MEMORANDUM

To: Alton Coal Development LLC Source File

Through: Marty Gray, New Source Review Section Manager, UDAQ

From: Jon L. Black, Engineer, New Source Review Section, UDAQ

Date: November 10, 2010

Subject: Response to Public Comments

An Approval Order (AO) for Alton Coal Development (ACD) was proposed with a public comment period from September 14 thru October 14, 2010. In addition, a public hearing was held on October 6, 2010 due to a request for hearing. The hearing was held at 6:00 P.M. on Wednesday October 6, 2010 in the Panguitch High School Auditorium in Panguitch, Utah. The public comment period was extended to October 21, 2010 which was beyond the normal 30 days to accommodate requests made in the hearing for more time to review the proposed permit action. Each comment received was considered and evaluated before final issuance of the AO.

The comments received, both written and those made orally at the hearing are identified below along with DAQ’s response to the comment. Please note that the Hearing facilitators set up recording equipment for the purpose of documenting the hearing procedure. The first portion of the hearing, the project introduction and question and answer period was recorded and documented. During the course of oral comments the recording equipment malfunctioned and did not record all commenter’s statements. However, a record of the hearing is provided by DAQ officials’ written notes. All statements/comments were captured. The notes were used for the file record and official comment response.

Oral Comments

There were a total of 92 people at the hearing, including DAQ staff (an attendance list is attached to this memo). During an informal discussion, many people asked various questions concerning the project, which were answered by DAQ officials. Eleven people offered official comment on the permit.

1) Three Persons Commented on Compliance with the Proposed Permit:

The commenters stated that they were very concerned that compliance visits would not be on a regular basis. Commenters requested the DAQ provide strong enforcement and compliance with the permit and did not think that spot checks were adequate. Statements were made that compliance determinations should never be left up to ACD as that is like “giving the fox the key to the hen house.” It was also asked what actions the DAQ takes if violations occur.

DAQ Response – Section 19-2-107 of the Utah Air Conservation Act and Section I.5 of the AO provide for DAQ inspectors to conduct unannounced inspections at the ACD site. These inspections, as stated, are not scheduled and ACD will receive no prior notification of the inspection prior to the visit. The compliance inspections will be performed as necessary based upon source performance and compliance history. DAQ inspectors will determine compliance with the permit conditions by reviewing on-site
recordkeeping and monitoring data. While conditions of the permit do require recordkeeping by ACD, these documents are reviewed and evaluated to authenticate records presented. The fugitive emissions and opacity limitations are determined by the DAQ inspector(s) themselves while on-site. Therefore, there should be no issue with false or inaccurate data. In addition, ACD will be required to file regular reports with DAQ to demonstrate compliance with the AO.

2) Four Persons Commented on PM$_{10}$ Monitoring:

Comments regarding PM$_{10}$ monitoring requested monitoring data be gathered prior to the project startup. Commenters wanted to be able to look at monitoring data before and after the mining had commenced. A request to have one monitor placed downwind of the predominant wind direction and one monitor to be placed several miles away to get the best comparison of on and off property impacts was made.

DAQ Response – Currently there is no PM$_{10}$ monitoring data available for the ACD location near the town of Alton. Background PM$_{10}$ monitoring data for modeling purposes was obtained from a monitor near Sigurd. Kane County is an attainment area for all criteria pollutants including PM$_{10}$. This means that National Ambient Air Quality Standards (NAAQS) for PM$_{10}$ are being met. Noting this fact, it is not necessary to impose a requirement for monitoring data to be gathered prior to the mining operation commencing.

ACD will place two PM$_{10}$ monitors in the area of the surface mine. The placement of the first PM$_{10}$ monitor was determined through modeling and will be positioned on-site in the area most impacted by the potential emissions from the mining process. This monitor is located in the predominant wind direction. This data will serve in demonstrating what the actual impacts are due to PM$_{10}$ emissions, and will be used to determine compliance with the NAAQS, thus protecting human health. The placement of the second monitor will be off property but located in the vicinity of the mine, and will be used to gather ambient background data and to compare to on-site air sampling data.

3) Two Persons Commented on Coal Truck Issues:

The commenters stated that coal trucks were not going to be able to negotiate the turn at the intersection of U.S. Hwy 89 and Center Street in Panguitch. The coal trucks would have to make wider turns causing them to exceed their lane boundaries. It was also stated that the coal haul trucks should be required to cover their loads.

DAQ Response - Coal haul trucks traveling on Utah State highways are under the jurisdiction of the Utah Highway Patrol. The DAQ may only act within the boundaries of its regulatory authority and therefore does not have authority to place restrictions upon a companies haul trucks once they have left the designated permit property boundary. The DAQ recommends that these comments be addressed with local city and county officials.

4) Two Persons commented a need for Extension of the Public Comment Period:
The commenters requested additional time to access and review the NOI information. This would allow for a better understanding of the mining process and provide for more informed comments.

DAQ Response - DAQ granted an extension of the public comment period for one additional week. The original comment period was scheduled to end on October 14, 2010. That was extended through October 21, 2010. Notification of the extended public comment period was published in the Southern Utah News and the Garfield County Insider.

5) Two Persons Commented on effects of Magnesium Chloride and Calcium Chloride on the local Vegetation:

Commenters wanted to know what type of impacts that magnesium chloride and calcium chloride would have on the vegetation in the area.

DAQ Response – In order to limit fugitive dust generation from the haul roads it is typical to apply a dust palliative or control agent. The proposed dust control agents are magnesium chloride or calcium chloride. These agents have been used for many years to control dust and have the side benefit of stabilizing the road surface, resulting in reduced loss of gravel from the road surface and lower maintenance requirements. Magnesium chloride comes in brine form so mixing is not required. The typical application rate of magnesium chloride is 0.25 gallon per square yard.

These two agents do have the disadvantage of being slightly harmful to many plants if applied excessively to the road surfaces. Therefore application must be applied appropriately, typically once or twice a season. The ACD AO Condition II.B.3.c requires two applications of a dust suppressant if the criterion of this Condition is met. Therefore, the permit does not require excessive use of the dust suppressant and should not affect the vegetation in the vicinity of the roadway.

6) One Person Commented that a Noise Study Needed to be Completed for Trucks Traveling through Panguitch:

Commenter stated that an acoustic or noise study needed to be performed to determine what the noise levels were in Panguitch from the coal haul trucks traveling down main street.

DAQ Response – Noise is considered a nuisance issue, which the DAQ has no authority to regulate. Therefore, it is recommended that this issue be addressed with the local city government or planning and zoning commission who can better address nuisance ordinances.

7) One Person Commented that ACD Must Use Low Sulfur Fuels in their Equipment:

Commenter requested a requirement for ACD to only use low sulfur fuels in their equipment that will operate on the mine site.

DAQ Response – The AO for ACD does require the use of low sulfur fuels. AO Condition II.B.5.b states: “The sulfur content of any fuel oil or diesel burned in the on-site equipment shall not exceed 0.05 percent by weight.” Therefore this comment has been addressed.
8) **One Person Stated a Need to Comply with State and Federal Regulations:**

Commenter stated due to the fact this is the first strip coal mine in Utah, all State and Federal Regulations must be complied with. The DAQ should be very concerned with moving forward with this project.

**DAQ Response** - The AO has conditions that are enforceable for all applicable State and Federal Regulations. Unannounced compliance inspections will take place on a periodic basis and records of production, water/chemical applications for dust control, opacity limitations, equipment specifications and monitoring data collection will all be verified. These inspections will verify compliance with all State and Federal Regulations at the time of each inspection.

9) **One Person Requested a need for Transparency of the Permit and Website Access:**

It was suggested that there needed to be transparency in the process of permitting and compliance. Commenter wanted to have a link on our website to access compliance reports and air monitoring data being collected at the ACD location.

**DAQ Response** – The AO process is open and transparent and is governed by R307-401 which includes a public comment period. The DAQ is developing an Alton Coal Development website that will be accessible to the general public. This website is not required but will be established as a public service to make compliance and monitoring data available to the public as it is collected. This will assist in the transparency process of this AO.

10) **Five Persons Commented on their Approval of the Alton Coal Development Project:**

These commenters all stated a need for the ACD project. It was recorded that jobs were desperately needed in this area and the employment would be welcome. One commenter has experience working with air monitoring equipment and air quality and supports DAQ’s evaluation of the project.

**DAQ Response** - These comments do not pertain to or directly affect the permit conditions as presented and are therefore noted for the record. They do not require a response from DAQ.

This concludes the oral comments portion of the public hearing. The remaining comments were comments which were submitted to the DAQ in written form.
Written Comments

There were 701 e-mail and written comments received regarding the ACD project. The comments submitted are addressed below followed by DAQ’s response to the comment. The comments have been categorized due to the fact that most of the comments dealt with the same issues. A copy of each e-mail and written comment is attached to this memo in electronic format due to the volume of comments received.

11) Written Comments Received on Fugitive Dust:

Fugitive dust was a major concern to most e-mail and written commenters. Persons commenting were concerned with fugitive dust affecting Bryce Canyon and the other nearby national parks. In addition, questions were raised about what is being done about PM$_{2.5}$ emissions. A final statement was made asking what DAQ is doing about the PM$_{10}$ or PM$_{2.5}$ emissions, which would be picked up by the wind currents and be delivered to outlying areas.

DAQ Response – Fugitive dust is associated with the on-site activities of earth moving, coal excavation, crushing and processing. Fugitive dust is primarily made up of Total Suspended Particulates (TSP) and Respirable Particulates (PM$_{10}$ - Particulate Matter with a particle size less than 10 microns and PM$_{2.5}$ – Particulate Matter with a particle size less than 2.5 microns). The fugitive dust, which can be seen or is deposited in the form of visible dirt or sand particles, is considered a total suspended particulate. This particle is no longer regulated by either the Environmental Protection Agency or by the Utah Division of Air Quality. These particles with typical aerodynamic diameters of 40 microns or larger do not pose the health hazards associated with smaller-size particles. In order to control fugitive dust associated with PM$_{10}$ and PM$_{2.5}$, Best Available Control Technology (BACT) and fugitive dust control strategies have been implemented. For the ACD project, requirements (Condition II.B.1.c and e) to control fugitive dust are as follows:

All crushers will have water sprays installed which shall be used to meet the State recommended BACT limitation of 15% opacity.

All conveyor transfer points will meet the State recommended BACT limitation of 10% opacity. Water sprays may need to be installed to ensure that this limitation is not exceeded.

All conveyor drop points will meet the 20% opacity limitation required by the State recommended BACT analysis. Additional control of water sprays installed on the drop points of the conveyors and lowering the drop distance will be required if opacity exceeds 20%.

All haul roads unpaved/paved must meet the required 20% opacity limitation. The State BACT analysis determined that watering was necessary to reducing fugitive dust emissions at this location. Other control requirements are watering along with chemical dust suppression methods to further reduce fugitive emissions from vehicle travel (Condition II.B.3.c and d).
A fugitive dust control plan (FDCP) is also required (Condition II.B.1.i) for the Alton Coal operation. This plan has been submitted and approved. The FDCP states what types of fugitive dust control will occur when observations of excessive fugitive dust are observed. This plan is a staged approach that when fugitive dust is observed, each area of production will either increase emission control strategies by increasing water application, reduction or cutting back production, or ceasing operation until such time as fugitive dust emissions can be controlled once again and observations do not exceed the permit limitation of 20% opacity.

All other fugitive dust activities are covered by R307-205 (Emission Standards: Fugitive Emissions and Fugitive Dust. This regulation covers a wide variety of fugitive dust activities at a mining location.

Fugitive dust is controlled by the above stated methods at this mine location. Water sprays are primarily the best control method along with visual opacity readings for the ACD mine site. Awareness is the key to controlling fugitive dust and ACD will be held to their permit requirements for controlling fugitive dust.

Bryce Canyon, nearby national parks and other outlying areas will not be affected by the emission of fugitive dust. PM$_{10}$ and PM$_{2.5}$ modeling was required for this source because the proposed emissions exceeded the emission increase limitation for fugitive emissions and fugitive dust of State rule R307-410-4 (Modeling of Criteria Pollutant Impacts in Attainment Areas). The PM$_{10}$ and PM$_{2.5}$ emissions were modeled to determine impacts on/off property. The model concluded that National Ambient Air Quality Standards (NAAQS) for annual and 24 hour impacts from PM$_{10}$ and PM$_{2.5}$ would not be exceeded due to the operation of this mine. In addition, because the emissions are primarily fugitive, maximum predicted impacts occurred at or near the property boundary, and dropped off promptly beyond the boundary. Since the computer model inputs use all local conditions including temperature, wind directions, wind speeds, elevations and background emissions concentrations, all facets of the area were included in this model. Therefore, the predicted emissions concentrations took into account any emissions which would be picked up or transported off property by local wind conditions. The concentrations all passed the established NAAQS levels.

12) **Written comments received regarding monitoring of PM$_{2.5}$ emissions at the site:**

Several comments were made that the plan (AO) does not provide monitoring of PM$_{2.5}$ emissions at the site and that monitoring of PM$_{2.5}$ should take place along with PM$_{10}$ monitoring.

**DAQ Response** - The emission of PM$_{2.5}$ was evaluated and the modeled impacts from the potential 10.48 tons of PM$_{2.5}$ determined that no violation of the NAAQS would occur (NAAQS for PM$_{2.5}$ is 35 µg/m$^3$). Therefore, due to a minimal impact established by the modeling demonstration, there is no need to monitor the potential PM$_{2.5}$ emissions generated from this project. This is also addressed above in DAQ response to Comment #11.

13) **Written comment received regarding ACD not having to comply with 40 CFR Part 60, Subpart Y:**
Comment received stated that ACD will process more than 200 tons per day and because New Source Review is allowing this permit it negates the need for compliance with Subpart Y.

DAQ Response – The ACD process will produce more than 200 tons per day as stated. This does not negate the fact that 40 CFR 60 Subpart Y (Standards of Performance for Coal Preparation Plants) applies to this operation at all times. All applicable sections of Subpart Y are required by the AO (Condition 2.B.1.g) and compliance with this subpart will be evaluated during compliance inspections. Subpart Y is also noted as a requirement in Section III: Applicable Federal Requirements of the AO.

14) Written comments received requesting a designated number of inspections for compliance determinations:

The comments requested that a specific number of inspections be set with a frequency sufficient to provide a strong incentive for ACD to consistently meet the requirements of the State issued AO.

DAQ Response - See response to oral comment #1 above.

15) Written comments request public access to monitoring data via the internet:

The comments received stated that access is needed for the public to view the submitted PM$_{10}$ air monitoring data along with compliance information. It was requested that this data be available to the public through the DAQ website.

DAQ Response - See response to oral comment #9 above.

16) Written comments regarding the effects of haul truck traffic on state highways and the local community of Panguitch:

All comments received from this category were very concerned with the number of vehicle trips that were going to travel through the town of Panguitch. Concerns of emissions due to brake wear, coal falling off of the trucks, and combustion emissions were expressed. It was also stated that due to the existing condition of the current road ways, Highway 89 and Highway 20, would be further deteriorated, steep grades and switchbacks with loaded trucks traveling at very low speeds would cause excessive truck stack up and decont off of these steep grades would cause run away truck situations which will lead to fatal crashes. One additional comment stated a need for installation of air monitors along the route of the coal haul trucks as required by the Clean Air Act Section 108(f) (iv) (vii) (xi) and (xii).

DAQ Response: The DAQ recognizes that truck traffic on these roadways will increase. Currently the DAQ has no authority to regulate the situations stated above. These issues should be addressed through local government and the Utah Department of Transportation (UDOT).

The emissions generated by the combustion of diesel fuel in the haul trucks are currently evaluated by the Mobile Source and Transportation Section of DAQ. This Section also works closely with Utah Department of Transportation (UDOT) and regional metropolitan planning organizations in transportation planning and air quality modeling.
Lastly, the Clean Air Act Section 108 (f) deals with the formulation and emission reduction potential of transportation control measures related to criteria pollutants and their precursors, including trip-reduction ordinances; programs to limit or restrict vehicle use in downtown areas; programs to control extended idling of vehicles; and programs to reduce motor vehicle emissions which are caused by extreme cold start conditions. Review and analysis of these topics has been addressed through the DAQ Mobile Source and Transportation Section and addressed in the State Implementation Plan. Because there are no current recognized impacts in this area, the DAQ cannot justify the implementation of a monitoring network along Highway 89 and Highway 20. The DAQ would find it necessary to show an impact on the local area in order to develop an air monitoring system for analysis of vehicle emissions on Highway 89 and Highway 20.

17) Written comment regarding Notice of Intent (NOI) information:

A comment stated that inadequate information was provided in the NOI leaving out the elevation of the mine.

DAQ Response: The elevation of the mine was included in the modeling section of the NOI (Air Quality Modeling Report, Table 2). All emission sources, which were included in the modeling analysis use elevation as part of the model parameters. Therefore, this requirement was satisfied in the NOI submittal.

18) Written comment regarding Improper Meteorological Data used in model:

Comment states that the Cedar City meteorological data used was inappropriate and a closer location, Bryce Canyon Airport data, should have been used. Request made to rerun the model with Bryce Canyon Airport data.

DAQ Response - The air dispersion modeling analysis was performed according to an air modeling protocol submitted by ACD on November 7, 2008 and subsequently approved by the Utah Department of Air Quality (DAQ). This protocol proposed the use of the 1987 through 1991 meteorological dataset. While these data are older, consideration of a five-year block of time is recommended to adequately address the variability in air dispersion model estimates due to meteorological data input (GAQM, 2005). While use of the most recent complete dataset is preferred, it is not recommended (GAQM, 2005). The model-ready meteorological data file was assembled from surface data collected at National Weather Service station 93129 (Cedar City) and upper air information collected at station 3160 and as indicated in JBR Environmental’s memorandum Compliance Demonstration – Alternative Model Selection (ISCST3), on June 1, 2010, provided to DAQ on ACD’s behalf, for use in the air modeling analysis. Use of the 1987 through 1991 dataset allows DAQ staff to directly compare the air modeling results obtained for ACD to the results obtained for other facilities in the vicinity modeled with the same data. Given the length of time covered by the data, the sources of the raw meteorological data, and the location of ACD, the meteorological files are appropriate for the air dispersion modeling analysis.
19) Written comment regarding failure to use the AERMOD model:

Comment states that AERMOD is DAQ’s preferred model and is more refined than ISCST3. Request is made to run the AERMOD model with Bryce Canyon Airport data to analyze the emission dispersion from the Coal Hollow Mine.

DAQ Response – Use of ISCST3 was proposed in the air modeling protocol submitted by ACD on November 7, 2008 and subsequently approved by DAQ. This protocol was approved before the DAQ Air Quality Modeling Guidelines were revised to identify AERMOD as a preferred air dispersion model in 2008. Further, Section 3.2, Use of Alternative Models, of the Guideline on Air Quality Models allows users to employ an alternative model to the preferred model if an appropriate demonstration of the suitability of the alternative model is provided (GAQM, 005). ACD submitted such a demonstration to DAQ in Compliance Demonstration – Alternative Model Selection (ISCST3), on June 1, 2010. DAQ subjected the Compliance Demonstration to a technical review and found it acceptable if specific concerns identified in the review were adequately addressed. DAQ identified the following concerns in a letter dated August 9, 2010:

1) A reference section should be added to the Compliance Demonstration and the studies, analyses, and scientific journal articles mentioned in the text cited by title and referenced appropriately; and

2) The text should be revised to include a comparison of the performance of ISCST3 to that of AERMOD.

ACD submitted a revised alternative model justification on August 11, 2010 which addressed the concerns above and provided DAQ documentation to allow for the acceptance of the ISCST3 modeling data submitted for this project.

20) Written comment regarding the failure to do a Cumulative Impact Analysis:

Comment states that the NOI does not conform with DAQ’s modeling guidelines as it lacks a cumulative impacts analysis. Request is made for DAQ to perform a cumulative impacts analysis before issuance of the AO.

DAQ Response: In accordance with the ‘Utah DAQ Modeling Guidelines’ (Revised December 17, 2008), the modeled compliance analysis submitted in the NOI represents a Cumulative Impact Analysis. Comparisons with the Significant Impact levels were not included in the NOI or associated modeling report because a Cumulative Impact Analysis was assumed to be required based on the size of the proposed project, therefore screening level impact analyses were not included.

During the development of the modeled compliance analysis, the source documented surrounding source data from DAQ in accordance with page 13 and 14 of the Utah Modeling Guidelines. Specifically, sources with the potential to impact the project area that resided within 50 km were sought. The DAQ did not provide co-contributing sources for use in the analysis. This is in keeping with the remoteness of the facility, which lies more than 50 km from any population centers. As a result, no co-contributing sources were required for inclusion in the cumulative impact analysis.
21) **Written comment regarding the failure to demonstrate compliance with NAAQS**

Comment states that the Coal Hollow Mine NOI does not demonstrate that this project will comply with NAAQS for PM$_{10}$, fine particulates (PM$_{2.5}$), or nitrogen dioxide. Because ACD has not performed a cumulative impacts analysis, it cannot demonstrate that any of these NAAQS will be met.

In particular, because the NOI modeling uses the sixth highest value for PM$_{10}$, and NAAQS compliance is determined by the second highest value in a year, this NOI does not demonstrate NAAQS compliance. Given that the NOI predicts some sixth highest values for PM$_{10}$ just below the 24-hour average NAAQS, it is likely that the proper value, the second highest value, may exceed the NAAQS.

Comment also said that something similar may be said for the NOI’s modeling of the 24-hour average maximum for PM$_{2.5}$. The NOI only discloses the eighth highest value for this pollutant and the NAAQS are based on the 98th percentile value.

**DAQ Response** - In September 2006, EPA revised the NAAQS for PM$_{10}$ to retain the 24-hour standard of 150 micrograms per cubic meter (ug/m$^3$) and vacate the annual standard. To account for this change, the air dispersion modeling technique used to demonstrate compliance with the standard was changed (EPA, 2009). As outlined in the AERMOD User’s Guide Addendum, the 24-hour NAAQS for particulate matter with aerodynamic particle diameters of 10 microns or less (PM$_{10}$) is in the form of an expected exceedance value, which cannot be exceeded more than once per year on average over a three year period for purposes of attainment demonstrations. Modeling demonstrations of compliance with the PM$_{10}$ NAAQS are based on the High-N+1-High value over N years, or in the case of five years of National Weather Service meteorological data (as used in ACD’s air modeling analysis), the High-6th-High over five years. This recommendation was implemented using the CO MULTYEAR option described in Section 3.2.11, Performing Multiple Year Analyses for PM$_{10}$, of the ISCST3 User’s Guide, Volume 1 (USEPA, 1995). Technical review of the ISCST3 modeling results submitted by ACD indicated the PM$_{10}$ modeling was performed as currently recommended. Please note the special processing consisting of the 99th percentile 24-hour value averaged over N years for PM$_{10}$ as the “Post-1997” PM$_{10}$ option, is no longer used as the standard upon which it was based has been vacated.

22) **Written comment received regarding failure to evaluate impacts on Bryce Canyon National Park**. Additional comments were made requesting modeling for visibility and regional haze in the Class 1 areas:

All comments received from this category stated a need to perform a visibility analysis to demonstrate there would be no detriment to the Class 1 areas affected by this permit. One additional comment stated:

“The NOI has not undertaken a modeling analysis regarding the impacts of this project to Bryce Canyon National Park, a Class I airshed, and its air quality related values (AQRVs). Bryce Canyon National Park is located only a few miles from the proposed construction site. It is critical that the modeling prepared for this NOI evaluate impacts to the Class I airshed in terms of prevention of significant deterioration (PSD) increment limits and the
AQRVs for Bryce Canyon. Among those AQRVs, the most sensitive in Bryce Canyon is visibility. This NOI does not explain how the project will, or will not, impact AQRVs in Bryce Canyon National Park, particularly visibility (which includes night skies).”

“According to Utah’s State Implementation Plan (SIP), DAQ should require ACD to evaluate these impacts. Section II.A of the SIP requires that DAQ obtain from new sources “information necessary to appraise the possible effects of the effluent” from the site. SIP, § II.A.4. PM$_{10}$ pollution has a detrimental impact on visibility. *Id.* § XVII.H.2. The proximity of Bryce Canyon and the importance of AQRVs such as visibility at the park are factors, which compel DAQ to obtain such information from Alton Coal Development. Furthermore, Utah’s Regional Haze rule requires that DAQ demonstrate that visibility will not degrade on the least impaired days in Bryce Canyon National Park. *See id.* § XX.C.3.a. DAQ cannot comply with this requirement without requiring Alton Coal Development’s NOI to include modeling analysis of the Coal Hollow Mine on visibility in Bryce Canyon National Park.”

**DAQ Response - The sections of the SIP that are referenced in these comments are narrative, and are intended to describe the overarching purpose of the NSR program. Utah's rules, that are also part of Utah's federally-approved SIP, provide the details of how the NSR program is implemented. There are a number of rules, including the PSD rule in R307-405, the Visibility Rule in R307-406, the Modeling Rule in R307-410, and the New and Modified Source rule in R307-401. These rules describe the analyses that are required, the requirements that must be met and also provide cut-off levels that focus review on those sources that are likely to have an adverse impact on air quality, including visibility. Any major source or major modification under the PSD rule must evaluate the impact on AQRVs, but this requirement does not apply to minor sources. Any major source or major modification under the visibility rule must evaluate the impact on visibility in Class I areas, but this requirement does not apply to minor sources. Therefore, ACD has no requirement to perform a visibility analysis under its current AO proposal.**

23) **Written comment regarding deficient monitoring program to demonstrate compliance:**

Comment stated that based on the modeling for this NOI, which shows exceedences of the SILs, ACD should also be required to monitor nitrogen dioxide from the facility. The proposed frequency of every sixth day for monitoring coarse particulates is too great a time between measurements. Also, the NOI should have included visibility monitoring because of visibility concerns at Bryce Canyon National Park. One additional comment was received that requested the addition of one more monitor in the network for a total of three monitors.

**DAQ Response:** ACD developed the monitoring program associated with this project on a voluntary basis. The monitoring program was developed cooperatively between DAQ and ACD in an effort to demonstrate that the facility will operate with a minimized impact on air quality. In addition, DAQ will conduct unannounced compliance inspections to ensure air quality standards are being met at the facility.

**ACD will be required to file regular reports with DAQ. On a quarterly basis, the facility must report air monitoring results to DAQ. The air monitoring procedures**
for ACD are very detailed and familiar to the DAQ scientists who will review each report for compliance. Each review will evaluate:

1) The monitored PM$_{10}$ emissions to make sure the National Ambient Air Quality Standards (NAAQS) are not exceeded.

2) The completeness of the air monitoring results to ensure the monitoring network is operating at all times and is collecting valid data. For any period during which information is missing, Alton Coal must explain why the monitoring network was not operating as required (e.g., machine calibration, power outage).

3) The monitor calibration data to ensure the collected data have been measured accurately.

If discrepancies are found, ACD will be sent a compliance action to resolve the issue. All compliance actions require the company to immediately return to compliance. In addition to fixing the problem that led to non-compliance, a penalty may be assessed against the facility.

In addition to PM$_{10}$, Alton Coal will emit nitrogen oxide (NO$_x$) and sulfur dioxide (SO$_2$). To address these pollutants, the permit will require the use of Selective Catalytic Reduction on the two stationary engines that will be used at the site. With successful implementation, operation, and maintenance of this control technology, ACD will qualify as a minor source of NO$_x$. The permit will also limit SO$_2$ emissions by requiring the use of low-sulfur fuel in the stationary engines. So the monitoring program will evaluate only PM$_{10}$ emissions due to the fact that they represent the largest portion of emissions from the mining process and were the largest modeled impact associated with the project. The proposed frequency of every sixth day is an acceptable frequency and is used in other mining operations similar in nature to the ACD project. Therefore, the monitoring frequency is adequate and will not be changed. Also, the placement of the air monitor was established through modeling impacts. The monitor is currently proposed to operate at the highest modeled concentration area and will suffice for PM$_{10}$ data gathering. Another air monitor is not required at this time.

DAQ also recognizes the close proximity of ACD to some of Utah's premier National and State Parks and is aware of concerns regarding visibility and air quality in these areas. DAQ remains committed to ensuring the ACD permit protects these values while respecting the rules and regulations that define this process. Additional information related to National Park Visibility can be found at [http://www.airquality.utah.gov/Public-Interest/Current-Issues/Regionalhazesip/regionalhazepdf/2008/SecXX%20Reg%20Haze](http://www.airquality.utah.gov/Public-Interest/Current-Issues/Regionalhazesip/regionalhazepdf/2008/SecXX%20Reg%20Haze)

24) Written comment regarding Quarterly reporting and violations:

Comment stated that the requirement to submit quarterly reports to the DAQ created a lag time for oversight of violations.
DAQ Response – Quarterly reports are a typical requirement for data submittal. It is necessary for laboratory analysis to be performed on the PM$_{10}$ data gathered by the monitor and so laboratory time and reports have to be generated. The quarterly requirement allows the time for the analysis, report generation and submittal of the report.

25) Written comments regarding ACD performing their own air quality monitoring:

Comments regarding this topic were strictly addressing the fact that the public does not feel that records, especially air monitoring data, should be kept by ACD. The commenters compared this to “the fox guarding the hen house and giving him a key, just in case he needs to get in.”

DAQ Response – All air quality monitoring data collected by the PM$_{10}$ monitor is evaluated by an independent laboratory. This data is used in determining the PM$_{10}$ concentrations being picked up by the monitor. This information is required to be submitted to the DAQ on a quarterly basis. This data must also include an extensive list of additional information as requested in AO Conditions II.B.2.i and II.B.2.j. Also, please see response to Oral Comment #1 and Written Comment #23 above. It is standard practice for regulatory agencies to require the source to install, operate and maintain records for required monitors at their facilities.

26) Written comment regarding Kane County residents being notified of this project and not Garfield County residents:

Commenter stated that the original newspaper notice advertising this project was published in the Sun Times, which is a Kane County newspaper. Because the public hearing was held in Panguitch and affects Garfield County, the commenter wants 30 days for Garfield County residents to be able to respond to this permit.

DAQ Response – In accordance with R307-401-7, the DAQ advertises all notices of a proposed project in the local newspaper nearest the project location. The ACD project will be located near the town of Alton, Utah, which is located in Kane County. Kane County only has one newspaper, which is The Southern Utah News. The public notice for ACD was published in the Sun Times on September 14, 2010. Because a public hearing was requested for this project, a local venue had to be found which would accommodate approximately 200 people. It was determined that Panguitch High School would be the best option for this hearing. The High School is located approximately 20 miles north of Alton, could seat 240 people comfortably, had a PA system and pull down screen that allowed for a power point presentation of the project. The Panguitch High School was selected out of convenience and not because it is located just across the county border in Garfield County.

In addition, due to comments received at the hearing the public comment period was extended for 7 additional days. This extension was advertised in both Kane County (The Southern Utah News) and Garfield County (Garfield County Insider) newspapers to accommodate commenters who needed more time to review the project information. The complete electronic project file was also provided to a commenter who requested it.
27) **Written comment requesting the use of computerized visual opacity monitors:**

Commenter objected to the fact that there was no plan to install computerized visual opacity monitors that could read opacity on a daily basis.

**DAQ Response:** As stated in previous responses, ACD is considered a minor source of air emission (R307-415-3). All potential pollutants have been evaluated and modeling performed, if necessary, to ensure that all off property impacts of these pollutants meet the NAAQS. Computerized visual opacity monitors are not a requirement under the NSR permitting rules. This type of equipment has yet to be proven as an effective tool in accurately reading opacity limitations for fugitive dust. Therefore, computerized visual opacity monitors cannot be justified for the ACD AO.

28) **Written comments regarding general disagreements and alternative suggestions regarding this permit:**

Numerous comments were received regarding banning the burning of coal in general, pursuing investments in solar and wind power, destruction of landscape along with local watersheds and tourism, mines cause cancer, strip mines are eyesores, etc.

**DAQ Response:** While the DAQ understands that these comments are directed towards the ACD project, they are not comments directly relating the operational conditions of the AO. These ideas and topics should be addressed with elected local, state, or federal government officials as they are outside of the DAQ regulations.