | Fossil fuel electric power generation | 12/31/1953 | A | 12/31/1953 | A | | 01/01/2009 |
| 2 | NBP | Affected | Operating | DVF | Electric Utility | Fossil fuel electric power generation | 12/31/1953 | A | 12/31/1953 | A | | 05/01/2003 |

Basic Table Layout:

Generator Information

No data are available.

Basic Table Layout:

Current Owners and Operators

| Unit ID | Owner/Operator Company Name | Type | Effective Date | End Date |
|---------|-----------------------------|----------------|----------------|----------|
| 1 | Appalachian Power Company | Owner/Operator | 03/07/2003 | |
| 2 | Appalachian Power Company | Owner/Operator | 03/07/2003 | |

Basic Table Layout:

Attachment I
Appendix D

Title IV Phase II Acid Rain Permit Renewal



west virginia department of environmental protection

Division of Air Quality
601 57th Street SE
Charleston, WV 25304
Phone: 304 926 0475 • FAX: 304 926 0479

Joe Manchin, III, Governor
Stephanie R. Timmermeyer, Cabinet Secretary
www.wvdep.org

December 18, 2007

Certified Mail
7001 0360 0000 1560 2975

Mr. John M. McManus
Designated Representative
American Electric Power Service Corporation
1 Riverside Plaza
Columbus, Ohio 43215

Re: Title IV Phase II Acid Rain Permit Renewals

Dear Mr. McManus:

Please find enclosed the Phase II Acid Rain Permit Renewals for the following facilities:

John E. Amos Power Station
Kanawha River Power Station
Mountaineer Power Station
Philip Sporn Power Station
Kammer Power Station
Mitchell Power Station

If you have any questions, please contact me at (304) 926-0499 ext. 1215.

Sincerely,

Frederick Tipane
Permit Engineer

Enclosures



west virginia department of environmental protection
Division of Air Quality

Phase II Acid Rain Permit

| | | |
|--|------------------------------|----------------------------------|
| Plant Name: Kanawha River Power Station | | Permit #: R33-3936-2012-3 |
| Affected Unit(s): 1, 2 | | |
| Operator: Appalachian Power Company | | ORIS Code: 3936 |
| Effective Date | From: January 1, 2008 | To: December 31, 2012 |

Contents:

1. Statement of Basis.
2. SO₂ allowances allocated under this permit and NO_x requirements for each affected unit.
3. Comments, notes and justifications regarding permit decisions and changes made to permit application forms during the review process, and any additional requirements or conditions.
4. The permit application forms submitted for this source, as corrected by the West Virginia Division of Air Quality. The owners and operators of the source must comply with the standard requirements and special provisions set forth in the application.

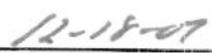
1. Statement of Basis

Statutory and Regulatory Authorities: In accordance with W. Va. Code §22-5-4(a)(16) and Titles IV and V of the Clean Air Act, the West Virginia Department of Environmental Protection, Division of Air Quality issues this permit pursuant to 45CSR33 and 45CSR30.

Permit Approval



John A. Benedict, Director
Division of Air Quality



Date

West Virginia Department of Environmental Protection • Division of Air Quality

| | |
|---|---------------------------|
| Plant Name: Kanawha River Power Station | Permit #: R33-3936-2012-3 |
|---|---------------------------|

2. SO₂ Allocations and NO_x Requirements for each affected unit

| |
|------------|
| Unit No. 1 |
|------------|

| SO ₂ Allowances | Year | | | | |
|--|-------|-------|------|------|------|
| | 2008 | 2009 | 2010 | 2011 | 2012 |
| Table 2 allowances, as adjusted by 40CFR Part 73 | 4462* | 4462* | 3981 | 3981 | 3981 |
| Repowering plan allowances | N/A | N/A | N/A | N/A | N/A |

The number of allowances actually held by an affected source in a unit account may differ from the number allocated by U.S. EPA. The aforementioned condition does not necessitate a revision to the unit SO₂ allowance allocations identified in this permit (See 40 CFR §72.84). *Note: 2008 and 2009 allowances are the sum of Column "(B)" and Column "(C)" of Table 2 of 40CFR§73.10

| NO _x Requirements | 2008 | 2009 | 2010 | 2011 | 2012 |
|----------------------------------|------|------|------|------|------|
| NO _x Limit (lb/mmBtu) | 0.80 | 0.80 | 0.80 | 0.80 | 0.80 |

Pursuant to 40 CFR §76.11, the West Virginia Department of Environmental Protection, Division of Air Quality approves four (4) NO_x emissions averaging plans for this unit. Each plan is effective for one calendar year for the years 2008, 2009, 2010 and 2011. Under each plan, the unit's NO_x emissions shall not exceed the annual alternative contemporaneous emission limitation (ACEL) of 0.80 lb/mmBtu.

Under the plan, the actual Btu-weighted annual average NO_x emission rate for the units in the plan shall be less than or equal to the Btu-weighted annual average NO_x emission rate for the same units had they each been operated, during the same period of time, in compliance with the applicable emission limitations under 40 CFR §76.5, 76.6 or 76.7, except that for early election units, the applicable emission limitations shall be under 40 CFR §76.7. If the designated representative demonstrates that the requirement of the prior sentence (as set forth in 40 CFR §76.11(d)(1)(ii)(A)) is met for a year under the plan, then this unit shall be deemed to be in compliance for that year with its alternative contemporaneous annual emission limitation and annual heat input limit.

In accordance with 40 CFR §72.40(b)(2), approval of the averaging plan shall be final only when the Arkansas Department of Environmental Quality, Air Division, Indiana Department of Environmental Management, Office of Air Management, the Kentucky Department of Environmental Protection, Division for Air Quality, the Ohio Environmental Protection Agency, Division of Air Pollution Control the Oklahoma Department of Environmental Quality, Air Quality Division, Virginia Department of Environmental Quality, Division of Air Program Coordination and the Texas Commission on Environmental Quality, Office of Permitting, Remediation and Registration have also approved this averaging plan.

In addition to the described NO_x compliance plans, this unit shall comply with all other applicable requirements of 40 CFR Part 76, including the duty to reapply for a NO_x compliance plan and requirements covering excess emissions.

Pursuant to 40 CFR Part 76 and 45CSR33, the West Virginia Department of Environmental Protection, Division of Air Quality approves a NO_x emissions compliance plan for this unit effective for calendar year 2012. Under this plan the unit's actual annual average NO_x emission rate shall not exceed the applicable limitation of 0.80 lb/mmBtu as set forth in 40 CFR 76.6(a)(4) for Group 2 vertically fired boilers.

3. Comments, notes and justifications regarding decisions, and changes made to the permit application forms during the review process:

As a result of comments from American Electric Power, the 2008 and 2009 SO₂ allowances have been adjusted to reflect an October 30, 2000 reallocation of allowances by USEPA. The 2008 and 2009 allowances are the sum of Column "(B)" and Column "(C)" of Table 2 of 40CFR§73.10.

4. Permit application forms:

Attached.

| | |
|---|---------------------------|
| Plant Name: Kanawha River Power Station | Permit #: R33-3936-2012-3 |
|---|---------------------------|

2. SO₂ Allocations and NO_x Requirements for each affected unit

| |
|------------|
| Unit No. 2 |
|------------|

| SO ₂ Allowances | Year | | | | |
|--|-------|-------|------|------|------|
| | 2008 | 2009 | 2010 | 2011 | 2012 |
| Table 2 allowances, as adjusted by 40CFR Part 73 | 4291* | 4291* | 3545 | 3545 | 3545 |
| Repowering plan allowances | N/A | N/A | N/A | N/A | N/A |

The number of allowances actually held by an affected source in a unit account may differ from the number allocated by U.S. EPA. The aforementioned condition does not necessitate a revision to the unit SO₂ allowance allocations identified in this permit (See 40 CFR §72.84). *Note: 2008 and 2009 allowances are the sum of Column "(B)" and Column "(C)" of Table 2 of 40CFR§73.10

| NO _x Requirements | 2008 | 2009 | 2010 | 2011 | 2012 |
|----------------------------------|------|------|------|------|------|
| NO _x Limit (lb/mmBtu) | 0.80 | 0.80 | 0.80 | 0.80 | 0.80 |

Pursuant to 40 CFR §76.11, the West Virginia Department of Environmental Protection, Division of Air Quality approves four (4) NO_x emissions averaging plans for this unit. Each plan is effective for one calendar year for the years 2008, 2009, 2010 and 2011. Under each plan, the unit's NO_x emissions shall not exceed the annual alternative contemporaneous emission limitation (ACEL) of 0.80 lb/mmBtu.

Under the plan, the actual Btu-weighted annual average NO_x emission rate for the units in the plan shall be less than or equal to the Btu-weighted annual average NO_x emission rate for the same units had they each been operated, during the same period of time, in compliance with the applicable emission limitations under 40 CFR §76.5, 76.6 or 76.7, except that for early election units, the applicable emission limitations shall be under 40 CFR §76.7. If the designated representative demonstrates that the requirement of the prior sentence (as set forth in 40 CFR §76.11(d)(1)(ii)(A)) is met for a year under the plan, then this unit shall be deemed to be in compliance for that year with its alternative contemporaneous annual emission limitation and annual heat input limit.

In accordance with 40 CFR §72.40(b)(2), approval of the averaging plan shall be final only when the Arkansas Department of Environmental Quality, Air Division, Indiana Department of Environmental Management, Office of Air Management, the Kentucky Department of Environmental Protection, Division for Air Quality, the Ohio Environmental Protection Agency, Division of Air Pollution Control the Oklahoma Department of Environmental Quality, Air Quality Division, Virginia Department of Environmental Quality, Division of Air Program Coordination and the Texas Commission on Environmental Quality, Office of Permitting, Remediation and Registration have also approved this averaging plan.

In addition to the described NO_x compliance plans, this unit shall comply with all other applicable requirements of 40 CFR Part 76, including the duty to reapply for a NO_x compliance plan and requirements covering excess emissions.

Pursuant to 40 CFR part 76 and 45CSR33, the West Virginia Department of Environmental Protection, Division of Air Quality approves a NO_x emissions compliance plan for this unit effective for calendar year 2012. Under this plan the unit's actual annual average NO_x emission rate shall not exceed the applicable limitation of 0.80 lb/mmBtu as set forth in 40 CFR 76.6(a)(4) for Group 2 vertically fired boilers.

3. Comments, notes and justifications regarding decisions, and changes made to the permit application forms during the review process:

As a result of comments from American Electric Power, the 2008 and 2009 SO₂ allowances have been adjusted to reflect an October 30, 2000 reallocation of allowances by USEPA. The 2008 and 2009 allowances are the sum of Column "(B)" and Column "(C)" of Table 2 of 40CFR§73.10.

4. Permit application forms:

Attached

STEP 3

Read the
standard
requirements

Permit Requirements

- (1) The designated representative of each affected source and each affected unit at the source shall:
 - (i) Submit a complete Acid Rain permit application (including a compliance plan) under 40 CFR part 72 in accordance with the deadlines specified in 40 CFR 72.30; and
 - (ii) Submit in a timely manner any supplemental information that the permitting authority determines is necessary in order to review an Acid Rain permit application and issue or deny an Acid Rain permit;
- (2) The owners and operators of each affected source and each affected unit at the source shall:
 - (i) Operate the unit in compliance with a complete Acid Rain permit application or a superseding Acid Rain permit issued by the permitting authority; and
 - (ii) Have an Acid Rain Permit.

Monitoring Requirements

- (1) The owners and operators and, to the extent applicable, designated representative of each affected source and each affected unit at the source shall comply with the monitoring requirements as provided in 40 CFR part 75.
- (2) The emissions measurements recorded and reported in accordance with 40 CFR part 75 shall be used to determine compliance by the unit with the Acid Rain emissions limitations and emissions reduction requirements for sulfur dioxide and nitrogen oxides under the Acid Rain Program.
- (3) The requirements of 40 CFR part 75 shall not affect the responsibility of the owners and operators to monitor emissions of other pollutants or other emissions characteristics at the unit under other applicable requirements of the Act and other provisions of the operating permit for the source.

Sulfur Dioxide Requirements

- (1) The owners and operators of each source and each affected unit at the source shall:
 - (i) Hold allowances, as of the allowance transfer deadline, in the unit's compliance subaccount (after deductions under 40 CFR 73.34(c)), or in the compliance subaccount of another affected unit at the same source to the extent provided in 40 CFR 73.35(b)(3), not less than the total annual emissions of sulfur dioxide for the previous calendar year from the unit; and
 - (ii) Comply with the applicable Acid Rain emissions limitations for sulfur dioxide.
- (2) Each ton of sulfur dioxide emitted in excess of the Acid Rain emissions limitations for sulfur dioxide shall constitute a separate violation of the Act.
- (3) An affected unit shall be subject to the requirements under paragraph (1) of the sulfur dioxide requirements as follows:
 - (i) Starting January 1, 2000, an affected unit under 40 CFR 72.6(a)(2); or
 - (ii) Starting on the later of January 1, 2000 or the deadline for monitor certification under 40 CFR part 75, an affected unit under 40 CFR 72.6(a)(3).
- (4) Allowances shall be held in, deducted from, or transferred among Allowance Tracking System accounts in accordance with the Acid Rain Program.
- (5) An allowance shall not be deducted in order to comply with the requirements under paragraph (1) of the sulfur dioxide requirements prior to the calendar year for which the allowance was allocated.
- (6) An allowance allocated by the Administrator under the Acid Rain Program is a limited authorization to emit sulfur dioxide in accordance with the Acid Rain Program. No provision of the Acid Rain Program, the Acid Rain permit application, the Acid Rain permit, or an exemption under 40 CFR 72.7 or 72.8 and no provision of law shall be construed to limit the authority of the United States to terminate or limit such authorization.
- (7) An allowance allocated by the Administrator under the Acid Rain Program does not constitute a property right.

STEP 3,
Cont'd.

Nitrogen Oxides Requirements The owners and operators of the source and each affected unit at the source shall comply with the applicable Acid Rain emissions limitation for nitrogen oxides.

Excess Emissions Requirements

- (1) The designated representative of an affected unit that has excess emissions in any calendar year shall submit a proposed offset plan, as required under 40 CFR part 77.
- (2) The owners and operators of an affected unit that has excess emissions in any calendar year shall:
 - (i) Pay without demand the penalty required, and pay upon demand the interest on that penalty, as required by 40 CFR part 77; and
 - (ii) Comply with the terms of an approved offset plan, as required by 40 CFR part 77.

Recordkeeping and Reporting Requirements

- (1) Unless otherwise provided, the owners and operators of the source and each affected unit at the source shall keep on site at the source each of the following documents for a period of 5 years from the date the document is created. This period may be extended for cause, at any time prior to the end of 5 years, in writing by the Administrator or permitting authority:
 - (i) The certificate of representation for the designated representative for the source and each affected unit at the source and all documents that demonstrate the truth of the statements in the certificate of representation, in accordance with 40 CFR 72.24; provided that the certificate and documents shall be retained on site at the source beyond such 5-year period until such documents are superseded because of the submission of a new certificate of representation changing the designated representative;
 - (ii) All emissions monitoring information, in accordance with 40 CFR part 75, provided that to the extent that 40 CFR part 75 provides for a 3-year period for recordkeeping, the 3-year period shall apply.
 - (iii) Copies of all reports, compliance certifications, and other submissions and all records made or required under the Acid Rain Program; and,
 - (iv) Copies of all documents used to complete an Acid Rain permit application and any other submission under the Acid Rain Program or to demonstrate compliance with the requirements of the Acid Rain Program.
- (2) The designated representative of an affected source and each affected unit at the source shall submit the reports and compliance certifications required under the Acid Rain Program, including those under 40 CFR part 72 subpart I and 40 CFR part 75.

Liability

- (1) Any person who knowingly violates any requirement or prohibition of the Acid Rain Program, a complete Acid Rain permit application, an Acid Rain permit, or an exemption under 40 CFR 72.7 or 72.8, including any requirement for the payment of any penalty owed to the United States, shall be subject to enforcement pursuant to section 113(c) of the Act.
- (2) Any person who knowingly makes a false, material statement in any record, submission, or report under the Acid Rain Program shall be subject to criminal enforcement pursuant to section 113(c) of the Act and 18 U.S.C. 1001.
- (3) No permit revision shall excuse any violation of the requirements of the Acid Rain Program that occurs prior to the date that the revision takes effect.
- (4) Each affected source and each affected unit shall meet the requirements of the Acid Rain Program.

| |
|---|
| Kanawha River Power Station Plant Name (from Step 1) |
|---|

Step 3,
Cont'd.

Liability, Cont'd.

- (5) Any provision of the Acid Rain Program that applies to an affected source (including a provision applicable to the designated representative of an affected source) shall also apply to the owners and operators of such source and of the affected units at the source.
- (6) Any provision of the Acid Rain Program that applies to an affected unit (including a provision applicable to the designated representative of an affected unit) shall also apply to the owners and operators of such unit. Except as provided under 40 CFR 72.44 (Phase II repowering extension plans) and 40 CFR 76.11 (NO_x averaging plans), and except with regard to the requirements applicable to units with a common stack under 40 CFR part 75 (including 40 CFR 75.16, 75.17, and 75.18), the owners and operators and the designated representative of one affected unit shall not be liable for any violation by any other affected unit of which they are not owners or operators or the designated representative and that is located at a source of which they are not owners or operators or the designated representative.
- (7) Each violation of a provision of 40 CFR parts 72, 73, 74, 75, 76, 77, and 78 by an affected source or affected unit, or by an owner or operator or designated representative of such source or unit, shall be a separate violation of the Act.

Effect on Other Authorities

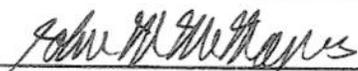
- No provision of the Acid Rain Program, an Acid Rain permit application, an Acid Rain permit, or an exemption under 40 CFR 72.7 or 72.8 shall be construed as:
- (1) Except as expressly provided in title IV of the Act, exempting or excluding the owners and operators and, to the extent applicable, the designated representative of an affected source or affected unit from compliance with any other provision of the Act, including the provisions of title I of the Act relating to applicable National Ambient Air Quality Standards or State Implementation Plans;
 - (2) Limiting the number of allowances a unit can hold; *provided*, that the number of allowances held by the unit shall not affect the source's obligation to comply with any other provisions of the Act;
 - (3) Requiring a change of any kind in any State law regulating electric utility rates and charges, affecting any State law regarding such State regulation, or limiting such State regulation, including any prudence review requirements under such State law;
 - (4) Modifying the Federal Power Act or affecting the authority of the Federal Energy Regulatory Commission under the Federal Power Act; or,
 - (5) Interfering with or impairing any program for competitive bidding for power supply in a State in which such program is established.

STEP 4

Certification

Read the certification statement, sign, and date

I am authorized to make this submission on behalf of the owners and operators of the affected source or affected units for which the submission is made. I certify under penalty of law that I have personally examined, and am familiar with, the statements and information submitted in this document and all its attachments. Based on my inquiry of those individuals with primary responsibility for obtaining the information, I certify that the statements and information are to the best of my knowledge and belief true, accurate, and complete. I am aware that there are significant penalties for submitting false statements and information or omitting required statements and information, including the possibility of fine or imprisonment.

| | | |
|-----------|---|--------------|
| Name | John M. McManus | |
| Signature |  | Date 7/13/07 |



Phase II NO_x Compliance Plan

Page of

For more information, see instructions and refer to 40 CFR 76.9

This submission is: New Revised

STEP 1
Indicate plant name,
State, and ORIS code
from NADB, if applicable

| | | |
|---------------|-------|-----------|
| Kanawha River | WV | 3936 |
| Plant Name | State | ORIS Code |

STEP 2

Identify each affected Group 1 and Group 2 boiler using the boiler ID# from NADB, if applicable. Indicate boiler type: "CB" for cell burner, "CY" for cyclone, "DBW" for dry bottom wall-fired, "T" for tangentially fired, "V" for vertically fired, and "WB" for wet bottom. Indicate the compliance option selected for each unit.

| 1 | 2 | | | | |
|------|------|------|------|------|------|
| ID# | ID# | ID# | ID# | ID# | ID# |
| V | V | | | | |
| Type | Type | Type | Type | Type | Type |

(a) Standard annual average emission limitation of 0.50 lb/mmBtu (for Phase I dry bottom wall-fired boilers)

| | | | | | |
|--------------------------|--------------------------|--------------------------|--------------------------|--------------------------|--------------------------|
| <input type="checkbox"/> |
|--------------------------|--------------------------|--------------------------|--------------------------|--------------------------|--------------------------|

(b) Standard annual average emission limitation of 0.45 lb/mmBtu (for Phase I tangentially fired boilers)

| | | | | | |
|--------------------------|--------------------------|--------------------------|--------------------------|--------------------------|--------------------------|
| <input type="checkbox"/> |
|--------------------------|--------------------------|--------------------------|--------------------------|--------------------------|--------------------------|

(c) EPA-approved early election plan under 40 CFR 76.8 through 12/31/07 (also indicate above emission limit specified in plan)

| | | | | | |
|--------------------------|--------------------------|--------------------------|--------------------------|--------------------------|--------------------------|
| <input type="checkbox"/> |
|--------------------------|--------------------------|--------------------------|--------------------------|--------------------------|--------------------------|

(d) Standard annual average emission limitation of 0.46 lb/mmBtu (for Phase II dry bottom wall-fired boilers)

| | | | | | |
|--------------------------|--------------------------|--------------------------|--------------------------|--------------------------|--------------------------|
| <input type="checkbox"/> |
|--------------------------|--------------------------|--------------------------|--------------------------|--------------------------|--------------------------|

(e) Standard annual average emission limitation of 0.46 lb/mmBtu (for Phase II tangentially fired boilers)

| | | | | | |
|--------------------------|--------------------------|--------------------------|--------------------------|--------------------------|--------------------------|
| <input type="checkbox"/> |
|--------------------------|--------------------------|--------------------------|--------------------------|--------------------------|--------------------------|

(f) Standard annual average emission limitation of 0.68 lb/mmBtu (for cell burner boilers)

| | | | | | |
|--------------------------|--------------------------|--------------------------|--------------------------|--------------------------|--------------------------|
| <input type="checkbox"/> |
|--------------------------|--------------------------|--------------------------|--------------------------|--------------------------|--------------------------|

(g) Standard annual average emission limitation of 0.86 lb/mmBtu (for cyclone boilers)

| | | | | | |
|--------------------------|--------------------------|--------------------------|--------------------------|--------------------------|--------------------------|
| <input type="checkbox"/> |
|--------------------------|--------------------------|--------------------------|--------------------------|--------------------------|--------------------------|

(h) Standard annual average emission limitation of 0.80 lb/mmBtu (for vertically fired boilers)

| | | | | | |
|--------------------------|--------------------------|--------------------------|--------------------------|--------------------------|--------------------------|
| <input type="checkbox"/> |
|--------------------------|--------------------------|--------------------------|--------------------------|--------------------------|--------------------------|

(i) Standard annual average emission limitation of 0.84 lb/mmBtu (for wet bottom boilers)

| | | | | | |
|--------------------------|--------------------------|--------------------------|--------------------------|--------------------------|--------------------------|
| <input type="checkbox"/> |
|--------------------------|--------------------------|--------------------------|--------------------------|--------------------------|--------------------------|

(j) NO_x Averaging Plan (include NO_x Averaging form)

| | | | | | |
|-------------------------------------|-------------------------------------|--------------------------|--------------------------|--------------------------|--------------------------|
| <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
|-------------------------------------|-------------------------------------|--------------------------|--------------------------|--------------------------|--------------------------|

(k) Common stack pursuant to 40 CFR 75.17(a)(2)(i)(A) (check the standard emission limitation box above for most stringent limitation applicable to any unit utilizing stack)

| | | | | | |
|--------------------------|--------------------------|--------------------------|--------------------------|--------------------------|--------------------------|
| <input type="checkbox"/> |
|--------------------------|--------------------------|--------------------------|--------------------------|--------------------------|--------------------------|

(l) Common stack pursuant to 40 CFR 75.17(a)(2)(i)(B) with NO_x Averaging (check the NO_x Averaging Plan box and include NO_x Averaging form)

| | | | | | |
|-------------------------------------|-------------------------------------|--------------------------|--------------------------|--------------------------|--------------------------|
| <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
|-------------------------------------|-------------------------------------|--------------------------|--------------------------|--------------------------|--------------------------|

Kanawha River
Plant Name (from Step 1)

STEP 2, cont'd.

| | | | | | |
|-------------------|-------------------|------|------|------|------|
| ID# ¹ | ID# ² | ID# | ID# | ID# | ID# |
| Type ^V | Type ^V | Type | Type | Type | Type |

(m) EPA-approved common stack apportionment method pursuant to 40 CFR 75.17 (a)(2)(i)(C), (a)(2)(iii)(B), or (b)(2)

(n) AEL (include Phase II AEL Demonstration Period, Final AEL Petition, or AEL Renewal form as appropriate)

(o) Petition for AEL demonstration period or final AEL under review by U.S. EPA or demonstration period ongoing

(p) Repowering extension plan approved or under review

STEP 3
Read the standard requirements and certification, enter the name of the designated representative, sign &

Standard Requirements

General. This source is subject to the standard requirements in 40 CFR 72.9 (consistent with 40 CFR 76.8(e)(1)(i)). These requirements are listed in this source's Acid Rain Permit.

Special Provisions for Early Election Units

Nitrogen Oxides. A unit that is governed by an approved early election plan shall be subject to an emissions limitation for NO_x as provided under 40 CFR 76.8(a)(2) except as provided under 40 CFR 76.8(e)(3)(iii).
Liability. The owners and operators of a unit governed by an approved early election plan shall be liable for any violation of the plan or 40 CFR 76.8 at that unit. The owners and operators shall be liable, beginning January 1, 2000, for fulfilling the obligations specified in 40 CFR Part 77.
Termination. An approved early election plan shall be in effect only until the earlier of January 1, 2008 or January 1 of the calendar year for which a termination of the plan takes effect. If the designated representative of the unit under an approved early election plan fails to demonstrate compliance with the applicable emissions limitation under 40 CFR 76.5 for any year during the period beginning January 1 of the first year the early election takes effect and ending December 31, 2007, the permitting authority will terminate the plan. The termination will take effect beginning January 1 of the year after the year for which there is a failure to demonstrate compliance, and the designated representative may not submit a new early election plan. The designated representative of the unit under an approved early election plan may terminate the plan any year prior to 2008 but may not submit a new early election plan. In order to terminate the plan, the designated representative must submit a notice under 40 CFR 72.40(d) by January 1 of the year for which the termination is to take effect. If an early election plan is terminated any year prior to 2000, the unit shall meet, beginning January 1, 2000, the applicable emissions limitation for NO_x for Phase II units with Group 1 boilers under 40 CFR 76.7. If an early election plan is terminated on or after 2000, the unit shall meet, beginning on the effective date of the termination, the applicable emissions limitation for NO_x for Phase II units with Group 1 boilers under 40 CFR 76.7.

Certification

I am authorized to make this submission on behalf of the owners and operators of the affected source or affected units for which the submission is made. I certify under penalty of law that I have personally examined, and am familiar with, the statements and information submitted in this document and all its attachments. Based on my inquiry of those individuals with primary responsibility for obtaining the information, I certify that the statements and information are to the best of my knowledge and belief true, accurate, and complete. I am aware that there are significant penalties for submitting false statements and information or omitting required statements and information, including the possibility of fine or imprisonment.

| | |
|----------------------------------|---------------------------|
| John M. McManus | |
| Name | |
| Signature <i>John M. McManus</i> | December 19, 2006 Date |



Phase II NO_x Averaging Plan

For more information, see instructions and refer to 40 CFR 76.11

Page 1

This submission is: New Revised

Page 1 of 1

STEP 1

Identify the units participating in this averaging plan by plant name, State, and boiler ID# from NADB. In column (a), fill in each unit's applicable emission limitation from 40 CFR 76.5, 76.6, or 76.7. In column (b), assign an alternative contemporaneous annual emissions limitation (ACEL) in lb/mmBtu to each unit. In column (c), assign an annual heat input limitation in mmBtu to each unit. Continue to page 3 if necessary.

| Plant Name | State | ID# | (a) Emission Limitation | (b) ACEL | (c) Annual Heat Input Limit |
|---------------|-------|------|-------------------------------|-------------|--------------------------------|
| Rockport | IN | MB1 | 0.46 | 0.46 | 88,636,400 |
| Rockport | IN | MB2 | 0.46 | 0.46 | 93,566,400 |
| Tanners Creek | IN | U1 | 0.80 | 0.80 | 8,960,400 |
| Tanners Creek | IN | U2 | 0.80 | 0.80 | 9,839,600 |
| Tanners Creek | IN | U3 | 0.80 | 0.80 | 10,605,200 |
| Tanners Creek | IN | U4 | 0.86 | 0.86 | 28,043,800 |
| Big Sandy | KY | BSU1 | 0.46 | 0.46 | 16,002,200 |
| Big Sandy | KY | BSU2 | 0.46 | 0.46 | 51,126,800 |
| Conesville | OH | 3 | 0.50 | 0.50 | 3,518,200 |

STEP 2

Use the formula to enter the Btu-weighted annual emission rate averaged over the units if they are operated in accordance with the proposed averaging plan and the Btu-weighted annual average emission rate for the same units if they are operated in compliance with 40 CFR 76.5, 76.6, or 76.7. The former must be less than or equal to the latter.

Btu-weighted annual emission rate averaged over the units if they are operated in accordance with the proposed averaging plan

Btu-weighted annual average emission rate for same units operated in compliance with 40 CFR 76.5, 76.6 or 76.7

$$\boxed{.56} \leq \boxed{.56}$$

$$\frac{\sum_{i=1}^n (R_{Li} \times HI_i)}{\sum_{i=1}^n HI_i}$$

$$\frac{\sum_{i=1}^n [R_{1i} \times HI_i]}{\sum_{i=1}^n HI_i}$$

Where,

- R_{Li} = Alternative contemporaneous annual emission limitation for unit i, in lb/mmBtu, as specified in column (b) of Step 1;
- R_i = Applicable emission limitation for unit i, in lb/mmBtu, as specified in column (a) of Step 1;
- HI_i = Annual heat input for unit i, in mmBtu, as specified in column (c) of Step 1;
- n = Number of units in the averaging plan

Kanawha River
Plant Name (from Step 1)

NO_x Averaging - Page 2

STEP 3

Mark one of the two options and enter dates.

This plan is effective for calendar year 2007 through calendar year 2011 unless notification to terminate the plan is given.

Treat this plan as identical plans, each effective for one calendar year for the following calendar years: _____, _____, _____, _____ and _____ unless notification to terminate one or more of these plans is given.

STEP 4

Read the special provisions and certification, enter the name of the designated representative, and sign and date.

Special Provisions

Emission Limitations

Each affected unit in an approved averaging plan is in compliance with the Acid Rain emission limitation for NO_x under the plan only if the following requirements are met:

- (i) For each unit, the unit's actual annual average emission rate for the calendar year, in lb/mmBtu, is less than or equal to its alternative contemporaneous annual emission limitation in the averaging plan, and
- (a) For each unit with an alternative contemporaneous emission limitation less stringent than the applicable emission limitation in 40 CFR 76.5, 76.6, or 76.7, the actual annual heat input for the calendar year does not exceed the annual heat input limit in the averaging plan,
- (b) For each unit with an alternative contemporaneous emission limitation more stringent than the applicable emission limitation in 40 CFR 76.5, 76.6, or 76.7, the actual annual heat input for the calendar year is not less than the annual heat input limit in the averaging plan, or
- (ii) If one or more of the units does not meet the requirements of (i), the designated representative shall demonstrate, in accordance with 40 CFR 76.11(d)(1)(ii)(A) and (B), that the actual Btu-weighted annual average emission rate for the units in the plan is less than or equal to the Btu-weighted annual average rate for the same units had they each been operated, during the same period of time, in compliance with the applicable emission limitations in 40 CFR 76.5, 76.6, or 76.7.
- (iii) If there is a successful group showing of compliance under 40 CFR 76.11(d)(1)(ii)(A) and (B) for a calendar year, then all units in the averaging plan shall be deemed to be in compliance for that year with their alternative contemporaneous emission limitations and annual heat input limits under (i).

Liability

The owners and operators of a unit governed by an approved averaging plan shall be liable for any violation of the plan or this section at that unit or any other unit in the plan, including liability for fulfilling the obligations specified in part 77 of this chapter and sections 113 and 411 of the Act.

Termination

The designated representative may submit a notification to terminate an approved averaging plan, in accordance with 40 CFR 72.40(d), no later than October 1 of the calendar year for which the plan is to be terminated.

Certification

I am authorized to make this submission on behalf of the owners and operators of the affected source or affected units for which the submission is made. I certify under penalty of law that I have personally examined, and am familiar with, the statements and information submitted in this document and all its attachments. Based on my inquiry of those individuals with primary responsibility for obtaining the information, I certify that the statements and information are to the best of my knowledge and belief true, accurate, and complete. I am aware that there are significant penalties for submitting false statements and information or omitting required statements and information, including the possibility of fine or imprisonment.

| | |
|----------------------------------|---------------------------|
| John M. McManus Name | |
| Signature <i>John M. McManus</i> | December 19, 2006 Date |

| |
|---|
| Kanawha River Plant Name (from Step 1) |
|---|

NO_x Averaging - Page 3

STEP 1

Continue the identification of units from Step 1, page 1, here.

| Plant Name | State | ID# | (a) | (b) | (c) |
|--------------|-------|-----|---------------------|-----------------------------------|-------------------------|
| | | | Emission Limitation | Alt. Contemp. Emission Limitation | Annual Heat Input Limit |
| Conesville | OH | 4 | 0.45 | 0.45 | 44,976,190 |
| Conesville | OH | 5 | 0.40 | 0.40 | 25,434,200 |
| Conesville | OH | 6 | 0.40 | 0.40 | 24,905,400 |
| Muskingum | OH | 1 | 0.84 | 0.84 | 8,796,800 |
| Muskingum | OH | 2 | 0.84 | 0.84 | 8,181,600 |
| Muskingum | OH | 3 | 0.86 | 0.86 | 8,251,800 |
| Muskingum | OH | 4 | 0.86 | 0.86 | 8,143,200 |
| Muskingum | OH | 5 | 0.68 | 0.68 | 35,606,400 |
| Picway | OH | 9 | 0.50 | 0.50 | 3,432,400 |
| Clinch River | VA | 1 | 0.80 | 0.80 | 11,366,000 |
| Clinch River | VA | 2 | 0.80 | 0.80 | 14,350,000 |
| Clinch River | VA | 3 | 0.80 | 0.80 | 14,544,000 |
| Glen Lyn | VA | 51 | 0.40 | 0.40 | 1,581,500 |
| Glen Lyn | VA | 52 | 0.40 | 0.40 | 1,581,500 |
| Glen Lyn | VA | 6 | 0.46 | 0.46 | 5,930,000 |
| John E Amos | WV | 1 | 0.46 | 0.46 | 52,512,000 |
| John E Amos | WV | 2 | 0.46 | 0.46 | 52,031,200 |
| John E Amos | WV | 3 | 0.68 | 0.68 | 88,228,800 |
| Kammer | WV | 1 | 0.86 | 0.86 | 11,214,400 |
| Kammer | WV | 2 | 0.86 | 0.86 | 11,570,600 |
| Kammer | WV | 3 | 0.86 | 0.86 | 11,498,000 |
| Kanawha | WV | 1 | 0.80 | 0.80 | 10,392,600 |
| Kanawha | WV | 2 | 0.80 | 0.80 | 9,018,200 |
| Mitchell | WV | 1 | 0.50 | 0.50 | 50,415,600 |
| Mitchell | WV | 2 | 0.50 | 0.50 | 53,611,600 |
| Mountaineer | WV | 1 | 0.46 | 0.46 | 97,048,400 |
| Sporn | WV | 11 | 0.80 | 0.80 | 7,467,000 |

Attachment I
Appendix E

Reg. 2 and 10 Monitoring and Recordkeeping Plan

122.

**45 CSR 2 and 45 CSR 10
Monitoring and Recordkeeping Plan**

Kanawha River Plant

Facility Information:

Facility Name: Kanawha River Plant

Facility Address: P.O. Box 110
State Route 60
Glasgow, WV 25086

Facility Environmental Contact: Andrea L. Knopp

A. Facility Description:

Kanawha River Plant is a coal-fired electric generating facility with two main combustion units (Units 1 and 2) discharging through a common stack (CS012). Unit 1 and Unit 2 each have a design heat input greater than 10 mmBtu/hr making both 45 CSR 2A (Interpretive Rule for 45 CSR 2) and 4 CSR 10A (Interpretive Rule for 45 CSR 10) applicable to these sources.

I. 45 CSR 2 Monitoring Plan:

In accordance with Section 8.2.a of 45 CSR 2, following is the proposed plan for monitoring compliance with opacity limits found in Section 3 of that rule:

A. Main Stack (CS012)

1. Applicable Standard:

45 CSR 2, §3.1. No person shall cause, suffer, allow or permit emission of smoke and/or particulate matter into the open air from any fuel burning unit which is greater than ten (10) percent opacity based on a six minute block average.

2. Monitoring Method(s):

45 CSR 2, §8.2.a.1. Direct measurement with a certified continuous opacity monitoring system (COMS) shall be deemed to satisfy the requirements for a monitoring plan. Such COMS shall be installed, calibrated, operated and maintained as specified in 40 CFR Part 60, Appendix B, Performance Specification 1 (PS1). COMS meeting the requirements of 40 CFR Part 75 (Acid Rain) will be deemed to have satisfied the requirements of PS1.

- a. **Primary Monitoring Method:** The primary method of monitoring opacity at Kanawha River Plant will be Continuous Opacity Monitors (COMS). The COMS are installed, maintained and operated in compliance with requirements of 40 CFR Part 75.
- b. **Other Credible Monitoring Method(s):** While Kanawha River Plant will use COMS as the primary method of monitoring opacity of the stack CS012, we are also reserving the right to use Method 9 readings or any other appropriate method that would produce credible data. These “other monitoring methods” will generally be used in the absence of COMS data or as other credible evidence used in conjunction with COMS data.

3. Recordkeeping:

a. **Operating Schedule and Quality/Quantity of Fuel Burned**

45 CSR 2A §7.1.a. *The owner or operator of a fuel burning unit(s) shall maintain records of the operating schedule, and the quality and quantity of fuel burned in each fuel burning unit as specified in paragraphs 7.1.a.1 through 7.1.a.6, as applicable.*

The applicable paragraphs for Kanawha River Plant are the following:

§7.1.a.2: *For fuel burning unit(s) which burn only distillate oil, such records shall include, but not be limited to, the date and time of start-up and shutdown, the quantity of fuel consumed on a monthly basis and a BTU analysis for each shipment.*

§7.1.a.4: *For fuel burning unit(s) which burn only coal, such records shall include, but not be limited to, the date and time of start-up and shutdown, the quantity of fuel consumed on a daily basis and an ash and BTU analysis for each shipment.*

§7.1.a.6: *For fuel burning unit(s) which burn a combination of fuels, the owner or operator shall comply with the applicable Recordkeeping requirements of paragraph 7.1.a.1 through 7.1.a.5 for each fuel burned.*

The date and time of each startup and shutdown of Units 1 and 2 will be maintained. The quantity of coal burned on a daily basis as well as the ash and Btu content will also be maintained. From a fuel oil perspective, the quantity of fuel oil burned on a monthly basis, as well as the Btu content will be maintained. The fuel oil analysis will generally be one that is provided by the supplier for a given shipment but in some cases, we may use independent sampling and analyses. The quantity of fuel oil burned on a monthly basis may be maintained on a facility wide basis.

b. **Record Maintenance**

45 CSR 2A §7.1.b. *Records of all required monitoring data and support information shall be maintained on-site for a period of at least five (5) years from the date of monitoring, sampling, measurement or reporting. Support information includes all calibration and maintenance records and all strip chart recordings for continuous monitoring instrumentation, and copies of all required reports.*

Records of all required monitoring data and support information will be maintained on-site for at least five (5) years. Support information includes all calibration and maintenance records and all strip chart recordings for continuous monitoring instrumentation, and copies of all required reports.

4. Exception Reporting:

a. **Particulate Mass Emissions:**

45 CSR 2A, §7.2.a. *With respect to excursions associated with measured emissions under Section 4 of 45CSR2, compliance with the reporting and testing requirements under the Appendix to 45CSR2 shall fulfill the requirement for a periodic exception report under subdivision 8.3.b. or 45CSR2.*

Kanawha River Plant will comply with the reporting and testing requirements specified under the Appendix to 45 CSR 2.

b. **Opacity:**

45 CSR 2A, §7.2.b. *COMS – In accordance with the provisions of this subdivision, each owner or operator employing COMS as the method of monitoring compliance with opacity limits shall submit a “COMS Summary Report” and/or an “Excursion and COMS Monitoring System Performance Report” to the Director on a quarterly basis; the Director may, on a case-by-case basis, require more frequent reporting if the Director deems it necessary to accurately assess the compliance status of the fuel burning unit(s). All reports shall be postmarked by the thirtieth (30th) day following the end of each calendar quarter. The COMS Summary Report shall contain the information and be in the format shown in Appendix B unless otherwise specified by the Director.*

45 CSR 2A, §7.2.b.1. *If the total duration of excursions for the reporting period is less than one percent (1%) of the total operating time for the reporting period and monitoring system downtime for the reporting period is less than five percent (5%) of the total operating time for the reporting period, the COMS Summary Report shall be submitted to the Director; the Excursion and COMS Monitoring System Performance report shall be maintained on-site and shall be submitted to the Director upon request.*

45 CSR 2A, §7.2.b.2. *If the total duration of excursions for the reporting period is one percent (1%) or greater of the total operating time for the reporting period or the total monitoring system downtime for the reporting period is five percent (5%) or*

greater of the total operating time for the reporting period, the COMS Summary Report and the Excursion and COMS Monitoring System Performance Report shall both be submitted to the Director.

45 CSR 2A, §7.2.b.3. *The Excursion and COMS Monitoring System Performance Report shall be in a format approved by the Director and shall include, but not be limited to, the following information:*

45 CSR 2A, §7.2.b.3.A. *The magnitude of each excursion, and the date and time, including starting and ending times, of each excursion.*

45 CSR 2A, §7.2.b.3.B. *Specific identification of each excursion that occurs during start-ups, shutdowns, and malfunctions of the facility.*

45 CSR 2A, §7.2.b.3.C. *The nature and cause of any excursion (if known), and the corrective action taken and preventative measures adopted (if any).*

45 CSR 2A, §7.2.b.3.D. *The date and time identifying each period during which quality- controlled monitoring data was unavailable, except for zero and span checks, and the reason for data unavailability and the nature of the repairs or adjustments to the monitoring system.*

45 CSR 2A, §7.2.b.3.E. *When no excursions have occurred or there were no periods of quality-controlled data unavailability, and no monitoring systems were inoperative, repaired, or adjusted, such information shall be stated in the report.*

Attached, as Appendices A and B are sample copies of the COMS “Summary Report” and “Excess opacity and COM downtime report” that we plan on using to fulfill the opacity reporting requirements. The COMS “Summary Report” will satisfy the conditions under 45 CSR 2A, §7.2.b for the “COMS Summary Report” and will be submitted to the Director according to its requirements. The “Excess opacity and COM downtime report” satisfies the conditions under 45 CSR 2A, §7.2.b.3. for the “Excursion and COMS Monitoring System Performance Report”. The “Excess opacity and COM downtime report” shall be submitted to the Director following the conditions outlined in 45 CSR 2A, §7.2.b.1. and §7.2.b.2.

To the extent that an excursion is due to a malfunction, the reporting requirements in section 9 of 45CSR2 shall be followed – 45 CSR 2A, §7.2.d.

II. 45 CSR 10 Monitoring Plan:

In accordance with Section 8.2.c of 45 CSR 10, following is the proposed plan for monitoring compliance with the sulfur dioxide weight emission standards expressed in Section 3 of that rule:

A. Main Stack (CS012)

1. Applicable Standard:

45 CSR 10, §3.2.b. *For fuel burning units of the Kanawha River Plant of Appalachian Power Company, located in Air Quality Control Region IV, the product of 1.6 and the total design heat inputs for such units discharging through those stacks in million BTU's per hour.*

45 CSR 10, §3.8. *Compliance with the allowable sulfur dioxide emission limitations from fuel burning units shall be based on continuous twenty-four (24) hour averaging time...A continuous twenty-four (24) hour period is defined as one (1) calendar day.*

2. Monitoring Method:

45 CSR 10, §8.2.c.1. *The installation, operation and maintenance of a continuous monitoring system meeting the requirements 40 CFR Part 60, Appendix B, Performance Specification 2 (PS2) or Performance Specification 7 (PS7) shall be deemed to fulfill the requirements of a monitoring plan for a fuel burning unit(s), manufacturing process source(s) or combustion source(s). CEMS meeting the requirements of 40 CFR Part 75 (Acid Rain) will be deemed to have satisfied the requirements of PS2.*

- a. **Primary Monitoring Method:** The primary method of monitoring SO₂ mass emissions from CS012 will be Continuous Emissions Monitors (CEMS). Data used in evaluating the performance of the Kanawha River Units with the applicable standard will be unbiased, unsubstituted data as specified in 45 CSR 10A, §6.1.b.1 We are proposing that data capture of more than 50% constitute sufficient data for the daily mass emissions to be considered valid. The CEMS are installed, maintained and operated in compliance with requirements of 40 CFR Part 75. Because Units 1 and 2 discharge through a common stack (CS012) and both are "Type a" fuel burning units as defined in 45 CSR 10, the stack limit is effectively the same as the plant-wide limit.
- b. **Other Credible Monitoring Method(s):** While Kanawha River Plant will use CEMS as the primary method of monitoring SO₂ mass emissions of the stack CS012, we are also reserving the right to use ASTM compliant fuel sampling and analysis or any other appropriate method that would produce credible data. These "other monitoring methods" will generally be used in the absence of CEMS data or as other credible evidence used in conjunction with CEMS data.

3. Recordkeeping:

a. Operating Schedule and Quality/Quantity of Fuel Burned:

45 CSR 10A, §7.1.a. *Fuel burning units - The owner or operator of a fuel burning unit(s) shall maintain records of the operating schedule and the quality or quantity of fuel burned in each unit...*

45 CSR 10A, §7.1.c. *The owner or operator of a fuel burning unit or combustion source which utilizes CEMS shall be exempt from the provisions of subdivision 7.1.a. or 7.1.b, respectively.*

As such, Kanawha River plant will not maintain records of the operating schedule and the quality and quantity of fuel burned in each unit for purposes of meeting the requirements for a monitoring plan under 45 CSR 10. While fuel sampling and analysis may continue to be performed at this facility, it is done so at the discretion of the owner/operator and is not required by this monitoring plan for the purposes of indicating compliance with SO₂ standards.

b. Record Maintenance

45 CSR 10A, §7.1.d. *For fuel burning units, manufacturing process sources, and combustion sources, records of all required monitoring data as established in an approved monitoring plan and support information shall be maintained on-site for a period of at least five (5) years from the date of monitoring, sampling, measurement or reporting. Support information includes all calibration and maintenance records and all strip chart recordings for continuous monitoring instrumentation, and copies of all required reports.*

As such, CEMS records at Kanawha River Plant will be maintained for at least five years.

4. Exception Reporting:

45 CSR 10A, §7.2.a. *CEMS - Each owner or operator employing CEMS for an approved monitoring plan, shall submit a “CEMS Summary Report” and/or a “CEMS Excursion and Monitoring System Performance Report” to the Director quarterly; the Director may, on a case-by-case basis, require more frequent reporting if the Director deems it necessary to accurately assess the compliance status of the source. All reports shall be postmarked no later than forty-five (45) days following the end of each calendar quarter. The CEMS Summary Report shall contain the information and be in the format shown in Appendix A unless otherwise specified by the Director.*

45 CSR 10A, §7.2.a.1. *Submittal of 40 CFR Part 75 data in electronic data (EDR) format to the Director shall be deemed to satisfy the requirements of subdivision 7.2.a.*

As such, Kanawha River Plant will submit the 40 CFR 75 quarterly electronic data reports (EDRs) to the OAQ to meet the requirements for a CEMS Summary Report and the CEMS Excursion and Monitoring System Performance Report. The EDR reports will be submitted to the OAQ no later than 45 days following the end of the quarter.

When no excursions of the 24 SO₂ standard have occurred, such information shall be stated in the cover letter of the EDR submittal.

Revisions of Monitoring Plan:

Kanawha River Plant reserves the right to periodically revise the conditions of this monitoring plan. Any revised plan will become effective only after approval by the OAQ.

Implementation of Monitoring Plan:

Upon approval of this monitoring plan or any subsequent revisions to the plan, it is certain that a period of time will be necessary to implement new testing, monitoring, recordkeeping or reporting commitments. While some of the commitments will be implemented immediately, others may require a significant amount of implementation work (including training of personnel) that will not necessarily be undertaken until the plan has been approved by OAQ. The reason for delaying such implementation is so that the facility can be assured that the implementation work is not being spent on a commitment that will not be approved by the OAQ. Kanawha River plant is proposing that the requirements under this initial monitoring plan be implemented during a period of 3 months (at a minimum) after approval by OAQ with the actual effective date coinciding with the start of a quarterly reporting period. However, if the final monitoring plan requires significant equipment revisions or installation of new equipment, more time may be required. In any case, we ask that the OAQ work with the Kanawha River facility to reach a workable implementation date. Likewise, Kanawha River Plant and AEP are committed to working with the OAQ on a successful implementation.