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|  <b>EPA</b>   |  | United States of America<br>Environmental Protection Agency |  |
| <b>A FAX FROM:</b>   |  |   |  |
| <b>TO:</b><br>Chad Schlichtemeier  |  | <b>FAX NO.:</b><br><br>(307) 777-5616                       |  |
| <b>SUBJECT:</b> EPA comments on proposed PSD permit to construct the new source to be know as MBFP IGL plant, AP-5873  |  |   |  |
| <b>FROM:</b><br>Christopher Razzazian  |  | <b>PHONE NO.:</b><br><br>(303) 312-6648                     |  |
| <b>OFFICE:</b><br>8P-AR  |  | <b>FAX NO. FOR:</b><br><br>(303) 312-6064                   |  |
| <b>COMMENTS:</b><br><p>Chad,</p> <p>Thanks for the opportunity to comment. The original copy of our letter is on its way and here is a faxed copy to meet the closing of the public comment period. I can get you an electronic version if you'd like.</p> <p>Thanks again,</p> <p>Chris</p> |  |   |  |
| <b>DATE and TIME:</b><br>8/4/08 3:18 pm  |  | <b>NO. of PAGES:</b><br>13                                  |  |

EPA Form 1315-18 (Rev. 5/97) (WebForms v1.0)

**MEDICINE BOW  
 EXHIBIT PP  
 PRE-HRG MEMO**



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY  
REGION 8

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AUG - 4 2008

Ref: 8P-AR

David A. Finley, Administrator  
Air Quality Division  
Wyoming Dept. of Environmental Quality  
122 West 25<sup>th</sup> Street  
Cheyenne, WY 82002

RE: Comments on the Draft Prevention of Significant  
Deterioration (PSD) Permit, AP-5873, to  
Construct at Medicine Bow Fuel and Power's  
Industrial Gasification and Liquefaction Plant

Dear Mr. Finley:

This letter provides our comments on the draft PSD Permit, AP-5873, for a proposed new facility to be known as the Medicine Bow Fuel and Power (MBFP) Industrial Gasification and Liquefaction (IGL) Plant in Carbon County, Wyoming. Our office received the permit package on June 30, 2008. The public comment period is from Thursday July 3, 2008 to Monday, August 4, 2008.

The Proposed IGL Plant includes the construction of an underground coal mine to be known as the Saddleback Hills Mine, as well as a power block for plant steam and power usage that will consist of three GE 7EA gas turbines with combined cycle heat recovery power generators for a total power generation capacity of 400 MW. The plant will produce the following for sale: 18,500 barrels per day (bpd) of gasoline, 42 tons per day of sulfur, 198 million standard cubic feet per day of carbon dioxide (CO<sub>2</sub>), and 712 tons per day of coarse slag.

The Division has determined that the proposed project will emit significant levels of the following PSD pollutants: nitrogen oxides (NO<sub>x</sub>), carbon monoxide (CO), volatile organic compounds (VOC), and particulate matter/particulate matter less than ten microns (PM/PM<sub>10</sub>) for which a Best Available Control Technology (BACT) review must be completed. Wyoming rules also require that the BACT process be followed for pollutants emitted in less than major amounts; therefore a minor source BACT review has been completed for sulfur dioxide (SO<sub>2</sub>), and mercury (Hg).

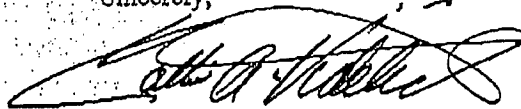
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Our primary comments include the applicability of PSD to SO<sub>2</sub>, the BACT procedure and BACT permit requirements, various modeling comments, case-by-case MACT, and the enforceability of provisions that minimize emissions. We have organized our comments in the enclosure to this letter by importance and by category.

We have reviewed the June 25, 2008 package including an updated application, modeling files, and the Division's Permit Application Analysis. Thank you for the opportunity to comment. If you have any questions or concerns please contact me at (303) 312-6434, or Christopher Razzazian at (303) 312-6648.

Sincerely,



Callie A. Videtich, Director  
Air Program

Enclosure

cc: Chad Schlichtemeier

## Enclosure

### EPA Region 8 Comments on Draft PSD Permit AP-5873 for the Construction of the Medicine Bow Fuel and Power Industrial Gasification and Liquefaction Plant

#### I. PSD Applicability for SO<sub>2</sub>

More analysis needs to be provided explaining why the proposed facility has not been determined to be a major source of sulfur dioxide (SO<sub>2</sub>). Table Va on page 8 of the Division's analysis, as well as page B-2 of Medicine Bow Fuel and Power's (MBFP's) application, indicate that the emission of sulfur dioxide (SO<sub>2</sub>) during the initial cold startup year would be 256.9 tons per year (tpy). During any other cold startup year, SO<sub>2</sub> emissions would equal 227.74 tpy in addition to the tonnage emitted in normal operational mode for the remainder of the year. Both scenarios would cause the emission of greater than 40 tpy of SO<sub>2</sub>, which is the significance threshold for Prevention of Significant Deterioration (PSD) applicability. The regulations do not provide exemptions for excluding startup emissions from a facility's Potential To Emit (PTE). The current record appears to indicate that all PSD requirements should apply for SO<sub>2</sub>; however table VI on page 9 of the Division's analysis indicates that PSD requirements do not apply to the facility for SO<sub>2</sub>.

Additionally, in the event that no other downstream equipment is ready to accept syngas, the high pressure (HP) flare has been designed to accept the total syngas flow from all operating gasifiers. This would result in the direct combustion of the untreated syngas. MBFP's application indicates that during "malfunctions and other events" (emphasis added) the HP flare has the potential to exceed the significance threshold, emitting 150 tpy of SO<sub>2</sub> (MBFP application, page B-1). Assuming MBFP is subject to PSD for SO<sub>2</sub>, as we believe, our comments in the remainder of this enclosure, regarding the need for a BACT determination and compliance provisions, would apply for SO<sub>2</sub> as well.

#### II. BACT Procedure

The Division's BACT write-up in the Permit Application Analysis should be expanded (please see our May 5, 2007 letter on American Colloid, Colony Plants, Comment 2). All categories of emitting units should undergo the entire BACT process. Among other things, the BACT write-up should include a more detailed description of cost effectiveness and other factors that form the basis for the rejection and selection of particular control options. In the past we have detailed concerns regarding the rationale provided for dismissing control options and our concern with conclusions regarding technical feasibility versus economic impact (please see our May 23, 2008 letter on PacifiCorp, Dave Johnston Plant, Comments 2 and 3 as well as our June 19, 2007 letter for FMC, Westvaco Facility, Comment 1.b.). We have also indicated that an explanation should be provided in the BACT analysis for the level of control selected (please see our

letter on Dave Johnston Plant, Comment 1, as well as our March 30, 2007 letter for Jim Bridger Plant, Comment 1).

### III. PSD BACT Limits

The PSD permit for the Medicine Bow Fuel and Power Industrial Gasification and Liquefaction (IGL) plant must include BACT limits for each of the PSD pollutants emitted in significant amounts. The current draft permit does not include limits at all emitting units for each of the PSD pollutants that are projected to be emitted in significant amounts.

The requirement to conduct a BACT review and set BACT limits applies to all the units at a facility that will emit the PSD pollutants: 40 CFR 51.166(j)(2) (Chapter 6, Section 4(b)(ii)(A) of the Wyoming Ambient Air Quality Standards and Regulations (WAAQSR)) states that, "[a] new major stationary source shall apply best available control technology for each regulated NSR pollutant that it would have the potential to emit in significant amounts." This provision does not specify any emissions units that are exempt from the BACT requirement, and given the definitions of "building, structure facility, or installation," "stationary source," "major stationary source," and "best available control technology," in 40 CFR 51.166(b) (Chapter 6, Section 4(a) of the WAAQSR), it's clear that the BACT requirement applies to all units emitting pollutants that will be emitted in significant amounts by the facility as a whole. In the case of MBFP, this means BACT must be established for all units that will emit nitrogen oxides (NO<sub>x</sub>), carbon monoxide (CO), volatile organic compounds (VOC), and particulate matter/particulate matter less than ten microns (PM/PM<sub>10</sub>)<sup>1</sup>.

Furthermore, we have previously stated that the definition of BACT at 40 CFR 51.166(b) (and at WAAQSR Chapter 6, Section 4(a)) requires a numeric limit unless the measurement of the pollutant to be limited is not feasible. If a numeric limit cannot be created, there is still a requirement from the definition of BACT to utilize a design, equipment, work practice, operational standard, or combination thereof, to minimize emissions and satisfy the requirement for BACT. "Such standard shall...set forth the emissions reduction achievable by implementation of such design, equipment, work practice or operation, and shall provide for compliance by means which achieve equivalent results," (emphasis added). If the Division believes that measurement of a pollutant from any of the emitting units at the proposed source is not feasible, the reasons for such a conclusion should be provided. Otherwise, all units should have numerical BACT limits for CO, NO<sub>x</sub>, PM<sub>10</sub>, and VOC. We have commented to the Division in the

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<sup>1</sup> We also note that for major modifications, our regulations (and WAAQSR Chapter 6, Section 4(b)(ii)(B)) require BACT for "each proposed emissions unit at which a net emissions increase in the pollutant would occur." See 40 CFR 51.166(j)(3). There is no reason the BACT requirement would be less stringent at a new major stationary source than at a major modification. Given a baseline of zero (see 40 CFR 51.166(b)(47)(iii)), all emitting units at MBFP will have a net emissions increase; therefore, all must have BACT in the permit.

past about missing BACT limits – in our March 22, 2007 letter on Dry Fork, Comment 1 as well as our March 30, 2007 letter on Jim Bridger Plant, Comment 2.

### 1. Pollutants and Emitting Units that Need BACT Analysis

In order to set BACT limits, a BACT analysis must be completed. The Division's Application Analysis does not include a BACT determination for the pollutants and emitting units as indicated in the following table:

Table 1 – Presence of a BACT Analysis (YES/NO or N.A.)

| Emitting Unit      | NO <sub>x</sub> BACT Analysis Included in Application Analysis | CO BACT Analysis Included in Application Analysis | VOC BACT Analysis Included in Application Analysis | PM/PM <sub>10</sub> BACT Included in Application Analysis |
|--------------------|--|---|--|---|
| FL-1               | NO   | NO  | NO   | NO  |
| FL-2               | NO   | NO  | NO   | NO  |
| GP-1               | YES  | YES   | YES  | NO  |
| GP-2               | YES  | YES   | YES  | NO  |
| GP-3               | YES  | YES   | YES  | NO  |
| GP-4               | YES  | YES   | YES  | NO  |
| GP-5               | YES  | YES   | YES  | NO  |
| Gen-1              | YES  | YES   | YES  | NO  |
| Gen-2              | YES  | YES   | YES  | NO  |
| Gen-3              | YES  | YES   | YES  | NO  |
| FW-Pump            | YES  | YES   | NO   | NO  |
| CO <sub>2</sub> VS | N.A.   | NO  | NO   | N.A.  |

To correct this deficiency, the Division must revise the Application Analysis to include: a NO<sub>x</sub> BACT determination for FL-1, FL-2; a CO BACT determination for FL-1, FL-2, and the CO<sub>2</sub> VS; a VOC BACT determination for FL-1, FL-2, FW-Pump, and the CO<sub>2</sub> VS; and a PM/PM<sub>10</sub> BACT determination for FL-1, FL-2, GP-1 through 5, Gen-1 through 3, and the FW-Pump.

The PM/PM<sub>10</sub> BACT analysis on page 21 of the Division's analysis lists a BACT determination for the "Auxiliary Boiler and Process Heaters," but does not have the section that the BACT determinations for other pollutants contain titled, "Startup Units (Gasifier Preheaters and Black Start Generators) and Emergency Unit (Fire Water Pump Engine)." The discussion for PM/PM<sub>10</sub> BACT on page 21 does not specify which units were considered in the "Process Heaters" section. Absent such information, it appears that the gasifier preheaters, the startup generators, and the fire water pump were not included in the PM BACT process.

Flares FL-1 and FL-2 are used to control the release of volatile gasses. FL-1 (the high pressure flare) has been designed to accept total syngas flow from the gasifiers in the event that they must be isolated from the downstream units. FL-2 has been designed

to accept smaller flare loads such as the methanol to gasoline stripper vent emergency releases. The BACT analysis needs to address the control that the flares will provide for VOC and CO and the Division needs to include parameters in the permit to assure that the control efficiency will be maintained (i.e. stipulate a minimum control efficiency and provide for measures to test or calculate actual control efficiency once the unit is in operation.)

In addition to minimum control (destruction) efficiency requirements, the Division should analyze the possibility of including operating hour limitations on the flares. A phone call with the Division revealed that the Division believes that the hours of expected operation listed in the permit application would be sufficient to limit the use of the flares (and the CO<sub>2</sub> vent stack). Such operating hour limits should be included as enforceable conditions in the permit (and not just the permit application) to satisfy BACT requirements.

All units at the proposed IGL facility that have the potential to emit a PSD pollutant subject to BACT at the facility must undergo the BACT process for each such pollutant, and the permit must include a BACT limit for each pollutant at each emitting unit. Each BACT limit should specify the averaging period for compliance demonstration.

## 2. Emitting Units that Need BACT Limits

VOC BACT limits must be created in the permit for the units listed in Condition 14 on page 74 (units AB, B-1, B-2, B-3, GP-1, GP-2, GP-3, GP-4, GP-5) as well as for the fire water pump engine listed in Condition 17 on page 75.

PM/PM<sub>10</sub> BACT limits must be created for the units listed in Conditions 14, 16, and 17 on pages 74 and 75. These units include AB, B-1, B-2, B-3, GP-1, GP-2, GP-3, GP-4, GP-5, Gen-1, Gen-2, Gen-3, and FW-Pump.

There are currently no limits for FL-1, FL-2, and the CO<sub>2</sub> VS. BACT limits for these units must be set for each pollutant (NO<sub>x</sub>, CO, VOC, and PM/PM<sub>10</sub>, SO<sub>2</sub>) that the emitting units have the potential to emit. We realize that the potential for the CO<sub>2</sub> VS to emit NO<sub>x</sub> and PM/PM<sub>10</sub> is low.

In addition to unit specific BACT limits, we suggest including a general condition that would require MBFP to operate in a manner that would minimize emissions. Such language could be, "the owner/operator shall operate and maintain the facility in a manner consistent with good air pollution control practices for minimizing emissions."

## IV. BACT Compliance Demonstration

In addition to establishing BACT emission limitations for NO<sub>x</sub>, CO, VOC, and PM<sub>10</sub> at each emitting unit, there must be a demonstration of initial compliance and of

continual compliance for each BACT limit at each unit. To ensure continual compliance, an initial compliance test should be required, followed by periodic testing/monitoring.

### 1. Initial Compliance Demonstration

The draft permit does not currently have an initial compliance test at each emitting unit for the PSD pollutants emitted in significant levels. Provisions for initial testing should be added to the PSD permit for the units and pollutants listed in the following table:

**Table 2 – Emission Units Lacking Initial Compliance Testing**

| Unit ID            | Pollutants Needing the Creation of Initial Compliance Provisions |
|--------------------|--|
| AB                 | VOC, PM/PM <sub>10</sub> , Opacity, SO <sub>2</sub>              |
| B-1 through 3      | VOC, PM/PM <sub>10</sub> , Opacity, SO <sub>2</sub>              |
| GP-1 through 5     | VOC, PM/PM <sub>10</sub> , Opacity, SO <sub>2</sub>              |
| Gen-1 through 3    | PM/PM <sub>10</sub> , Opacity, SO <sub>2</sub>                   |
| FW-Pump            | VOC, PM/PM <sub>10</sub> , Opacity, SO <sub>2</sub>              |
| FL-1, FL-2         | CO, VOC, PM/PM <sub>10</sub> , Opacity, SO <sub>2</sub>          |
| CO <sub>2</sub> VS | CO, VOC, SO <sub>2</sub>   |

### 2. Continual Compliance Demonstration

In addition to initial compliance testing, the PSD permit must include conditions that ensure that, as the proposed source operates, the PSD BACT limits for NO<sub>x</sub>, CO, VOC, PM<sub>10</sub>, and SO<sub>2</sub>, as well as the opacity limits, are not violated. The proposed conditions do not include any provisions for testing of VOC, PM<sub>10</sub>, SO<sub>2</sub>, or opacity emissions at any of the units other than the initial compliance tests required in Condition 9 of the draft permit. Conditions 11 and 19 stipulate opacity limits as determined by Method 9; however, there are no requirements to complete Method 9 testing.

Without some sort of periodic testing or monitoring, there is no assurance that emitting units will not exceed permit limits after the initial compliance test. To ensure ongoing compliance, periodic testing and monitoring requirements must be added for VOC, PM<sub>10</sub>, SO<sub>2</sub>, and opacity at all units. In addition, flares FL-1 and FL-2 will need conditions providing for continual compliance demonstrations.

### V. Current VOC BACT Limit

The proposed VOC BACT limit for the turbines in Condition 10, on page 72, needs a 30-day or shorter averaging period. In past letters to your office we have outlined this policy in great detail (please see our March 3, 2007 letter on Dry Fork Plant, Comment 7). There is currently no requirement for testing other than an initial compliance test, which would imply an averaging period consistent with the initial test



method. If it is the Division's intent to impose a limit of 1.4 ppm<sub>v</sub> @ 15% O<sub>2</sub> with a 3-hour average, this should be clearly stated in the emission limit table for the combustion turbines.

#### VI. Combustion Units' PM/PM<sub>10</sub> BACT Analysis

The BACT analysis for PM/PM<sub>10</sub> should provide information indicating how effective current filtration options are, and compare that data with the estimated grain loading from the combustion turbines. We feel that it is necessary to provide more information supporting the decision to not require PM control. One such option that was not addressed would be the combination of an Agglomerator (to increase the average particulate size) with a conventional PM control option.

Although the turbines will combust a gaseous fuel that the Division feels has a low potential for PM generation, PM is projected to be emitted in significant amounts and page 65 of the Division's modeling analysis assumes that ¼ of the PM will be filterable. The fuel that will be combusted by the turbines will vary due to site conditions and remaining catalyst life therefore the possibility for fluctuations in the emission rate of PM is greater than for sources burning only pipeline quality natural gas. To ensure that the proposed facility will adequately meet the requirement to apply PM BACT to all emitting units, more information should be provided regarding current filtration capabilities and the capabilities of agglomeration technology in conjunction with filtration technology.

#### VII. Coal Conveyor PM/PM<sub>10</sub> BACT Analysis

The Division's analysis only indicates that the conveyors will be "enclosed" (pages 3, 5). The Division's analysis should indicate whether this means fully enclosed. Currently there is a discrepancy between the Division's Application Analysis and the June 4, 2008 revised application submitted by MBFP. The discrepancy revolves around a revision in the application, which states that "some conveyors will be ¾ covered, rather than fully enclosed." Page B-29(1) of the April 23, 2008 revision to the application states that East Portal Conveyors C6 through C10 will have three-quarter cover, rather than being completely enclosed. We ask that this discrepancy be clarified.

Regardless of the discrepancy, the BACT process requires that the Division analyze whether fully enclosing the conveyors would represent BACT. We note that fully enclosed conveyors would require less water, and would not be affected by high wind events. In a phone call with the Division it has come to our attention that other mines in Wyoming have ¾ covered conveyors and that the Division feels this is sufficient. However, the Division must analyze full enclosure of the conveyors per the relevant BACT factors and determine whether full enclosure represents BACT (please see our Comment II., above regarding the complete BACT process necessary to validate BACT determinations).

### VIII. Soils and Vegetation Analysis

The statement that, "the commercial productivity of the lands around the immediate Medicine Bow area is very low, and soils in the region generally do not have significant commercial or recreational value," is subjective without supporting information (Division Application Analysis, page 54). 40 CFR 51.166 and Chapter 6, Section 4 of the WAAQS state that "the owner or operator need not provide an analysis of the impact on vegetation having no significant commercial or recreational value." Although an analysis of impacts to low commercial and recreational value vegetation may not necessarily be required, it is necessary to provide supporting information that confirms that such vegetation is of low quality.

Although an exemption exists for the impact analysis to vegetation, no such exemption is provided for the analysis of impacts to soils. To support the Division's conclusions regarding the soil quality, supporting information should be provided in the analysis. Such information could include, but is not limited to, baseline soil composition, current concentrations of pollutants in the soil that may increase during the operational life of the IGL plant, etc.

The Division's conclusion that the soils "in the region generally do not have significant ...recreational value," is not accurate with respect to the Elk Mountain, Medicine Bow Forest and Savage Run Class I area. The plant is approximately 12 miles from these recreational areas, which should be within the envelope of the soil and vegetation analysis.

Today many people utilize the Medicine Bow area for outdoor activities including hiking, camping, fishing, and hunting. It is necessary to ensure that the soil and vegetation of the area will be adequately protected from significant deterioration. To achieve this, the analysis must depict the soil and vegetation baselines and project whether the IGL plant could pose a threat of significant deterioration.

### IX. Modeling

#### 1. NAAQS/WAAQS Analysis

During certain periods of operation the air dispersion modeling shows that emissions of CO, SO<sub>2</sub>, and PM/PM<sub>10</sub> range from 80% to 98% of the National Ambient Air Quality Standards (NAAQS)/Wyoming Ambient Air Quality Standards (WAAQS).

The total maximum predicted annual PM<sub>10</sub> impacts are just over 80% of the standard along the southwest portion of the ambient boundary of the plant. For CO impacts, the highest second-high (HSH) concentration was added to the background concentration. The projected 1-hr CO impact is 98% of the standard and occurs approximately 1.5 km southeast of the plant. For SO<sub>2</sub>, HSH values were added to the background concentration as well. The HSH concentration for 3-hour SO<sub>2</sub> impacts is 89% of the standard and occurs 3.5 km northwest of the plant. The HSH concentration

for 24-hour SO<sub>2</sub> impacts is approximately 94% of the standard and occurs 4 km east of the plant boundary.

Actual emissions and ambient concentrations may be lower or higher than the modeled concentrations, which could mean that concentrations could be even closer to the NAAQS/WAAQS. In light of the fact that projections are so close to the NAAQS/WAAQS, a more thorough analysis of modeling parameters and sources included in the model may be warranted.

## 2. Background Source Selection

The application and supporting documentation should provide an explanation of how nearby sources were selected for modeling cumulative NAAQS/WAAQS and PSD increment consumption. Table 6.3 in the Air Quality Permit Application shows the nearby sources (defined as < 35 km) modeled, but does not provide a basis for their selection or define whether they were modeled for NAAQS/WAAQS purposes or PSD increment. Also, the sources are only listed by number in Table 6.3. There should be a legend that allows the reader to correlate the number with the actual name of the modeled source.

For the NAAQS/WAAQS analysis, nearby sources that cause a "significant concentration gradient" should be modeled explicitly as discussed in the EPA Modeling Guideline (40 CFR Part 51, Appendix W). In general, for PSD Class II increment consumption, major non-project related increment consuming (and increment expanding) sources within the significant impact area of the source plus 50 km should be modeled for increment consumption.

## 3. Short-term SO<sub>2</sub>

Table 6.1 shows the maximum combined modeled short term emission rate for all sources that are included in the analysis. The SO<sub>2</sub> emission rate shown in the table is 1400.80 g/sec, (approximately 48, 000 tpy on an annual basis) while the long term emission rate for the proposed source is only about 256.69 tpy (see table 3.5 of the application). Given this very large difference between modeled short and long-term term emission rate for SO<sub>2</sub>, it is unclear why there is such a small difference in concentration between predicted short and long term modeled concentrations shown in tables 6.10 and 6.11 of the application. An additional discussion is needed to clarify the basis for the emissions that were actually modeled in the NAAQS/WAAQS and PSD Class II increment analysis.

Additionally, predicted short-term SO<sub>2</sub> values in table 6.2 of the application should be checked to ensure they are from the latest version of the modeling, as some values do not seem to be present in the AERMOD \*.LST files.

#### 4. Inclusion of SO<sub>2</sub> Emissions from Flares in Increment Modeling

Flare SO<sub>2</sub> emissions should be included in PSD increment modeling. The HP flare (Source ID Z8901) and LP flare (Source ID Z8902) were not included in SO<sub>2</sub> increment modeling only because they are not part of routine operation (according to the Division's analysis), presumably because the emissions modeled for the NAAQS/WAAQS represent "large malfunction events" (application, page 3-9). If the emissions are relevant for the NAAQS/WAAQS (which we feel they are), then they should also be included for the increment analysis.

#### 5. Haul Road Fugitive Dust

Haul road PM<sub>10</sub> emissions should be included in short-term PM<sub>10</sub> NAAQS/WAAQS and increment modeling. These are fugitive emissions, and so do not count toward the source's PTE, but they nevertheless are source emissions that affect the PM<sub>10</sub> NAAQS/WAAQS and increment. A note below table 6.5 on page 6-8 of the permit application indicates that the, "Haul road PM<sub>10</sub> emissions are fugitives, and per WDEQ policy, are not included in short-term (24-hr) modeling analyses." We ask that the Division explain this policy. We are unaware why fugitive dust from haul roads should not be included in the NAAQS/WAAQS and increment analysis.

#### 6. Mine Receptors

Model receptors should be included around mining areas if they are ambient air. As illustrated in Figure 6.3 on page 6-9 of the application, the set of receptors used for annual PM<sub>10</sub> modeling excludes ovals surrounding Surface Mine Area 2 (Saddleback Hills Mine) and the South Portal Area (Elk Mountain Mine). These locations appear to be in ambient air to which the public has access, and therefore should be included in the modeling.

#### X. Case By Case MACT

In the event that the requirement to complete case-by-case MACT determinations applies to this source, under section 112 of the Clean Air Act, the determinations must be completed before the commencement of any construction at the proposed site. We note that the Division's analysis states that the limits from 40 CFR 63, subpart YYYY have been stayed. Careful consideration should be given to determine the necessity to complete any case by case MACT determinations for the proposed facility.

#### XI. Startup/Shutdown Emission Minimization Plan

The introductory paragraph to the Startup/Shutdown Emission Minimization Plan indicates that this may not be a requirement. The introductory paragraph states that the goal of the plan is to provide "guidelines and suggestions." Additionally, the Plan may be amended without public comment (Division's Application Analysis, page 75, Condition 20). If the Plan is a meaningful tool, it should provide requirements rather

than suggestions. Also, the public should be afforded the opportunity to comment on any revisions to the plan to assess the ability of such a plan to protect their health and welfare. See In re Rockgen Energy Center, 8 E.A.D. 536, at 554 n. 22 (EAB, 1999).

## XII. Clarity

### **1. Engine Requirements**

Conditions 9.v., and vi., specify that the Black Start Generators will comply with 40 CFR 60, subpart JJJJ and that the fire water pump engine shall comply with 40 CFR 60, subpart IIII. In general, subpart level citations may be so general as to be confusing. We recommend further clarification as to what applicable requirements in subparts JJJJ and IIII apply to these engines.

These New Source Performance Standards (NSPS) classify an engine in order to create groups of engines with similar requirements. To help clarify what parts of the rules may apply to these engines, we suggest including in these conditions the information necessary to determine which category the Black Start Generators and fire water pump engine will fall into. Such information would include the model year of the engine, the date the engine was ordered/manufactured, the power rating of the engine, the displacement of one cylinder (in liters), and any certification the engine may have and, if certified, whether the engine will operate as a certified engine or be a certified engine operating as an uncertified engine (which will affect compliance options). Compliance with Condition 9.v., and vi., would be achieved with greater ease if the condition included information necessary to determine the compliance path in the two NSPS rules for reciprocating internal combustion engines (RICE).

### **2. Typo – Reference to Compliance Condition**

There seems to be a typo in Condition 32 on page 76 of the Application Analysis. Currently the Condition requires that performance tests be conducted to determine “compliance with Condition 29(a).” There is no Condition 29(a). We believe that this reference should probably be to Condition 33(a), which requires that the PECS and atomizer/fogger systems be operated and maintained to exhibit no visible emissions.

### **3. Typo – Startup/Shutdown Minimization Plan**

There appears to be an inadvertent typographical error in the Startup/Shutdown Emission Minimization Plan in Appendix B of the Division’s analysis. The third, and last, bullet in the “Gasifier heaters” section (page 3 of 4) states that, “...the heaters will be turned off and removed.” We believe that the Division means that the heaters will be “removed from service,” rather than removed from the IGL plant.