



To: Planning Department, Daniel Murray
From: Public Works Department, Jim Davis, P.E.
Date: March 25, 2016
Subject: **GCC Energy LLC – King Coal Mine**
Class II – Project No. 2012-0089
Public Works - Agency Review Comments
Coal Transport Trucks on County Road 120 north and Interim Measures

Background: Coal mining at the King I mine and the hauling of coal on County Road 120 has occurred since 1939. GCC Energy has operated the King II Coal Mine located on County Road 120 since 2007 when operations commenced after King I mine was closed. Due to a misunderstanding over County – State jurisdictional control in 2006, the County believed a land use permit could not be required for the development and operation of the King II coal mine. It was later determined the original jurisdictional finding was without merit and GCC was notified in 2010 by the County of the need to apply for a Class II land use permit as a result of their expanded mining operations associated with the development of the King II mine.

With the opening of the King II coal mine, the mining extraction and associated coal haul operations increased, resulting in increased impacts to local County roads. Prior to 2011, coal transport trucks had been hauling south and north from the mine on County roads. The southern route included County roads 120, 116, 119, 122, and 130, and required southbound trucks to cross State Highway 140, continue east on CR 119, south on CR 130, and west on CR 122 where they could turn left, southbound onto State Highway 140. This southern route resulted in coal trucks driving past the school bus loading zone on the east side of the Fort Lewis Mesa Elementary School in Kline.

As a direct result of concerns expressed by the School District and the Fort Lewis Mesa Fire Protection District over this southern route, in 2011 GCC decided to restrict coal truck traffic to the north end of County Road 120.

With the submittal of a Class II permit application and associated *Traffic Impact Assessment* prepared by Roadrunner Engineering (November 19, 2015), GCC evaluated six coal transport options. The evaluation of these options included a pro/con analysis and evaluated in part; impacts to existing residential properties, accident history along potential routes, and intersection access at State Highway 140. On the basis of minimizing impacts to county roads, adjacent residents, and focusing mitigation measures where they would have the greatest impact, GCC selected “Option 1” County Road 120 north as their optimal route for coal transport between the Mine and State Highway 140.

As County Road 120 north does not meet the current road standards per County Code for projects of this nature and intensity, the applicant was notified of the need to improve the road to current standards and, because it was operating without the necessary land use permit, directed to propose interim mitigation measures to support their operations until the required road improvements could be completed.

Proposed Interim & Long Term Mitigation Measures:

Interim mitigation measures are those measures GCC has implemented, or agreed to implement, to allow them to continue the transport of coal prior to completing the reconstruction of the north 6.4 miles of County Road 120 to current county standards.

- Interim Mitigation Measures for County Road 120 north:
 - Initial widening of the 90 degree curve just west of State Highway 140 to accommodate two-way truck traffic.
 - Trimming vegetation along numerous sections of County Road 120 north to improve the sight distance around curves.
 - Limiting coal truck hauling to six days per week, no hauling on Sundays.
 - Radio communication used to limit truck traffic to one direction at a time through the “narrows”.
 - Reduced speed limits for trucks; 35 mph on the paved section and 25 mph on gravel, and 10 mph within 200 feet of the two adjacent residences to further minimize road dust.
 - Dust suppression with the application of water, up to four times each day as needed.
 - The installation of additional lighted advisory traffic signs at key locations.
 - Temporary paving of approximately one mile of County Road 120 from the current end of the pavement south to help mitigate road dust and sound for two residences adjacent to County Road 120.
 - Conduct internal monitoring of truck speed with radar guns, enhanced driver training, and a direct phone number to report unsafe driving.
 - The suspension of coal hauling on County Road 120 during adverse weather.
 - No stopping of coal haul trucks on County Road 120 except for emergency purposes.
 - Limiting the number of coal trucks to an average of 80 outgoing trips per day until the first three phases of the County Road 120 road reconstruction are completed, then limited to an average of 100 outgoing trips per day until the remaining long term road reconstruction has been completed for all 6.4 miles of County Road 120 north. Upon completion of all long term road improvements, GCC will be limited to an average of 120 outgoing trips per day for their coal trucks.

- Long Term Mitigation Measures for County Road 120 north: Long Term mitigation measures are outlined in the conditions of approval for the Class II permit and the *Road Improvement Agreement* (RIA). Key components of the improvements include the complete reconstruction in five phases of the north 6.4 miles of County Road 120 from the Mine entrance to State Highway 140 and the payment of a road maintenance fee tied to their annual production to be paid as long as the mine is in operation.

Potential Safety Issues using County Road 120 north during the Interim Period:

County Road 120 north is similar to many local “farm to market” County roads, although historic activities in the Hay Gulch area supported minimal mining activities for many years in addition to agriculture.

Coal trucks transporting coal for GCC are classified as commercial trucks, and based on the type of load they transport are not permitted to be overweight or oversize as they have the ability to regulate their load. These trucks can legally drive on any public road where there are no limitation on local truck traffic or weight restrictions on bridges or local roads. The coal truck drivers are required to possess and maintain a commercial driver’s license and their ability to earn a living as a commercial driver depends on their driving skill. *“Driving a Commercial Motor Vehicle (CMV) requires a higher level of knowledge, experience, skills, and physical abilities than that required to drive a non-commercial vehicle. In order to obtain a Commercial Driver's License (CDL), an applicant must pass both skills and knowledge testing geared to these higher standards. Additionally CDL holders are held to a higher standard when operating any type of motor vehicle on public roads. Serious traffic violations committed by a CDL holder can affect their ability to maintain their CDL certification.”* (USDOT – Federal Motor Carrier Safety Administration) <https://www.fmcsa.dot.gov/registration/commercial-drivers-license>

Even under ideal weather conditions on perfect roads, driving is inherently dangerous. In order to evaluate potential hazards or safety issues along any road one of the first steps is to review the accident history data¹. This can help identify areas of higher incident of accidents where road alignment, traffic control, or vehicle speeds, may be an issue resulting in the reoccurrence of accidents. Many accidents are the result of adverse weather conditions or human error, and higher speeds typically increase the severity of the accident. The condition of the road is also an important factor and properly designed roads can safely accommodate two-way traffic with the ability for oncoming vehicles to remain within their respective lanes under all conditions, and adequate shoulders provide an opportunity for a distracted driver to recover.

A review of the accident history involving coal trucks on County roads since the King II coal mine open in 2007 shows the few accidents that have occurred have been relatively low speed with minimal injuries and limited property damage. County Road 120 is considered a local road and most of the traffic is local with drivers familiar with the road and the coal transport operations. The applicant has agreed to limit the average daily coal truck traffic to 80 outgoing trips per day (160 average daily trips) until Phase 3 road improvements are complete and to 100 outgoing trips per day (200 average daily trips) after Phase 3 until all road improvements are complete. Upon completing the reconstruction of the 6.4 miles of County Road 120 north, the applicant has agreed to limit the average daily coal truck trips to 120 outgoing trips per day.

While it is acknowledged the current County road does not meet code standards for the applicant’s intensity of use, it should be noted that GCC has undertaken interim mitigation measures and there is not a documented history of significant or severe accidents on County Road 120 north associated with the coal transport trucks even with the elevated transport rates observed in 2014. Therefore, the proposed reduction in coal

¹ La Plata County accident history data from 2007 to 2015

transport trucks, combined with implementation of existing and proposed interim mitigation measures, will help insure the continued safe travel on this 6.4 mile section of County Road 120 north until Phase 3 road improvements are complete.