



October 10, 2016

Alabama Surface Mining Commission
P. O. Box 2390
Jasper, AL 35502-2390

RE: **Jesse Creek Mining, LLC.**
Gholson Mine, P-3663, Lolley Underground Mine
Revision No. 33

Dear Sir:

I hereby certify the enclosed Subsidence Control Plan for the above referenced mine is in accordance with the Regulations of the Alabama Surface Mining Commission as adopted by Act 81-435 of December 18, 1981 and as amended to date and that the information used in the enclosed plan is true and correct to the best of my knowledge and belief.

If you have any questions or need additional information, please do not hesitate to contact our office.

Sincerely,

McGehee Engineering Corp.

A handwritten signature in black ink, appearing to read "Robert W. Usher", is written over the company name.

Robert W. Usher, P.E.
Alabama Reg. No. 15917



JESSE CREEK MINING, LLC.

LOLLEY MINE, P-3663, R-33

ALABAMA SURFACE MINING COMMISSION

SUBSIDENCE CONTROL PLAN

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TITLE

[Pre-Subsidence Survey and Timing Map](#)

SUBSIDENCE CONTROL PLAN

JESSE CREEK MINING, LLC. LOLLEY MINE, P-3663, R-33

1.0 INTRODUCTION

Jesse Creek Mining, LLC is proposing to open an underground mine in the Clark coal seam within the boundary of the area permitted for the Gholson Mine, P-3663. The mine will be named Lolley Mine.

McGehee Engineering Corporation has prepared this Subsidence Control Plan (SCP) for Jesse Creek Mining, LLC.'s (JCM) Lolley Mine. This SCP specifically addresses planned mining projected for the next five (5) years. The mine plan is subject to change depending on market and geologic conditions.

2.0 DESCRIPTION OF SURFACE

The [Lolley Mine Pre-Subsidence Control and Timing Map](#) presents the area overlying the planned workings showing all features that could be affected.

A survey of structures, features, or renewable resource lands has been conducted. The limits of the survey were determined by a 30⁰ angle of draw from the limits of the mining area. The survey found several coal bed methane gas wells, pipelines and infrastructure associated with the coal bed methane business. There are two power transmission lines within the mine boundary. The supports for these power lines are pole structures either concrete or wood.

There are three occupied dwellings within Year 5 of the mine plan in the SE/SE of Section 26-21S-4W. Several small out buildings are associated with these dwellings.

There is one refuse disposal facility located within the 30⁰ angle of draw of the mining limits. The mining proposed in this area is main entries.

The surface overlying the Lolley Mine is predominantly privately owned forest/woodlands.

3.0 GEOLOGY

This mine proposes to mine the Clark Coal Seam within the Pottsville formation. The overburden above this coal seam is composed of alternating layers of sandstones and shale. The coal seam dips to the south and east.

Overburden depths range from 30 to over 1,900 feet at the southeastern end of the mine. The overburden consists of sandstone and shale. No known faults exist within the mine area. Seam heights average 4 feet.

This mine site is located within the Cahaba Coal Field of the Valley and Ridge Province as shown in “Hydrologic Assessment, Eastern Coal Province Area 23, Alabama”. The Pottsville Formation is characterized as the following: Alternating beds of gray sandstone, conglomerate, siltstone, and shale with beds of coal and underclay. The proposed mine site lies in the southern portion of the Cahaba Coal Field.

Lolley Mine is located, structurally, within the Dry Creek basin of the Cahaba Coal Field. According to “*Geology of Alabama*”, Special Report No. 14 of the Geological Survey of Alabama the rocks of the Cahaba Coal Field mark the southern end of the ‘Coal Measures’ of the Appalachian region. These early Pennsylvanian rocks were deposited in a comparatively narrow trough that extends from Alabama to Pennsylvania. The strata which underlies and outcrops in this region is of the Pottsville Formation of the Pennsylvanian Age. In Alabama, the Pottsville Formation is divided into four fields: the Warrior, the Cahaba, the Coosa and the Plateau. The Cahaba Coal Field occupies nearly 400 square miles and is located between the Warrior Field (the westernmost) and the Coosa Field (the easternmost) in parts of St. Clair, Jefferson, Shelby and Bibb Counties. The structure of the Cahaba Field as stated by the above mentioned reference is a relatively narrow trough or syncline, which is faulted along its southeast side. As stated in “*Coal Reserves of Alabama*” by the Mineral Resources Group of the Southern Railway System, this narrow syncline extends from southwestern St. Clair County on the northeast to northeastern Bibb County on the southwest. This reference also states that the northwest flank of this field typically dips approximately 20 degrees toward the southeast and that an extensive thrust fault (Helena thrust fault {Butts, 1911 & 1940}) truncates the eastern limb, forming the southern and eastern boundary of this field. Some cretaceous sediment overlaps the southwestern portion of the Cahaba Coal field.

The proposed permit area is located within the Dry Creek Basin. The Dry Creek Basin is bounded on the east by the Helena thrust fault, to the south by the Piney Woods anticline and to the north by the Cahaba River.

The most common geologic structural features in the Cahaba Basin are faults and folds. The

faults generally tend to be normal faults with a dominant northwest-southeast orientation. There are no known faults within or adjacent to the proposed permit area.

4.0 PLANNED MINING

This mine proposes room and pillar mining only with no secondary mining, therefore no planned subsidence is proposed.

5.0 SUBSIDENCE

5.1 NON-COMMERICAL BUILDINGS

There are three occupied dwellings within Year 5 of the mine plan in the SE/SE of Section 26-21S-4W. Several small out buildings are associated with these dwellings. Pillars will remain under these structures, therefore no subsidence is anticipated.

5.2 PUBLIC ROADWAYS and RELATED FACILITIES

There is only one public roadway(named road) within the 30 degree angle of draw. A small section of Landview Road lies above the southeastern portion within Year 5 of the mine. This road is a gravel roadway. Pillars will remain under these structures, therefore no subsidence is anticipated.

5.3 SURFACE WATER BODIES AND GROUNDWATER SURVEYS

Review of the Pre-Subsidence Control and Timing Map shows two named streams within the 30 degree angle of draw. Jesse Creek cuts across the southwestern portion and Murry Creek on the northeastern portion.

Due to the fact that pillars will remain and no planned subsidence is proposed the streams within the area will not be affected by this mine.

Ground water well surveys were performed prior to surface mining of the Hope Coal Company, Inc., Alliance Mine, P-3824 at two of the residences shown, Lutz and Nalley. The water wells were their only source of potable water. The mine will not extend under these residences until Year 5. Therefore no updated well inventory was conducted. However, prior to mining under these residences a pre-subsidence survey of the structures will be performed along with an updated well survey.

5.4 UTILITIES AND PIPE LINES

There are two power transmission lines within the mine boundary. The supports for these power lines are single concrete pole structures.

Numerous methane gas well pipelines (gas & water) are located within the survey area. A CDX Gas, LLC gas and water line are located along Landview Road. These pipelines are associated with the coal bed methane transportation industry.

JCM will notify utility/pipeline and owners of their intent to mine under the pipelines, utility lines and related structures, and public roads that cross planned panels approximately six (6) months in advance of mining.

Pillars will remain under these structures, therefore no subsidence is anticipated.

5.5 PRE-MINING NOTIFICATION

Within six (6) months prior to mining, JCM will mail a notification to all property owners and occupants of surface property and structures above the underground workings. The notification will include a statement identifying the location and time for mining; and a statement indicating the Subsidence Control Plan can be reviewed at the ASMC's office in Jasper, Alabama.

5.6 PRE-SUBSIDENCE SURVEY

A pre-subsidence survey will be offered to identify type and conditions of structures within the subsidence limits and to identify any structures that are at potential risk of being damaged by subsidence. Once completed, the survey will be used to determine the measures that may be used to prevent material damage or diminution of the value or reasonable use of the surface area. A copy of pre-subsidence survey/evaluation will be provided to the property owner. The Regulatory Authority has requested in the past that all pre-subsidence surveys be kept on file by the mining operator and be made available upon request. The owner shall be notified in writing the consequences under 880-X-10D-.58(1)(b)3 of denying access for a pre-subsidence survey.

5.7 SUBSIDENCE MITIGATION

JCM will use the room and pillar mining method to prevent subsidence.

1. Coal bed methane wells located within areas to be mined will be abandoned and sealed in accordance with the regulations approved by the State Oil and Gas Board or mining will leave barriers around the well. MSHA requires a 150' offset to be maintained for wells that are not removed.
2. If subsidence damage occurs, JCM will to the extent required by law and after time of damage, restore or remove and replace damaged structural features to a use equal to what was present had no subsidence occurred; including restoration of proper surface drainage when affected land contours prohibit drainage from following natural course. JCM assumes no liability to repair or compensate for subsidence damage to structures constructed after mining has occurred beneath the property.

3. Where the cost of restoration or rehabilitation of damaged structures is higher than replacement of the structures, JCM may choose the option of replacing damaged structures with structures of the same likeness, having similar attributes and being of equal or greater value.

4. JCM may also offer to purchase (before or after subsidence) the property at fair market value or offer to compensate the owner for any diminution in property value due to subsidence damage.

5. In the event a property owner's drinking, domestic or residential water supply system is damaged, interrupted or diminished by mine subsidence, JCM will repair or replace the system as required. Upon notification that a user's water supply was adversely impacted by mining, JCM will provide drinking water to the user within 48 hours after such notification. Within two weeks of notification, JCM will have the user hooked up to a temporary water supply. The temporary water supply will be connected to the existing plumbing, if any, and allow the user to conduct all normal domestic usage such as drinking, cooking, bathing, and washing. Within two years of notification, JCM will connect the user to a satisfactory permanent water supply.

If a property owner's water system is replaced and the operating cost is greater than the system in use prior to mining, JCM will offer to compensate the property owner for the additional operating cost by making a lump sum payment as negotiated between the parties.

6. In the event public utility water lines are damaged by subsidence, JCM will compensate the public water authority for repairs to the lines required to correct subsidence damage. The public water authority will be provided with six (6) months advance written notice prior to mining taking place beneath the water lines.

7. In the event power transmission lines are damaged by subsidence, JCM will compensate the utility for repairs to the lines required to correct subsidence damage. The utility will be provided with six (6) months advance written notice prior to mining taking place beneath the lines.

8. Subsidence damage to public roads is not anticipated to exceed beyond minor cracking and separation of pavement. Mitigation measures will be based on recommendations made by the agency having jurisdiction over the road. Typically this involves repairing cracks in the road surfacing. No bridges or tunnels are located within the subsidence limits.

Monitoring. Determination of Subsidence Impacts

JCM will determine the degree to which surface structures and property are affected by subsidence and define a basis for resolution of subsidence damage with property owners as

follows;

1. When JCM notifies the owners and occupants of surface property and structures of future mining beneath their properties, JCM will request permission to access the property and structures to conduct a pre-subsidence inspection of structures and surface features within the prescribed 30-degree angle of draw.
2. If the property owner does not permit JCM to perform a complete pre-subsidence inspection, JCM will notify the owner in writing that it will be their obligation to demonstrate that damage is caused by mine subsidence.
3. The pre-subsidence inspection will include a written, audio, video, and/or photographic record of the existing condition of structures and features.