




COMMONWEALTH OF PENNSYLVANIA
Department of Environmental Protection
Southwest Regional Office

MEMO

TO Air Quality Permit File TV-11-00378

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DATE February 20, 2013

RE Review of Application for Title V Operating Permit Renewal
 Inter-Power/Ahlcon Partners, LP
 Colver Power Project
 Cambria Township, Cambria County
 AUTH 602406; APS 560492; PF 280848

BACKGROUND

The Inter-Power/Ahlcon Partners, LP Colver Power Project (Colver) is a 102.0 megawatt waste coal-fired power generation facility, located in Cambria Township, Cambria County. Construction of the facility commenced in March 1993. The facility produces electricity for sale under a Power Purchase Agreement with the Pennsylvania Electric Company (Penelec), as a base-load facility.

An initial Title V Operating Permit (TVOP) was issued for this site on February 15, 2001, with an expiration date of February 15, 2006. On August 12, 2005, the Department received a renewal TVOP application from Inter-Power/Ahlcon Partners, LP for Colver, in accordance with Section B, Condition # 004. This renewal application was submitted to the Department pursuant to 25 Pa. Code §§127.501-127.542. The application was deemed timely and administratively complete on October 6, 2006. The application was assigned to me on May 10, 2012. On June 21, 2012, additional information was requested, which was received on February 19, 2013.

SOURCES, CONTROL DEVICES and EMISSIONS

The plant consists of one circulating fluidized bed (CFB) boiler rated at 1,214.5 MMBtu/hr, a diesel fire pump (emergency use only), a diesel generator (emergency use only), fuel handling system that includes a crusher and a fuel dryer, a limestone handling and injection system,

propane vaporizer and some other insignificant sources . There are no institutional, commercial, industrial boilers or process heaters at this site.

The CFB boiler is the major air pollutant source in this facility. It operates on the circulating bed concept and was designed to burn coal with a BTU content of at least 7200 Btu/lb. The Ahlstrom-Pyropower CFB boiler includes limestone injection for SO₂ control and ammonia injection for NO_x control. Blended waste coal and pre-crushed limestone sorbent (for control sulfur oxides (SO_x)) are introduced into the combustion chamber. High velocity fluidized air circulates the bed through the freeboard space of the combustion chamber. Particulate matter entrained in the CFB effluent is captured in a cyclone collector and recirculated into the bed. Bed temperature is maintained between 1550°F and 1650°F. Pre-crushed limestone sorbent is introduced into the bed at a Ca/S molar ratio of at least 2.5 to 1 to control emissions of sulfur dioxide. Air and dust associated with the limestone that is pneumatically unloaded from trucks is controlled by a baghouse rated at 3,000ACFM at 280°F. Sulfur is retained in the particulate as calcium sulfate, and is discharged with the ash. Cyclone effluent passes through convective heat transfer sections of the boiler to a reverse-pulse baghouse. A Brandt Filtration baghouse is used to control particulate emissions. Effluent from the baghouse is discharged to the atmosphere through a stack approximately 350 feet in height and 11 feet in diameter. The facility consumes a maximum of 78 tons/hr of coal refuse that averages 7,800 Btu/lb and 23 ton/hr of limestone. Rated output capacity of the boiler is 887,480 lbs/hr of steam at 1,500 psig and 950°F. Annually, the project utilizes in excess of 600,000 tons of waste coal, and approximately 160,000 tons of crushed limestone. Typical fuel values are in the mid-to-upper 6,000 Btu/lb, and approximately 2+/-0.5% sulfur. The typical fuel quality has dropped from 7,200 Btu/lb. to 6,000 Btu/lb.

Coarse and fine waste coal produced on site is blended with cleaned waste from off site and delivered to a blended coal storage pile that may contain up to 50,000 tons of fuel. Fuel is transferred via mobile equipment to dump hoppers. Following crushing, the coarse coal waste is transported to a blending bin via a conveyor belt. The belts are covered. All transfer points and the crusher buildings are controlled with baghouses. The combined exhaust gas flow rate from both the crusher/dryer baghouses is 63,000 ACFM @ 280°F.

Fly ash and bottom ash are discharged into drag chain conveyors that are discharged into surge bins with mixer. At the mixer, the ash products is conditioned to an approximately 13% moisture content to prevent dusting as the conveyor belt transports the ash to a storage silo. The ash moisture content is raised to approximately 25% at the load-out bin before discharge into mobile equipment for transport to the designated area.

Using waste coal (locally known as Bony or Gob), which originated from the mining of high quality coal for use in metals refining and utility power plants, the facility more than meets all of its requirements under the existing environmental regulations. The piles of waste coal contain low energy and high ash values and have been the source of ground water contamination and air pollution, with no viable means of disposal until CFB technology was introduced. CFB's are considered by the EPA to be the Best Available Technology (BAT) for controlling and reducing emissions from the burning of coal. Ash from the facility is high in lime content (high pH) and is used to reclaim the original refuse site where the residue from mining had been leeching acid

into the soil and nearby streams. It is also used for beneficial use programs in reclamation of strip mines and as a soil enhancement additive for farming.

As a result of the emission levels, Colver Power is a major stationary source as defined in Title 1, Part D of the Clean Air Act Amendments. As such the facility is subject to the Title V permitting requirements adopted at 25 PA Code, Chapter 127, and Subchapter G.

Emissions estimates for particulate, SO₂, NO_x, CO, non-methane hydrocarbons, and trace elements are based on coal refuse characteristics, system component design criteria, manufacturer performance guarantees, and emission data from similar installations. Emissions of sulfur oxide, expressed as SO₂, from CFB boiler are limited to 0.94 lb/MMBtu and 1,142 lbs/hr (3-hr rolling average period, 0.62 lbs/MMBtu and 753 lbs/hr (24-hr rolling average period), and 2,913 tons in any consecutive 12 month rolling average. Compliance with these requirements will ensure compliance with applicable SO₂ requirements per 25 Pa Code §123.22(a)(1) and 40 CFR §60.43a. Emissions of NO_x from the CFB boiler are limited to 0.20 lbs NO_x/MMBtu, 243 lbs/hr on 24 hours rolling average and 932 tons in any consecutive 12 month rolling average. The NO_x emission limitation of 932 tons per consecutive 12-month period is derived from the RACT Permit (for the installation of Low NO_x Burners). Emissions of VOC from CFB boiler are limited to 0.01 lbs/MMBtu, 11.2 lb/hr or 47 tons in any consecutive 12 month rolling average. Emissions of filterable PM₁₀ are limited to 0.019 lb/MMBtu, 21.3 lbs.hr and 88.6 tons in any consecutive 12 month rolling average. Compliance with these particulate limits ensure compliance with 25 Pa. Code § 123.11 and 40 CFR § 60.42a. Ammonia slip is limited to 5 ppmv.

The facility has the potential to emit the following types and quantity of air contaminants (on an annual basis): 1,264 tons carbon monoxide, 938 tons NO_x, 2,918 tons SO_x, 89 tons filterable PM₁₀, 47 tons volatile organic compounds, 171.24 tons hazardous air pollutants (HAP), including 170 tons hydrochloric acid; 1.24 tons hydrofluoric acid; 72 lbs lead; less than 1 pound mercury; 3 tons ammonia, and 1,366,481 tons carbon dioxide equivalents (greenhouse gases).

Colver's actual emissions from the year 2011 AIMS report are as follows: 251.07 tons CO; 713.15 tons NO_x; 41.68 tons PM₁₀; 10.43 tons PM_{2.5}; 2,883.12 tons SO_x; 3.83 tons VOC; 160.03 total HAPs [156.28 tons Hydrochloric Acid (HCl); <0.5 tons for each of the following pollutants: Lead (Pb); Mercury (Hg); Nickel (Ni); Chromium (Cr); Manganese (Mn); Hydrogen Fluoride (HF); Antimony (Sb); Selenium (Se)].

Group 1 includes an emergency Diesel Fire Pump (FP-01) & an emergency Diesel Generator (DG-01). Both these sources, having insignificant emissions, were exempt from Plan Approval requirements. Group 2 consists of fuel handling system (Source 101) and propane dryer (Source 032). Source 032 is limited to 2,200 hours of operation.

PREVIOUS AUTHORIZATIONS

Plan Approvals:

In April, 1989, the Department of Environmental Resources (DER) received an application from Inter-Power of Pennsylvania to construct two (2) bituminous coal refuse fired fluidized bed combustors in Cambria and Blacklick townships in Cambria County. On November 28, 1990, the Department issued Plan Approval PA-11-306-006 to authorize the construction of this facility. This project was subject to Prevention of Significant Deterioration (PSD) regulations, requiring modeling and BACT determinations for each pollutant exceeding de minimis levels. Through no fault of the permittee, construction of the facility did not commence within 18 months.

On October 14, 1992, the Department re-issued Plan Approval PA-11-306-006. The design of the facility was revised, resulting in the construction of a single CFB boiler.

On December 28, 1994, Plan Approval PA-11-305-030 was issued to authorize the construction of additional equipment for fuel, limestone, and ash handling. This was issued due to various conveyor problems during the winter. On May 29, 1996, the Department added special conditions to PA-11-305-030 to authorize the construction of two reversible hammer crushers, a dryer system, and fabric filter dust collectors, a fuel storage building, and an emergency stockpile. All the special conditions from these two Plan Approvals were consolidated into the initial TV-11-00378 when it was issued on February 15, 2001.

Requests for Determination:

Acting on a Request for Determination (RFD) application, on October 27, 2004, the Department exempted from Plan Approval the voluntary installation and operation of MobotecUSA Rotating Opposing Fire Air System (ROFA) on Colver's boiler to reduce actual emissions of SOx in addition to improving boiler operation and efficiency.

MobotecUSA installed a ROFA system which, amongst other positive features, increased residence time. The ROFA is a fan to set the volume of the furnace in rotation via asymmetrically placed mixing boxes/nozzles, making a combustion gas swirl and allowing for improved mixing of combustion gases. A blanket of air is fired into the boiler approximately 2 floors above the combustion chamber. The blanket holds combustion bed solids down slightly longer than normal. ROFA also homogenizes the flue gas stream, such that the gas and particulate matter streams are not quite as stratified. ROFA provides a balance of air in the correct zones for deep staging, as well as eliminating zones with too much or too little air. This homogenization also promotes efficient mixing of fuel and air resulting in optimized combustion. The ROFA system was projected to provide additional reduction in SOx emissions as much as 30% due to time, temperature, and turbulence enhancements. Likewise, CO and NOx emissions are also reduced. A related benefit to reduced SOx is a reduction in limestone and waste coal use. Thus, less limestone, less waste coal, less heat input, less emissions.

Pending Request for relocating EMRC:

On February 10, 2004, the Department received a RFD for re-locating the existing EMRC dual pitot tube flow monitor on the Clover Power Plant stack from an upper level stack platform (i.e. elevation approximately 181 feet above ground elevation) to a lower level platform (i.e. elevation approximately 161 feet above ground elevation, at roof top level). The purpose of this request is to relocate both pitots approximately 20 feet lower on the stack in the interest of safety. During the winter months ice and snow accumulates on the ladder.

The impact of re-locating the plant's EMRC dual pitot tubes will make winter maintenance considerably safer and easier for plant worker. The existing reference method flow testing is performed at the 161 foot test port elevation using all 4 available test ports and a test probe that samples the required traverse points in each of the four quadrants. These pitots will now occupy two (2) of the existing four (4) EPA reference method test ports at the 161 feet elevation. IAP relocated the pitot tube-gas velocity probes in 2006 to a much safer location. Subsequent studies indicated no changes in tested parameters. The Department has still not approved the new location.

REGULATORY ANALYSIS:

The applicability of the following regulations has been evaluated.

40 CFR Part 60 Subpart D: *Standards of Performance for Fossil-Fuel-Fired Steam Generators*

This subpart applies to any fossil-fuel-fired steam generating unit that has a maximum heat input capacity of more than 250 MmBtu/hr that commenced construction or modification after August 17, 1971 but on or before September 18, 1978. The CFB boiler at the Colver facility was constructed in 1995. Therefore, it is not subject to the requirements of 40 CFR Part 60, Subpart D.

40 CFR Part 60 Subpart Da: *Standards of Performance for Electric Utility Steam Generating Units*

This subpart applies to each electric utility steam generating unit that has a maximum heat input capacity of more than 250 MMBtu/hour that commenced construction or modification after September 18, 1978. The CFB boiler at the Colver facility was constructed in 1995. Therefore, it is subject to the requirements of 40 CFR Part 60, Subpart Da. Subpart Da contains conditions related to PM, opacity, SOx and NOx limits as well as testing, monitoring and reporting requirements. However, the emission limitations established in pre-construction Plan Approval PA-11-306-006 are more stringent than those established in Subpart Da.

40 CFR Part 60 Subpart Db: *Standards of Performance for Industrial-Commercial-Institutional Steam Generating Units*

In accordance with 40 CFR 60.40(b)(e), this subpart does not apply to steam generating units meeting the applicability requirements under Subpart Da. Accordingly, the CFB boiler at Colver is not subject to the requirements of 40 CFR Part 60, Subpart Db.

40 CFR Part 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 Colver facility has three (3) propane storage tanks with a capacity of 30,000 gallons each and two (2) diesel fuel storage tanks with a capacity of less than 1,000 gallons each, all constructed in 1993. This Subpart does not apply to this facility as the storage tanks were not constructed after May 18, 1978 and prior to July 23, 1984. June 11, 1973 and May 19, 1978.

40 CFR Part 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 Colver facility has three (3) propane storage tanks with a capacity of 30,000 gallons each and two (2) diesel fuel storage tanks with an overall capacity of less than 1,000 gallons each, all constructed in 1993. This Subpart does not apply to this facility as the storage tanks were not constructed after May 18, 1978 and prior to July 23, 1984.

40 CFR Part 60 Subpart Kb: *Standards of Performance for Storage Vessels for Petroleum Liquids for which Construction, Reconstruction, or Modification Commenced after July 23, 1984* The Colver facility has three (3) propane storage pressure vessels with a capacity of 30,000 gallons each and two (2) diesel fuel storage tanks with an overall capacity of less than 1,000 gallons each, all constructed in 1993. In accordance with 40 CFR § 60.110b(d)(2), this subpart does not apply to pressure vessels designed to operate in excess of 204.9 kPa and without emissions to the atmospheres. Therefore Kb is not applicable to the propane storage tanks. In accordance with 40 CFR § 60.110b(a), this subpart applies to storage vessels with a capacity greater than or equal to 10,000 gallons. The diesel fuel tanks have a capacity of 1,000 gallons each. Therefore Kb is not applicable to the diesel storage tanks.

40 CFR Part 60, Subpart III: *Standards of Performance for Stationary Compression Ignition Internal Combustion Engines* Per 40 CFR § 60.4200, the provisions of this sub-part apply to the owners and operators of stationary compression ignition (CI) internal combustion engines (ICE) that commence construction after July 11, 2005. The previously installed 3412 Caterpillar DG-01 and Detroit diesel fire pump, FP-01 commenced construction and were manufactured in 1995 and are not subject to this section.

40 CFR Part 60, Subpart JJJJ: *Standards of Performance for Stationary Spark Ignition Internal Combustion Engines* Per 40 CFR § 60.4230, the provisions of this sub-part apply to the manufacturers, owners, and operators of stationary spark ignition (SI) reciprocating internal combustion engines (ICE). There are no spark ignition RICE at this facility.

40 CFR Part 63, Subpart ZZZZ: *National Emissions Standards for Hazardous Air Pollutants for Stationary Reciprocating Internal Combustion Engines (RICE)* In accordance with 40 CFR § 63.6580, Subpart ZZZZ establishes national emission limitations and operating limitations for hazardous air pollutants (HAP) emitted from stationary reciprocating internal combustion engines (RICE) located at major and area sources of HAP emissions. This subpart also establishes requirements to demonstrate initial and continuous compliance with the emission limitations and operating limitations.

The Detroit diesel fire pump FP-01 is an existing stationary RICE as it has commenced construction in 1994, i.e. prior to June 12, 2006. FP-01, rated at 412 bhp, is subject all of the requirements for an existing, emergency compression ignition engine rate at less than 500 hp, located at a major source of HAP emissions. These include 40 CFR § 63.6605(b) for operating practices, 40 CFR § 63.6625(e)(f)(h) for operating in compliance with a maintenance plan, installing non-resettable hour meter, minimizing idle times, and 40 CFR § 63.6640(f) for routine maintenance requirements. FP-01 is further subject to 40 CFR § 63.6650(f) and 40 CFR § 63.6660 for record keeping and reporting requirements.

In accordance with 40 CFR 63 § 6590(b)(3)(iii) and 40 CFR §6600(c), an existing emergency stationary RICE with a site rating of more than 500 bhp located at major source of HAP emissions is exempt from the requirements of 40 CFR Subparts A and ZZZZ, including initial notifications. Emergency diesel generator DG-01, Caterpillar, rated at 780 bhp is an existing RICE as it has commenced construction in 1994, i.e. prior to December 19, 2002, and therefore is not subject to Subpart ZZZZ.

40 CFR 63 Subpart DDDDD: *National Emissions Standards for Hazardous Air Pollutants for Industrial, Commercial, Institutional (ICI) Boilers and Process Heaters* The applicability of 40 CFR 63, Subpart DDDDD – National Emission Standards for Industrial, Commercial, Institutional (ICI) boilers and process heaters has been evaluated. Finalized on March 21, 2011, this rule applies to ICI boilers and process heaters located at facilities that are major for hazardous air pollutants (HAPs). This facility is major for HAPs, but does not operate any ICI Boilers or Process Heaters. Therefore, this rule does not apply to the Colver facility.

40 CFR Part 63 Subpart UUUUU: *National Emission Standards for Hazardous Air Pollutants (NESHAP) for Coal and Oil-Fired Electric Utility Steam Generating Units.* On February 16, 2012 (77FR9304), EPA promulgated the final National Emission Standards for Hazardous Air Pollutants (NESHAP) for electric utilities. The applicability of 40 CFR 63 - Subpart UUUUU - National Emission Standards for Hazardous Air Pollutants emitted from coal and oil-fired electric utility steam generating units (EGUs) (as defined in § 63.10042 of this subpart) has been evaluated. The one CFB boiler at Colver meets the definition of coal-fired electric utility steam generating unit (EGU) as defined in § 63.10042: *Fossil fuel-fired* means an electric utility steam generating unit (EGU) that is capable of combusting more than 25 MW of fossil fuels. To be “capable of combusting” fossil fuels, an EGU would need to have these fuels allowed in its operating permit and have the appropriate fuel handling facilities on-site or otherwise available (e.g., coal handling equipment, including coal storage area, belts and conveyers, pulverizers, etc.; oil storage facilities). In addition, fossil fuel-fired means any EGU that fired fossil fuels for more than 10.0 percent of the average annual heat input during any 3 consecutive calendar years or for more than 15.0 percent of the annual heat input during any one calendar year after the applicable compliance date. Therefore, the CFB at Colver is subject to 40 CFR Part 63 Subpart UUUUU and shall comply with all the applicable requirements listed below, including tables and appendices, by April 16, 2015, unless an extension is granted.

Colver facility is subject to the following UUUUU requirements as noted by AECOM Technical Services, Inc.:

- 40 CFR 63.9991(a)(1)
- 40 CFR 63.9991(a)(2)
- 40 CFR 63.10000(a)
- 40 CFR 63.10000(b)
- 40 CFR 63.10000(c)
- 40 CFR 63.10000(d)
- 40 CFR 63.10000(e)
- 40 CFR 63.10005
- 40 CFR 63.10006
- 40 CFR 63.10010
- 40 CFR 63.10030(b)
- 40 CFR 63.10030(d)
- 40 CFR 63.10030(e)
- 40 CFR 63.10031(b)
- 40 CFR 63.10032
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A condition has been added to the Title V permit to ensure compliance with Subpart UUUUU including all applicable tables and indices.

40 CFR Part 64: *Compliance Assurance Monitoring (CAM)* The Compliance Assurance Monitoring (CAM) requirements of 40 CFR Part 64 are applicable to Colver. The CAM rule was promulgated by EPA in 1997 and it is intended to provide a reasonable assurance of compliance with applicable requirements under the Clean Air Act (CAA) for each pollutant-specific emission unit (PSEU) that:

- Is located at a major source subject to a Title V permit, and
- Is subject to an emission limitation for which a control device is used to meet that limit, and
- Has pre-controlled emissions greater than the major source threshold, and
- Pollutant is not currently monitored by certified continuous emissions monitoring (CEM) system.

Colver maintains a continuous emission monitoring system (CEMS) for SO₂ and NO_x; therefore a CAM plan is not required for those pollutants. The CFB boiler at Colver does meet the above criteria for particulate emissions and is, therefore, subject to CAM requirements for this pollutant. Colver has proposed using the existing Continuous Opacity Monitor as CAM for particulate matter. They have provided test data to demonstrate that operating at an opacity level of no more than 6% will ensure continuous compliance with their particulate matter limit for the CFB.

40 CFR Part 68: *Chemical Accident Prevention Provisions* This part sets forth the list of regulated substances and thresholds and the requirements for owners or operators of stationary sources concerning the prevention of accidental releases. The substances and threshold quantity that are considered a regulated substance under this part are listed in 40 § 68.130. Colver stores

propane and aqueous ammonia in concentrations and quantities greater than the threshold amounts for these pollutants. Propane is exempt from Risk Management Plan (RMP) provision per 40 CFR Part 68.126, as it is used as fuel at Colver facility. However aqueous ammonia is subject to 40 CFR Part 68. Owner/Operator shall comply with the RMP provisions of 40 CFR 68, Subpart G and must submit to EPA and DEP a RMP that meets all of the requirements for 40 CFR Part 68, Subpart G. As noted the company has submitted a RMP for ammonia to EPA on August 21, 2009. This requirement has been added to the TVOP.

40 CFR Part 51 Subpart P: *Requirements for Preparation, Adoption, and Submittal, of Implementation Plans - Protection of Visibility.* In accordance with the definitions found at 40 CFR § 51.301, a fossil-fuel boiler rated at greater than 250 million British thermal units per hour heat input, which commenced operation after August 7, 1962 and was in existence before August 7, 1977, and has the potential to emit 250 tons per year or more of any visibility impairing pollutants, which include: NO_x, SO₂, PM₁₀, and PM_{2.5} would be a BART-eligible source. The EGU at Colver was installed in 1993; therefore, BART does not apply to this source.

40 CFR Part 72, Subpart A:- Acid Rain Program Provisions The purpose of this part is to establish certain general provisions and the operating permit program requirements for affected sources and affected units under the Acid Rain Program, pursuant to Title IV of the Clean Air Act. In accordance with 40 CFR § 72.6 (b)(5) and (6): The following types of units are not affected units subject to the requirements of the Acid Rain Program: (5) A qualifying facility that has, as of November 15, 1990, one or more qualifying power purchase commitments to sell at least 15 percent of its total planned net output capacity; and consists of one or more units designated by the owner or operator with total installed net output capacity not exceeding 130 percent of the total planned net output capacity. (6) An independent power production facility that has, as of November 15, 1990, one or more qualifying power purchase commitments to sell at least 15 percent of its total planned net output capacity; and consists of one or more units designated by the owner or operator with total installed net output capacity not exceeding 130 percent of its total planned net output capacity. IAP is defined as a 'qualifying facility' and an 'independent power production facility; therefore; IAP is not required to obtain an Acid Rain Permit.

40 CFR Part 75: *Continuous Emissions Monitoring (CEM)* The purpose of this part per §75.1 is to establish requirements for the monitoring, recordkeeping, and reporting of sulfur dioxide (SO₂), nitrogen oxides (NO_x), and carbon dioxide (CO₂) emissions, volumetric flow, and opacity data from affected units under the Acid Rain Program. In addition, this part sets forth provisions for the monitoring, recordkeeping, and reporting of NO_x mass emissions with which EPA, individual States, or groups of States may require sources to comply in order to demonstrate compliance with a NO_x mass emission reduction program, to the extent these provisions are adopted as requirements under such a program. Colver is subject to 40 CFR Part 75 and maintains CEMs for the CFB boiler.

40 CFR Part 98 Subparts A, C: *Mandatory Greenhouse Gas Reporting* This part was promulgated on October 30, 2009, and November 30, 2010. In accordance with 40 CFR § 98.2(a), the Greenhouse Gas (GHG) reporting requirements and related monitoring, recordkeeping, and reporting requirements of this part apply to the owners and operators of any

facility that is located in the United States and that meets the requirements of either paragraph 40 CFR § 98.2 (a)(1), (a)(2), or (a)(3) of this section.

However, public comments to the Greenhouse Gas Mandatory Reporting Rule (GHG MRR) questioned the requirements of this rule to meet current definitions of “applicable requirement” at 40 CFR §§ 70.2 and 71.2. The commentators requested that USEPA confirm their interpretation of the regulations. The EPA provided the following response: “As currently written, the definition of “applicable requirement” in 40 CFR §§ 70.2 and 71.2 does not include a monitoring rule such as today’s action, which is promulgated under CAA sections 114(a)(1) and 208.” The preamble of the final version of the GHG MRR, located at 74 Fed Reg 209, pp. 56287-56288, states that the GHG MRR is not considered an “applicable requirement” under the Title V Operating Permit program. Therefore, this Subpart, while an obligation for Colver, is not considered an applicable condition for this Title V Operating Permit.

40 CFR Part 52: *The Greenhouse Gas Tailoring Rule* was issued on December 30, 2010. This rule establishes a process for conducting Prevention of Significant Deterioration (PSD) reviews, including Best Available Control Technology (BACT) determinations for control of greenhouse gases (GHG) when a new source or a modification to an existing source results in emissions of GHGs in excess of certain thresholds. Since 2010, there have not been any modifications to the Colver facility that triggered a GHG PSD review.

25 Pa Code Sections §§145.201-145.233, Subchapter D: The applicability of the CAIR requirements of 25 Pa Code §§145.201-145.233, Subchapter D has been evaluated. These sections were adopted by PA DEP on April 11, 2008, and became effective on April 12, 2008. These requirements addressed the requirements of EPA’s Clean Air Interstate Rule (CAIR) with some requirements specific to emission sources in Pennsylvania. These conditions superseded the requirements in both the PA Code and also the Federal Code of Regulations which comprised the default CAIR program for Pennsylvania. The requirements in this subchapter, as well as the remaining applicable federal requirements, are known as “PA CAIR.” EPA announced final acceptance of these requirements as a revision to the State Implementation Plan (SIP) for the Commonwealth of Pennsylvania on December 10, 2009.

On December 23, 2008, the US Court of Appeals for the DC Circuit decided that EPA had exceeded its authority under the Clean Air Act in adopting CAIR. The court decision remanded the CAIR rule, and required EPA to develop a rule within a reasonable time, under court guidelines to replace it. However, the CAIR rule was not vacated by the court. Until the CAIR was replaced, its implementation, including review of modifications of the federal requirements allowed by states, would continue. This allowed EPA to review and approve the requirements for PA CAIR after the date that the CAIR Rule was remanded.

On July 6, 2011, EPA finalized the Cross-State Air Pollution Rule (“CSAPR”) which was intended to replace CAIR and achieve greater reasonable progress towards the goal of achieving natural visibility conditions in Class I areas than the source-specific BART, in those states covered by the Transport Rule. Within this proposed rule, EPA stated that it anticipates the Transport Rule will result in greater emission reductions overall than CAIR. This rule had an

effective date of January 1, 2012 and replaced the requirements of PA specific CAIR. However, the United States Court of Appeals for the D.C. Circuit issued an order granting a motion to stay CSAPR on December 30, 2011. Per this order, "Respondent [EPA] is expected to continue administering the Clean Air Interstate Rule pending the court's resolution of these petitions for review." Final action has not yet been taken on these proposals. Therefore, at this time the Pennsylvania specific rule for CAIR remains in effect and CAIR NOx and SO2 Trading Programs of 25 Pa Code Subchapter D, Sections §§145.201-145.223 and 40 CFR Part 97 Federal NOx Budget Trading Program and CAIR NOx and SO2 Trading Program have been incorporated into the Title V Operating Permit.

Due to the applicability of 25 Pa Code Sections §§145.201-145.233, Subchapter D, the NOx allowance requirements 25 Pa Code Sections §§123.101-123.121 and The NOx Budget Trading Program in 25 Pa Code Sections §§ 145.1- 145.100 have been removed from the Title V operating permit.

MONITORING:

The compliance assurance policy has been updated for CEMS on combustion units on April 1, 2009, effective date. The policy has been reviewed and the Title V operating permit contains the necessary enforceable language in accordance with the compliance assurance policy. IAP has submitted Title V Compliance Certification Report on February 29, 2012. The report was reviewed and accepted by the Department on March 5, 2012.

TESTING REQUIREMENTS:

For the initial Title V permit issuance, periodic monitoring for compliance with the PM10 emission standards established in Plan Approval PA-306-06-006 was typically accomplished through stack testing at least once during the term of permit (every five years). In accordance with the final report issued by DEP on December 22, 2010 entitled "Evaluation of Total Particulate Matter Emissions From Coal-Fired Electric Generation Units," the Department now requires stack testing to demonstrate compliance with the allowable particulate rate from coal-fired EGU boilers to be conducted at least every two years. This requirement has been added to the proposed Operating Permit, along with standardized EGU testing language.

With the promulgation of a PM2.5 standard, and the development of a refined test method (OTM-028) for fine particulate, the Department wanted information regarding PM2.5 emissions from the largest sources of PM2.5; coal-fired and waste coal-fired electric generating units (EGUs). On January 30, 2009, the owners/operators of 34 coal-fired electric generating units (EGU) and waste coal-fired power plants were notified in writing requesting that source testing for condensable and filterable particulates should be completed by June 30, 2009. Colver (11-00378) was included. Results of data collected indicate that: CFB EGUs are averaging total particulate at 0.024 lbs/MMBTU with the filterable portion at 0.016 lb/MMBTu (68% of total) and the condensable portion at 0.008 lb/MMBTu (32% of total), pulverized coal fired EGUs

without scrubber controls are averaging 0.114 lb/MMBtu for total particulate with 0.041 lb/MMBtu for the filterable portion (36% of total) and 0.073 lb/MMBtu for the condensable portion (64%), and pulverized coal-fired EGUs with scrubber controls are averaging 0.037 lb/MMBtu for total particulate with 0.025 lb/MMBtu for the filterable portion (67% of total) and 0.012 lb/MMBtu for the condensable portion (33%).

As demonstrated by the stack testing initiative of 2009, emissions of filterable plus condensable particulate matter from most FGD controlled units were a fraction of the NSPS (0.03) and a small percentage of the SIP standard (0.1). To provide additional quantification of filterable plus condensable particulate emissions, I recommend that testing for filterable PM10, filterable PM2.5 and condensable particulate also be performed every two years. This additional particulate testing requirement also has been added to the proposed Operating Permit. This condition requires testing for filterable PM10, filterable PM2.5, and condensable particulate emissions, also at intervals of every two years, using EPA Test Methods 201A and 202, or Department approved equivalent.

Colver is also required to determine ammonia concentrations in the exhaust gas ("slip") from Source 031 once every five years through stack testing.

RECOMMENDATIONS:

On August 12, 2005, IAP submitted the renewal Title V Permit Application for the operation of one (1) CFB boiler at their Colver facility located in Cambria Township, Cambria County. IAP has complied with the municipal notification requirements contained in 25 Pa. Code §127.413: Municipal notification was received by Cambria Township, Barr Township, and by Cambria County on July 26, 2005. All the applicable fee was remitted to the "Clean Air Fund: by IAP on August 12, 2005 as required under 25 Pa. Code §127.704 (b)(3). The proposed Title V Operating Permit will be submitted to IAP for their review with the requirements to post a notice into the newspaper for three separate days. The Notice of Intent to Issue the permit will be published in the Pa. Bulletin for a 30 day comment period. The proposed operating permit and memo will also be submitted to EPA for a 45 day comment period

On May 17, 2012, Jesse Parihar (Air Quality Engineering Specialist) and Philip Sapala (Air Quality Specialist) visited the facility to perform a compliance inspection. There were no fugitive emissions observed from the ash truck loading area. The roadways were paved, well maintained, and frequently watered. Dennis Simmer, EHS Engineer, reported that the Mercury is captured 100% in the baghouse due to its low temperature. The boiler is equipped with continuous emission monitoring system (CEMS) for measuring NOx, SOx, and Opacity. Compliance with the emission limitations on the boiler will be determined through the use of CEMS. Sources of particulate emissions are equipped with baghouses. A daily inspection log will be maintained for visible emissions. The smaller sources such as the diesel generator and diesel fire pump will determine compliance through recordkeeping and maintaining the sources in accordance with manufacturer specifications. Annual fuel usage is approximately 600,000 tons of cleaned, dried

inspection. Colver failed their particulate matter limits during stack tests conducted in 2009. They underpaid on their particulate matter Title V emission fees in that year. Colver rebagged their baghouse in 2012 and easily met their particulate matter limits during 2013 testing. This matter is being resolved by the Operations Section.

Colver submitted a Title V Compliance Certification Report on February 29, 2012. The report was reviewed and accepted by the Department on March 5, 2012. It is my recommendation that the Title V Operating Permit renewal for the Colver facility be issued for five (5) years.