

## Supplemental Narrative for GCC Energy, LLC Class II King II Coal Mine

### OWNERSHIP:

GCC Energy LLC (“GCC”) of 6473 County Road 120, Hesperus, Colorado 81326 is a wholly owned subsidiary of GCC of America, a Colorado corporation whose principal place of business is 600 South Cherry Street, 10<sup>th</sup> Floor, Glendale, CO 80246. GCC of America’s principal business is cement manufacturing and has manufacturing locations in Colorado, New Mexico and South Dakota in addition to a concrete ready mix division with locations in several states through Midwestern United States. GCC of America is owned by GrupoCementos de Chihuahua, A.S. de C.V. of Chihuahua, Chihuahua, Mexico whose principal business is the manufacture of cement and cement products.

The property on which GCC operates in La Plata County comprises approximately 640 acres owned by the State of Colorado (“the Property”), which, acting through the State Board of Land Commissioners, leased Section 36, township 35 N, Range 12 W, NMPM, to GCC in Coal Mining Lease Number CO3388 (“the Project”).

This supplemental narrative is designed to accompany the application for a Class II Land Use Permit under the La Plata County Land Use Code (“LPLUC”) (“the Application”) for the Project’s operations in its present location and configuration, with certain modifications as described in this narrative and in the application.

Agent for GCC in this Application with La Plata County Colorado is Brian Kimmel, Southwest Land Services, Inc of 1099 Main Avenue, Durango, Colorado 81301. Professional engineer consultant for the project is Michael Olson, Roadrunner Engineering of 2610 Arroyo Drive, Durango, Colorado 81301.

### LOCATION:

The operation is located in Section 36, Township 35 N, Range 12 W, NMPM approximately 6.5 miles west of State Highway 140, on La Plata County Road 120, state parcel number 5653-362-00-077.

### HISTORY:

The original King Coal mine began operation in 1938 and obtained its first Federal coal lease in 1941. Early mining was mostly in Federal coal leases underlying the Huntington Ranch, with later leases in coal owned by the Huntington Ranch, the Tipotsch family and on Ute Mountain Ute land and the Dunn Ranch. Currently most of the coal is in Federal lease, with some fee owners or in a split estate. In August 2004, a coal and surface lease was obtained on State School Section 36 adjacent to coal leased from Federal and private entities. GCC acquired ownership of the mining operation in April 2005. King II was built on the State Land Board Parcel in 2006-7. Coal production from the State

of Colorado lease began in July 2007. An existing company sign on County Road 120 identifies the site entrance.

La Plata County had previously determined that the mine was not required to apply for a land use permit due to its operations located on a State Board of Land Commissioners parcel but subsequently reversed that decision, and directed GCC to apply for a county permit. This Application resulted.

The mine is known for its low sulfur, ash and alkali content and as such is now sold exclusively off site for use by kilns that are used in the manufacture of cement. Markets for this product are in the US southwest and northern Mexico. None of the mine product is presently sold to overseas markets. The overall mine operation has not seen a downturn in sales due to its high product quality and expanding customer base. A previously provided map indicates the past, current and proposed areas of mining. The proposed coal resources are 20 to 25 million tons with a mine life of 20-30 years, depending on the market. There is a small local market segment for lump and stoker coal, such as the railroad in Durango and an enduring level of use in local home heating. Coal for home heating use is sold through a privately owned concession on County Road 120 near State Highway 140, not at the mine.

## SITE LOCATION AND BUSINESS

GCC now operates the King I and King II mine sites in the Hay Gulch area with operations headquartered at 6473 County Road 120, Hesperus, Colorado. An existing company sign at the entry identifies the King II site. Mining operations ceased in January 2009 at the King I site. The areas of the King I site previously used for mining, processing coal storage, loading and support functions are in the process of reclamation. A permitted coal mine waste rock disposal facility at the southeast edge of the King I site will continue to be used for the small amount of waste rock the King II mine produces. Traffic volume associated with the haulage of waste rock is addressed in the Revised Traffic Study. It is proposed that reclamation work on the unused portions of the King I site will be complete by December 2016, pending approval of a Technical Revision to the State of Colorado mining permit.

The King II site is approximately 2 miles west of the King I site and is the focus of current operations of the business. The site has surface facilities covering 25.5 acres. As of July 2015, underground mining operations covered an area of approximately 565 acres.

The King II mine now operates more than 2 miles of underground roadway with an interconnected grid work of over six miles of tunnels. Thickness of the seam ranges from six to ten feet and no water has been encountered with the mining. In addition, no adverse roof conditions nor methane gas have been encountered. The type of mining utilized is the "room and pillar" method with all mining operations underground. There are no vertical shafts or inclines through the overburden. There is approximately 300 feet of cover over the coal seam, with variation for surface terrain. No unusual incidences of surface cracking or subsidence have been observed and subsidence cracks typically heal after a few seasons of normal weathering. The water table in the area is below the coal

seams; no water is encountered in the mining operation. This operation has no mountaintop removal, no steep slope mining and no disturbance of prime farmland or the Hay Gulch alluvial valley floor. There are no blasting operations associated with the mining.

## SITE PLAN

The site facility of King II has offices, product processing and truck loading facilities, equipment and supply storage yards, water storage, fuel tanks, mine ventilation equipment and a new bathhouse that was completed April 2014. All on site waste water systems have been approved and permitted through San Juan Basin Health. A permit and construction plans for an on-site drinking water treatment facility was issued on May 8, 2015. The site has a current storm water management plan. Virtually no dust is emitted from the mining operation, all coal dust having been immediately stabilized in the mine itself at the point of excavation. Noise from the ventilation equipment for blowing fresh air into the mine is buffered by terrain and a recently installed silencing device. The operation itself is set back approximately 1000 feet from County Road 120. Care was taken in laying out the site to preserve as much tree cover and existing topography as possible. Surrounding land uses are essentially open range land or natural undeveloped terrain except for irrigated farmland in Hay Gulch to the south.

As the accompanying site plan indicates, the coal is mined and exits the mine via a conveyor into one of two “stacker stockpiles” after which it is crushed and then ready for transport. The mine is accessed by the portal near the main fan. That fan continually replaces the air in the mine and exits at the return air portal. All other operational items are clearly labeled on the site plan.

See Exhibit(s) :Site Plan

## PERSONNEL AND OPERATIONS AND TRAFFIC

GCC in La Plata County produces 940,000 tons of coal annually, employed approximately 150 persons in 2014 with annual salaries and employee benefits of approximately \$12 million and paid property taxes of \$392,475.00 for 2013. The total number of employees is projected to be 165, with approximately 87 employees on site at any one time. Property taxes paid are projected to exceed \$400,000 annually in future years. The underground mine operates 24 hours a day. Truck transportation is on a 24 hour schedule, with lower traffic volume at night and on weekends. In response to citizen requests, Sunday trucking has been suspended since March 2015. Coal crushing and screening on the surface is normally limited to 6-10 hours per day but not limited to daytime operation. A description of shifts per day is contained in some detail in the traffic analysis report by Roadrunner Engineering, LLC. Exterior lighting meets industry and MSHA standards and is specific to the operation and does not leave the overall surface facility site.

Off-site impacts are essentially limited to truck traffic with some deliveries of supplies to the site. An updated complete analysis of the traffic impacts of the operation is attached in a Traffic Impact Assessment dated July 29, 2015 from Roadrunner Engineering, LLC. Standard operating procedures call for all truck hauling traffic and deliveries to use the northern segment of County Road 120 to State Highway 140 for normal access. In the unlikely event of an emergency closure of that portion of County Road 120, County Roads 120 west, 116 and 119 may be used for a short time.

On site traffic dust is suppressed by very low traffic speeds and the application of magnesium chloride and water. Drainage and erosion and sediment control facilities were designed by EIS Environmental & Engineering Consulting and Fleming Engineering, Inc, a copy of which is attached including a cross section of the haul road design. Supplemental information by Mike Olson, PE has been previously submitted. GCC does not operate a trucking business; all trucking is contracted by licensed companies. This trucking activity itself employs approximately 110 people, none of whom use the services at the operation site to any great extent. A description of the coal trucking monitoring processes undertaken by GCC is provided with this narrative, as well as the GCC Energy Coal Truck Safety Policy, revised 7/23/15.

Parking is provided for the employees on site near the newly completed bath house and administrative building and by the scale house. 90 slots are shown on the revised site plan, including 7 handicap slots. Parking areas are presently surfaced with gravel and treated with a dust retardant but will be paved. Parking lot lighting is indicated on the site plan.

See Exhibit(s) :           Traffic Impact Assessment, July 29, 2015  
                                  Site Plan with Parking Plan  
                                  Trucking Operations, August 7, 2015  
                                  GCC Energy Coal Truck Safety Policy- Revised July 23, 2015

## WATER SUPPLY

Water demands are created by rest rooms for employees and the bath house and operationally from the dust mitigation uses in the mine itself. Water supply to the site is based on GCC owned water rights that were initially developed through a long term lease of senior Class A ditch shares from Huntington Ranches, with reservoir storage on site within the mine itself and with groundwater rights. GCC is in the process of creating a redundancy and expansion of its water supply by increasing the amount of water received from Huntington Ranches and utilizing a pond that Huntington Ranches is constructing on Huntington Ranches property replacing the underground reservoir in the mine. Recent regulatory issues require deleting the use of the underground reservoir. GCC plans to submit a water court application to change water presently used by Huntington Ranches for irrigation of 43.5 acres to provide a redundant/expansion supply for GCC's water rights from the La Plata River. This is in addition to the existing 9 acre dry up.

Water from the decreed water rights enters the property by way of historical ditches on the Huntington Ranch and then the Huntington pipeline to the operations site where it becomes part of the lease and mine permit. Currently potable drinking water is supplied by bottled water and domestic water is supplied to the site by a certified hauler from off site sources (City of Durango) and is stored in on-site tanks. Going forward, GCC will supply mining operations and domestic uses from treated surface water. GCC retains the right to develop wells but they are not part of its current or planned water usage or supply at this time. The Huntington reservoir will be completed by May 2016 and the on-site GCC water treatment plant will be brought on line by that same time. The Huntington reservoir will be brought to capacity and replenished annually by GCC's water rights, the water hauling will cease except for emergencies after September 2016.

Harris Water Engineering supplied the initial Water Supply And Demand Report , dated June 28, 2012. Subsequent requests from the County produced the following updates to the original report: August 29, 2013, January 21, 2014, September 4, 2014, July 29, 2015, and August 11, 2015, hereto attached.

For details of the development of the redundant water sources for GCC, please see the enclosed letter from Harris Water Engineering, Inc, dated June 28, 2015 and the Huntington/GCC letter of July 30, 2015.

For a further explanation of the incorporation of a surface reservoir on Huntington property see the attached report by Harris Water Engineering, dated August 12, 2015.

In addition, GCC has obtained approval from the Colorado Department of Public Health and Environment for a water treatment plant at the operations site, Identification (PWSID) No.Co0234301, dated May 8, 2015.

See Exhibit(s) :       Harris Water Engineering Redundant Water Sources Letter, July 30, 2015  
                              Huntington Water Supply Intent Letter, July 29, 2015  
                              Harris Water Engineering, GCC Energy Water Use: Current and Future, August 12, 2015  
                              CDPHE GCC Water Treatment Plant Approval, May 8, 2015

## WASTEWATER FACILITIES

Sanitary sewer is provided by two septic and leach field systems at the operations site. These are permitted by San Juan Basin Health under permit numbers 2007-344 (the "upper septic system") and 2007-345 (the "lower septic system"). Miners use porta potties while on shifts in the mine, seldom using the outside systems more than once per day. The upper system is essentially used by the miners, maintenance, procurement, and administrative while the lower system is used by surface management, dispatch and truckers on occasion. Please review the previously submitted email of October 22, 2014, addressed to Daniel Murray and Victoria Schmitt of the La Plata County Planning Department related to on site waste water requirements and San Juan Basin Health Department approvals. Copies of that approval email and the referenced August 28, 2014 letter to Greg Brand of San Juan Basin Health, "On -site Wastewater System Wastewater

Demands for GCC Energy, LLC” from Wayne Dale, P. E., Stoner Engineering and Surveying are provided.

## VIBRATION/GROUND MOTION

A supplemental ground motion/vibration study was performed in December 2014 to address adjacent land owner concerns that measurements in the original study were made too far from production activity and covered too short a time span. Measurements in the supplemental study were made for 19 days continuously on the surface immediately above the active mining area. A copy of the supplemental noise/vibration study is attached as part of the CDS Environmental Report titled/subject: “GCC Energy – King II Mine, Underground Miner Ground Motion Study, La Plata County”, performed by Matheson Mining Consultants and addressed to Mr. Joe Bowden, PhD, CDS Environmental Services, LLC, PO Box 4124, Durango, Colorado 81302.

## UTILITIES

Electrical service is provided by La Plata Electric Association from its Shenandoah substation to the east and generally aligns along County Road 120 to the edge of the operations site approximately 130' north of the road shoulder. Disposal of waste oil and grease is provided by Safety Kleen or a similar qualified entity.

## DRAINAGE

An initial drainage plan for the CDRMS permit has been reviewed and updated for the total operations site and submitted to the County. It has been addressed by Mike Olson, PE of Roadrunner Engineering, LLC in an initial response to a County request for more information on September 5, 2013, “Re: GCC Energy King II Mine Drainage Assessment per County Memo dated November 30, 2012”; an additional response on September 13, 2013, “Re: Responses to La Plata County Planning Engineering Memo dated 11/30/12”; and an additional response on January 30, 2014, “Re: GCC Kind goal Mine Class II permit application, Project #2012-0089”.

## SPECIFIC OFF-SITE IMPACTS

Off-site impacts of potential noise, ground motion and water wells have been researched and analyzed by third party consultants. Noise and ground motions are minimal and essentially centered at the mine site and/or meet industry standards. Please review the additional Ground Motion Study prepared by CDS Environmental in coordination with Matheson Mining Consultants: “GCC Energy – King II Mine, Underground Miner Ground Motion Study, La Plata County, Colorado” dated December 11-31, 2014.

A sampling of water wells of neighboring properties indicated no interference or impact to residential water well operations. This study data is contained in the “Summary of Analytical Activities in Response to Neighborhood Comments In Conjunction with a Permit Expansion of GCC Energy, LLC King II Coal Mine”, Updated May 8, 2014.

In addition, a review of the water used in the mining operation, specifically the “Underground Mine Water Consumption” chart was updated: “Water Balance Study for the King II Mine In Response to Neighborhood Comments In Conjunction with a Permit Expansion of GCC Energy, LLC, King II Coal Mine” dated May 8, 2014.

Off-site impacts of dust, odor, glare, smoke, pollution, water vapor, and unsightly views at the operations site have not been a recognized issue. Interior roads on site are treated for dust control at least twice a year with mag chloride. To GCC’s knowledge there are no critical wildlife or habitat areas affected by the operation. Dust and noise on site are controlled to industry standards. Visual mitigation has been addressed and virtually no odor accompanies the mining and processing. Some nighttime exterior lighting is in operation, but does not leave the site and does not impact neighbors. The operation is compatible with the area in that no neighboring properties are impacted by the operations except the use of County Road 120. A small, historic cemetery is located just to the west of the mine surface facility entry from CR 120. The cemetery has not been nor will it be disturbed by the mine operations.

The use of County Road 120 as the main haul road for the mine has been the subject of neighborhood meetings, a GCC sponsored citizens group and further study of alternate haul routes. Please see the attached enlarged and comprehensive review of traffic options and proposals to upgrade the road in the report by Michael Olson, PE: GCC Energy LLC King II Coal Mine, County Road 120, La Plata County, Colorado, Traffic Impact Assessment, June 10, 2014, Revised and Updated July 31, 2015”.

See Exhibit(s) :       CDS Environmental Sound/Vibration Study Update, December  
                                  11-31, 2014  
                                  CDS Water Balance Study (Underground Mine Water Consumption  
                                  chart) for the King II Mine, May 8, 2014  
                                  CDS Summary of Analytical Activities in response to  
                                  Neighborhood Comments In Conjunction with a Permit  
                                  Expansion of GCC Energy, LLC King II Coal Mine,  
                                  updated Issue May 8, 2014  
                                  Traffic Impact Assessment, Revised and Updated July 31, 2014

## REGULATORY AGENCIES AND PERMITS

An attached chart lists the permits involved with the operation. The facility and its operations meet all MSHA and other regulatory agency standards and has a close relationship with the Fort Lewis Mesa Fire Department. MSHA inspectors are on site 10-20 days each quarter for announced inspections. The mine maintains an emergency

response plan for any mine emergencies and two fully equipped mine rescue teams (thirteen people) that are especially trained to handle mine disasters.

The Colorado Division of Reclamation, Mining and Safety permit number is C-81-035. A copy of the current CDRMS permit has been previously submitted, dated August 18, 2007. In addition, enclosed is a copy of the August 18, 2012 permit extending the permit date. The CDRMS permit is for 1.3mm tons annually.

The State Board of Land Commissioners Coal Mining Lease number is CO-3388 with a reclamation bond of \$854,249.71.

A current King II Lease Map, dated July 27, 2015 is enclosed, updating the originally submitted Lease Map of July 6, 2012. Most leases run for 15-20 years with the same portals being used for contiguous or adjacent leases.

The Fort Lewis Mesa Planning District serves in a referral agency role for this application. The Fort Lewis Mesa Plan was last updated in 2007. The plan mentions the King Coal Mine historically but does not otherwise refer to it or other existing coal mines or any industrial operations within the Plan. The Plan acknowledges the need for diversity in the District and refers to business development but generally as it relates to agriculture.

## NEIGHBORHOOD COMPATIBILITY

The King Coal Mine and the successor, King II Mine, in Hay Gulch have been in operation since 1938 and 2007 respectively. In 2004 a coal and surface lease was obtained on the Colorado State School Section 36 and the construction of King II began in March 2007. Compatibility within the neighborhood was accomplished by locating the mine surface operation in a small valley set back from Hay Gulch and County Road 120. Site configuration and terrain of the small valley provides a buffer to the sparsely populated neighboring area. The increase in the mine traffic to respond to market conditions in 2011-2015 placed more haul traffic on County Road 120 from the mine to State Highway 140. GCC is in the process of planning for the upgrade of this portion of CR 120 and the Highway intersection to reduce traffic noise and dust and enhance safety. Please see attached Compatibility Assessment for a complete analysis of the criteria set forth in LPLUC Section 82-193(c) with respect to compatibility.

See Exhibit(s) :        Comptability and Mitigation Assessment

## SUMMARY

As with any business, GCC is market based but has a specific product for specific clients. The coal from these mines is considered some of the best country wide for these special uses. The life of the mine will depend on the market, new advances in technology and the overall economy. Currently the mineral supplies will last for another 10-20 years. The mine is paying close to \$400,000 per year in property taxes and is projected to increase

that payment to the County in future years. It employs many citizens of La Plata and surrounding counties. The operation is environmentally sound and non-polluting. As mentioned before, the mine cleanly produces a coal product that is used primarily in the manufacturing of cement and as such is an economic driver of the local and national economy.

All supporting documents for this application are on file at the La Plata County Planning Department.

12 August 2015