



American Bituminous Power Partners, L.P. Grant Town Power Plant 228 ABPP Drive, P.O. Box 159 Grant Town, West Virginia 26574

Telephone: (304) 278-7449 **Fax:** (304) 278-7437

October 2, 2017 ABP.057.EHS

Edward S. Andrews, P.E. Engineer WVDEP Division of Air Quality 6017 57th Street, SE Charleston, WV 25304-2345

Reference: Ame

American Bituminous Power Partners, L.P.

Grant Town Power Plant

Permit Determination PD17-057

Mr. Andrews,

In response to your letter of September 8, 2017 letter regarding Permit Determination PD17-040 for American Bituminous Power Partners, L.P. (AmBit) Grant Town Power Plant, AmBit offers the following.

As described in Attachment C of the Permit Determination Form as submitted, AmBit is proposing to replace the original existing furnace grid nozzles in Boiler 1A (indentified as Emission Unit ID 1S Emission Point ID Boiler #1A: Alsthrom Pyropower Coal Refuse-Fired Circulating Fluidized Bed Combustion Unit in Title V Permit Number R30-04900026-2014) with block nozzles.

In evaluating any potential change in emissions from the grid nozzle replacement, AmBit compared heat input and generation output levels for calendar years 2015 and 2016 and actual emissions from those years as submitted to WVDEP DAQ in its Annual Certified Emissions Statement with generation and heat input projections for calendar years 2017 and 2018 to determine any potential increase in emissions rates. The results of those comparisons are summarized in the table below.

Pollutant	Calendar Years 2015 & 2016 Average Emissions (tons /year)*	Calendar Years 2015 & 2016 Average Emissions (lb/hr)**	Calendar Years 2015 & 2016 Average Emissions (lb/mmBTU) **	Calendar Years 2017 & 2018 Average Emissions (tons /year)***	Calendar Years 2017 & 2018 Average Emissions (lb/hr)***	Calendar Years 2017 & 2018 Average Emissions (lb/mmBTU) ***
PM	218.5	49.89	0.054	235.61	53.79	0.054
PM ₁₀	69.42	15.85	0.017	74.86	17.09	0.017
PM _{2.5}	36.92	8.43	0.009	39.81	9.09	0.009
VOCs	33.3	7.60	0.008	35.91	8.20	0.008
CO	701.95	160.26	0.173	756.93	172.81	0.173
NO _x	1396.4	318.81	0.344	1505.77	343.78	0.344
SO ₂	2052.45	468.60	0.506	1990	454.34	0.410
Pb	0.005	0.001	1.2 x 10 ⁻⁶	0.005	0.001	1.2 x 10 ⁻⁶
HAPS	89	20.32	0.022	95.97	21.91	0.022

^{*}Per the 2015 and 2016 Certified Emissions Statements previously submitted to WVDEP DAQ

^{**}Determined by multiplying tons/year emissions by 2000 lb/ton and dividing by 8760 hours/year

^{***}Based on actual emissions YTD 2017 (through August) with projections for remaining year 2017 and 2018

To determine the potential future year emissions, Ambit utilized a methodology that compared the average heat input and generation for 2015 and 2016 compared to the projected heat input and generation for 2017 and 2018. Once those averages for prior years and projected years was determined, a percentage difference (whether and increase or decrease) was determined and applied to the prior year emissions data to determine future year impacts. This methodology was applied to all pollutants in the above table with the exception of SO_2 . AmBit became compliant with the SO_2 Data Requirements Rule (DRR) (40 CFR§51) on January 13, 2017, requiring an annual SO_2 emissions rate not to exceed 1990 tons/year so therefore the projected years' emissions rate are reflective of that limit rather than a projection based on the heat input difference methodology as described above. The table above clearly shows that no pollutant emission rate (in units of lb/mmBTU) increase and that the mass increases noted reflect the difference in total heat input averages between calendar years 2015/2016 and 2017/2018.

Should you have any questions or require any additional information, please contact me at 304-278-6113 office, 304-290-9268 mobile or email at sfriend@ambitwv.com.

Sincerely,

Steve Friend Plant Manager



west virginia department of environmental protection

Division of Air Quality 601 57th Street, SE Charleston, WV 25304-2345 Phone: 304 926 0475 * Fax: 304 926 0479

Jim Justice, Governor Austin Caperton, Cabinet Secretary www.dep.wv.gov

September 25, 2017

Mr. Steve Friend Plant Manager American Bituminous Power Partners, L.P. P.O. Box 159 Grant Town, WV 26574

> Re: Permit Applicability Determination American Bituminous Power Partners, L. P. Determination No. PD17-057 Plant ID No. 049-00026

Dear Mr. Friend:

It has been determined that your permit determination request submitted on September 14, 2017, for the replacement of air nozzles in the grid floor in both circulating fluidized bed boilers lacks enough information to make a decision. The area of your determination that lacks information as to whether to the replacement of the air nozzles in the grid floor represents a "significant emissions increase and a significant net emission increase" (Major Modification) as defined in 45 CSR 14.

45 CSR §14-19.8.b. requires an existing electric utility steam generating unit, before beginning actual construction of any change that does not trigger the major modification threshold under 45 CSR 14, to provide the following as prescribed in 45 CSR 14-19.8.a.

- 1. A description of the proposed project;
- 2. Identification of the emissions unit(s) whose emissions of a regulated NSR pollutant could be affected by the proposed project; and
- 3. A description of the applicability test used to determine that the proposed project is not a major modification for any regulated NSR pollutant, including the baseline actual emissions, the projected actual emissions, the amount of emissions excluded under paragraph 2.63.a.2 and an explanation for why such amount was excluded, and any netting calculations, if applicable.

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Response to Mr. Friend Determination Request September 25, 2017 Page 2 of 2

Any submittal to satisfy 45 CSR 14-19.8.a. needs to be in terms of the trigger level (i.e. tons per year). Also, particulate matter less than 10 microns (PM₁₀) and particulate matter less than 2.5 microns (PM_{2.5}) needs to be evaluated with respect to the applicable trigger levels. The condensable fractions of PM₁₀ and PM_{2.5} needs to be included. The 24 consecutive months used to determine the baseline emissions must be identified by the source. If the "actual-to-projected-actual" applicability test is used, then sufficient justification needs to be submitted that explains how the projected emissions were determined. EPA suggests that a business plan be included when using the "actual-to-projected-actual" applicability test.

Should you have any questions, please contact the undersigned engineer at (304) 926-0499 ext. 1214.

Sincerely,

Edward S. Andrews, P.E.

Engineer

ec: Steve Friend, sfriend@ambitwv.com

Brian Tephabock, Brian.S.Tephabock@wv.gov