STATE OF ALABAMA

SURFACE MINING COMMISSION

P.O. BOX 2390 - JASPER, ALABAMA 35502-2390
(205) 221-4130 • FAX: (205) 221-5077

MEMORANDUM

TO: Sherry Wilson
Office of Surface Mining

Mr. Jeff Kitchens
Department of Environmental Management

Mr. Frank White
Alabama Historic Preservation Officer

The District Engineer
U.S. Corps of Engineers

Alabama Department of Industrial Relations
Division of Safety & Inspection

BLM - District Office

State of Alabama
Abandoned Mine Land Reclamation

Dekalb County Commission

U.S. Fish & Wildlife Service

Mr. Keith Guyse, Fish & Game Division

Mr. Mitch Reid - Alabama Rivers Alliance

FROM: JOHNATHAN E. HALL, DIRECTOR

RE: **PERMANENT PROGRAM PERMIT FOR:**

Permit P-3981-28-21-S (John Poe Mine)

Pursuant to the Alabama Surface Mining Commission Regulation 880-X-8K-.12(2), we are hereby notifying you of the issuance of the above permit.

You may also view a copy of this permit at our web address of:

http://surface-mining.alabama.gov/PermitDecisions.html

Enclosed for your information and file is a copy of the permit which shows the legal description of the mine site.

JEH/ml

STATE OF ALABAMA
SURFACE MINING COMMISSION

Permit Number:P- 3981-28-21-S

License Number:L- 837

PERMIT TO ENGAGE IN SURFACE COAL MINING OPERATIONS

Pursuant to **The Alabama Surface Mining Control and Reclamation Act of 1981**, as amended, **ALA. Code** Section 9-16-70 et. seq. (1975) a permit to engage in Surface Coal Mining Operations in the State of Alabama is hereby granted to:

Ridgeholm Energy Partners, LLC
722 Overbridge Lane
Chattanooga, TN 37405
(John Poe Mine)

Such operations are restricted to 143 acres as defined on the permit map and located in:

SE 1/4 of SW 1/4 of Section 20; NW 1/4 of NW 1/4, NE 1/4 of NW 1/4, SW 1/4 of NW 1/4, SE 1/4 of NW 1/4, NW 1/4 of NE 1/4, SW 1/4 of NE 1/4, SE 1/4 of NE 1/4, NE 1/4 of SW 1/4, NW 1/4 of SE 1/4 and NE 1/4 of SE 1/4 of Section 29, all in Township 5 South, Range 9 East, Dekalb County, Alabama.

This permit is subject to suspension or revocation upon violation of any of the following conditions:

1. The permittee shall conduct Surface Coal Mining and Reclamation Operations in accordance with the plans, provisions and schedules in the permit application.

2. The permittee shall conduct operations in a manner to prevent damage or harm to the environment and public health and safety and shall notify ASMC and the public in accordance with ASMC Rule 880-X-8K-.16 of any condition which threatens the environment or public health and safety.

CONDITIONS TO BE PLACED ON PERMIT P-3981-28-21-S

3. Surface coal mining operations are restricted to those areas for which sufficient bond has been posted with ASMC. On the date of issuance of this permit, bond was posted only for Increment(s) 4 consisting of 6 acres as defined on the permit map.

4. No mining disturbance is to occur on any part of the permit on which legal "right of entry" has not been obtained. When such rights are "pending" the applicant shall submit acceptable evidence, to the Director, that such rights have been obtained according to ASMC Regulation 880-X-8D-.07.

5. No disturbance is to occur on any properties on which land use comments from legal owners of record are "pending" prior to the applicant providing acceptable comments.

6. No disturbance is to occur in the 300' setback area to any occupied dwelling prior to the applicant providing acceptable evidence to ASMC of its having secured a waiver of each subject area signed by the owner of the dwelling.

7. No mining disturbance shall occur within the l00' setback of any public road or the relocation of any public road prior to the applicant providing acceptable evidence, to the Director, of its having secured approval for a waiver from the appropriate jurisdictional authority and specific written waiver from ASMC.

8. The permittee shall notify the ASMC and seek consultation with the US Fish and Wildlife Service if:

   a. The permit is modified in any way that causes an effect on species or Critical Habitat listed under the Endangered Species Act of 1973.
   b. New information reveals the operation may affect Federally protected species or designated Critical Habitat in a manner or extent not previously considered or
   c. A new species is listed or Critical Habitat is designated under the Endangered Species Act that may be affected by the operation.

9. The permittee shall contact the ASMC and consult with the Alabama Historic Preservation Officer if the permit is modified or if previously unknown archaeological or historic resources are discovered on the permit area. Upon discovery of previously unknown artifacts or archaeological features the permittee shall cease operations until the Alabama Historic Preservation Officer approves resumption of operations.

10. The permittee can only remove trees within the permitted area from October 15-March 31.

11. Prior to commencement of auger mining within the 100' offsets and beneath DeKalb County Road's No. 675, 676 and 880, an approval from the DeKalb County Commission will be submitted to the ASMC for review. And, upon written approval of accepting the county's approval from the ASMC, auger mining then can occur within the 100' offsets and beneath DeKalb County Road's No. 675, 676 and 880.

CONDITIONS TO BE PLACED ON PERMIT P-3981-28-21-S

12. Monitoring Well REPJPMW1 will be drilled to a depth of 80 feet, surfically cased and monitored from initial disturbance in Increment No. 2 until Phase III Bond Release of that Increment. Well diagram and lithologic log is to be submitted to the Regulatory Authority upon completion.

13. Alkaline addition of 5 tons of crushed limestone is to be added on the pit bottom before overburden is placed.

DATE ISSUED: **April 22, 2016**
EFFECTIVE DATE: **April 22, 2016**
EXPIRATION DATE: **April 21, 2021**

Johnathan E. Hall, Director

FINDINGS FOR PERMIT NO.: P-3981-28-21-S

The ASMC, acting by and through its Director, hereby finds, on the basis of information set forth in the application or from information otherwise available, that --

1. The permit application is complete and accurate and the applicant has complied with all requirements of the Act and the regulatory program.

2. The applicant has demonstrated that reclamation as required by the Act and the regulatory program can be accomplished under the reclamation plan contained in the permit application.

3. The proposed permit area is:

   (a) Not within an area under study or administrative proceedings under a petition, filed pursuant to Chapter 880-X-7 to have an area designated as unsuitable for surface coal mining operations;

   (b) Not within an area designated as unsuitable for mining pursuant to Chapter 880-X-7 or subject to the prohibitions or limitations of Section 880-X-7B.-06 and Section 880-X-7B-.07 of this chapter; or

4. For mining operations where the private mineral estate to be mined has been severed from the private surface estate, the applicant has submitted to the Regulatory Authority the documentation required under Section 880-X-8D-.07 and Section 880-X-8G-.07 of this chapter.

5. The Regulatory Authority has made an assessment of the probable cumulative impacts of all anticipated coal mining on the hydrologic balance in the cumulative impact area and has determined that the proposed operation has been designed to prevent material damage to the hydrologic balance outside the permit area.

6. The applicant has demonstrated that any existing structure will comply with Section 880-X-2B-.01, and the applicable performance standards of Chapter 3 or 10.

7. The applicant has paid all reclamation fees from previous and existing operations as required by 30 C.F.R., Subchapter R.

8. The applicant has satisfied the applicable requirements of Subchapter 880-X-8J.

9. The applicant has, if applicable, satisfied the requirements for approval of a long-term, intensive agricultural, postmining land use, in accordance with the requirements of 880-X-l0C-.58(4) and 880-X-10D-.52(4).

FINDINGS FOR PERMIT NO.: P-3981-28-21-S

10. The operation will not affect the continued existence of endangered or threatened species, or result in destruction or adverse modification of their critical habitats, as determined under the Endangered Species Act of 1973 (16 U.S.C. 1531 et seq.).

11. The Regulatory Authority has taken into account the effect of the proposed permitting action on properties listed or eligible for listing on the National Register of Historic Places. This finding is supported in part by inclusion of appropriate permit conditions or changes in the operation plan protecting historic resources, or a documented decision that the Regulatory Authority has determined that no additional protection measures are necessary.

12. For a proposed remining operation where the applicant intends to reclaim in accordance with the requirements of Section 880-X-l0C-.56 or 880-X-10D.-49, the site of the operation is a previously mined area as defined in Section 880-X-2A-.06.

13. Surface coal mining and reclamation operations will not adversely affect a cemetery.

14. After application approval but prior to issue of permit, ASMC reconsidered its approval, based on the compliance review required by Section 880-X-8K-.10(2)(a) in light of any new information submitted under 880-X-8D-.05(8).

15. The applicant has submitted the performance bond or other equivalent guarantee required under Chapter 880-X-9 of the ASMC Rules prior to the issuance of the permit.

16. For mining operations where a waiver is granted from the 100' setback from a public road according to 880-X-7B-.07, the interests of the public and affected landowners have been protected.

17. The Regulatory Authority has taken into account the effect of the proposed permitting action on properties listed or eligible for listing on the National Register of Historic Places. In a letter dated May 17, 2013, the University of Alabama, Office of Archaeological Research (OAR) conducted a Phase I Cultural Resource Survey in Dekalb County, Alabama from April 2-17, 2013. As a result of the cultural resource survey, a total of 4 new archeological sites were identified, documented and added to the Alabama State Site File (ASSF). The four sites 1Dk164-1Dk167 are not eligible or are recommended as ineligible for the National Register of Historic Places (NRHP). In addition to one isolated find and eleven historic standing structures, Historic Architectural Resources (HAR) 1-11, were documented during the field investigation. Only HAR 3 is recommended as eligible for listing to the NRHP under Criteria A and C. HAR 3 is outside the area of direct impact, and therefore would only be effected visually by the proposed project. The existing vegetation buffer along Smith Gap Road should be retained.

OAR recommends a finding of no properties, as long as the visual buffer is left intact between HAR 3 and the proposed undertaking. By a letter dated July 3, 2013, the State Historical Preservation Office (SHPO), upon review of the cultural resource assessment conducted by the OAR, determined that SHPO agrees with the author's findings. A buffer should be preserved between the mine activities and HAR 3, the farm complex, to reduce the visual impact of the mine. SHPO also agrees that none of the archaeological sites located are eligible for the NRHP and no further archaeological investigations are warranted. Therefore, with the inclusion of a proper buffer for HAR 3, SHPO can concur with the project. The project area has been reduced and HAR 3 is approximately 3000 feet from the southern edge of the permit. This finding is supported in part by inclusion of appropriate permit conditions or changes in the operation plan protecting historic resources, or a documented decision that the Regulatory Authority has determined that no additional protection measures are necessary. Concerns for unknown resources, which might be discovered during mining, have been made conditions of the permit.

18. AST Environmental (AST) conducted a biological habitat assessment for Threatened and Endangered species/critical habitat (T&E) for approximately 1,046 acres located in DeKalb County, near Henagar, Alabama throughout 2013. By a letter dated December 28, 2013, AST stated suitable habitat for listed mussels and fish is limited and marginally present on site. Suitable habitat for plants is present on site; however, it is limited to the stream and wetland areas. Streams located on site will be avoided along with the appropriate buffers. The wetland to be impacted is 3.3 acre cattle mire and not likely to provide suitable habitat for listed plan species. Fish and Wildlife Service (FWS) responded by letter dated January 24, 2014, requesting information on how adverse effects will be avoided for the Indiana, Gray, and Northern long-eared bats, or the results of AST acoustic and/or mist-netting results. FWS also recommended that surveys be conducted, by a qualified botanist, for the Green Pitcher plant and Harperella. AST responded by letter dated February 25, 2014, stating the 3.3-acre wetland to be impacted has been degraded by active cattle activity and that all streams will be avoided during mining operation along with a 200-feet wide buffer centered on each stream. In order to avoid adverse effects to the listed bat species tree removal will be limited to a period from October 15-March 31. By letter dated March 4, 2014, FWS concurred with the AST assessment that habitat that may have existed for the two plant species appears to have been degraded or destroyed and the project is not likely to affect the two plant species. FWS states the previous assessment supported that there was no suitable habitat (caves, karst) for the gray bat to exist on site and the proposed project is not likely to affect the gray bat. Based on the tree clearing dates of October 15-March 31, FWS concurs the proposed action may affect, but is not likely to adversely affect, the endangered Indiana bat and proposed northern long-eared bat. In a letter to FWS dated June 18, 2014, Earthcon Consultants, Inc. requested that Dan Spaulding perform a bat specific habitat study for the reduced permit area of approximately 283 acres. Dan Spaulding, Environmental Consultant, conducted a habitat assessment between June 7-16, 2014, for the Indiana and Northern Long-Eared bats as requested for the

approximately 283 acres as requested by Earthcon. Mr. Spaulding stated that no suitable habitat was located in the project area and no bats were observed. FWS responded by letter on July 1, 2014, that Mr. Spaulding's June report was not sufficient to support his stated opinion that there was not suitable habitat for the Indiana bad and northern long-eared bat. FWS e-mailed Mr. Spaulding on June 30, providing a description of suitable habitat for the Indiana bat. Mr. Spaulding responded on July 1, stating that, given the habitat description provided, there was, in fact, suitable habitat for the Indiana bad and the northern long-eared bat on the project site. FWS states that if Ridgeholm Energy Partners, LLC, carries out tree removal for this project between October 15 and March 31, FWS will concur that the proposed project is not likely to adversely affect the Indiana bat. In a letter dated April 17, 2014, the Alabama Department of Conservation and Natural Resources (ADCNR) Wildlife and Freshwater Fisheries Division states it does not appear that this project will adversely affect any state-or federally protected species. ADCNR by letter dated July 21, 2015, states the closest sensitive species as occurring approximately 0.7 miles from the project site and suggested a biological survey be conducted by trained professionals to ensure that no sensitive species are jeopardized by the development activities. In a letter dated, March 16, 2015, by File Number: LRN-2013-00629 the US Army Corps of Engineers (USACE) states an Army permit would not be required for the proposed work within the current mining permit area. The ASMC finds that the proposed operation will not jeopardize the continued existence of endangered or threatened species or critical habitat thereof.

19. The proposed permit area is:

    a. Not within an area under study or administrative proceedings under a petition, filed pursuant to Chapter 880-X-7 to have an area designated as unsuitable for surface coal mining operations.
    b. Not within an area designated as unsuitable for mining pursuant to Chapter 880-X-7 or subject to the prohibitions or limitations of Section 880-X-7B-.06 and Section 880-X-7B.-07 of this chapter.

BASED ON THESE FINDINGS, I RECOMMEND THAT THIS PERMIT BE ISSUED.

DATE: April 22, 2016

Mark Woodley

Mark Woodley, Permit Manager

/ml
cc: I & E, Permit File

CUMULATIVE HYDROLOGIC IMPACT ASSESSMENT

Permit Number P-3981 **NPDES AL0082252**
Ridgeholm Energy Partners **HUC 06030001-250**
John Poe Mine

As required under Federal Public Law 95-87, Section 510(b)(3), the Alabama Surface Mining Commission (ASMC) must find in writing the following proposed operation has been designed to prevent material damage to the hydrologic balance outside the permit area. The applicant must submit a determination of probable hydrologic consequences of mining and reclamation operations in Part II.H of the permit application for areas both on and off the mine site. This determination will allow the ASMC to assess probable cumulative impacts of all anticipated mining activities on the surface and ground water hydrology of the permit and adjacent areas as stated in Federal Public Law 95-87, Section 507(b)(11) and ASMC Rule 880-X-8E-.06(1)(g). The following assessment and findings are intended to fulfill the above.

I. GENERAL INFORMATION

The Ridgeholm Energy Partners, LLC (P-3981) John Poe Mine is for a surface coal mining encompassing 259 acres in Dekalb County. The proposed mine site is located in parts of Sections 20 and 29, Township 5 South, Range 9 East, Dekalb County, Alabama. The site is bound by Biddle Spring to the east, Dekalb County Road 114 to the south, Dekalb County Road 375 to the west and a portion of Biddle Creek to the north. Map No. 1 shows the permit area.

Geology of the Warrior Coal Field

The Pottsville Formation of Early and Middle Pennsylvanian age in Alabama is divided into four fields: the Warrior, Cahaba, Coosa and Plateau fields. All fields were once connected by an unbroken area of coal measures, however separation occurred as a result of folding, faulting and erosion of uplifted areas.

The Warrior coal field is a gently folded or flat-lying area classified as the Cumberland Plateau. It lies in a large, gentle monoclinal structure that extends west into central Mississippi. The regional dip is towards the southwest. This regional southwest dip is interrupted by two anticlines (the Blue Creek anticline and the Sequatchie anticline) and three synclines or basins (the Blue Creek basin, Coalburg syncline and Warrior syncline).

The Warrior field has numerous normal faults that trend north and northwest up to 4 miles in length with up to 200 feet of displacement ("Geology of Coal Resources of the Coal-Bearing Rocks of Alabama, Alabama Geological Survey Bulletin 1182-B").

During the beginning of the Pennsylvanian age (approximately 320 million years ago), most of Alabama was still part of a shallow, warm ocean basin. The transgressions and regressions of the

seas lead to the rhythmic cycle of sandstone, underclay, coal beds, and shale with zones of marine and brackish water fossils that rest on the basal resistant conglomerate orthoquarzite of the Boyles Sandstone F ormation. This sequence immediately repeats itself with similar rocks (marine shale, sandstone or clay, coal seam, freshwater shale and sandstone). This appears to show the rise of sea level, depositing marine sediments, then the falling of sea level allowing the coal producing forests to grow. This was followed by an influx of river deposited sands and muds, which would rapidly accumulate plant material. Then, the sea would rise again repeating the process.

At the end of the Pennsylvanian, the uplift of the region left the coal bearing ecosystem behind. During this periods of uplift, no new sediments could be deposited for at least 200 million years. The gap in time between the Pennsylvanian deposition and the Cretaceous deposition resulted in an unconformity that allows for surface coal mining to exist in the Alabama coal fields.

II. CUMULATIVE IMPACT AREA (CIA)

The Cumulative Impact Area (CIA) is that area, including the permit area, within which impacts resulting from the proposed operation may interact with the hydrologic impacts of all other past, current and anticipated coal mining on the surface and groundwater systems.

There is no cumulative impact as defined above. This is the only permit in the area. As such, there no cumulation of impacts from other mining in the area.

Active or Proposed Mines

There are no active or proposed mines in this area at this time.

A. Geologic/Hydrogeologic Information

i. Geology

The proposed P-3981 permit area is located in the Cumberland Plateau of the Warrior Coal Basin. According to the "Depositional Settings of the Pottsville Formation in the Black Warrior Basin", the Plateau Coal Field is a small, transitional basin which connects the Black Warrior Basin with smaller basins in southeastern Tennessee. The Pottsville Formation underlies and outcrops in this region, which is of Pennsylvanian Age.

Locally, the strata which outcrops in the immediate vicinity of the John Poe Mine site includes sandstones, shales, underclays and coal seams associated with the Upper Cliff coal seams. The target seams at this site include the Upper Cliff seams and the Underwood seam.

Overburden analysis was conducted on a total of four drill holes within the permit area. The analysis was run to determine the potential for acid- and toxic-forming properties. Potentially acid- and toxic-forming materials are those that exhibit a pH of less than 4.0 s.u. or a deficiency in calcium carbonate equivalent of at least 0.0 tons per 1,000 tons of

material (T/KT). Samples were collected every 5 feet or change in lithology and analyzed for pH (paste), total sulfur, potential acidity, neutralization potential and fizz rating. Results of analysis show that the overburden at the John Poe Mine contains +2.96 tons $CaCO_3$/1000 tons overburden excess neutralization potential. While this numerically is not considered acid-toxic forming, it is a borderline neutralization potential which will require additional liming.

ii. Surface Water

The permit area is located in the Town Creek drainage basin and is drained by an unnamed tributary to Town Creek, and unnamed tributary to Biddle Spring Branch and by Biddle Spring Branch. Biddle Spring Branch drains to Town Creek. It is located in sub watershed 250 of HUC 060300014. Four basins are proposed for this site, and three surface water monitoring sites have been established for performance monitoring on this permit.

To characterize the existing quality and quantity of water within the above-mentioned stream, baseline data was obtained and submitted in the permit application. Baseline water quality was characterized from nine sites surrounding the original permit, however since the submittal of the original permit application, the size of the permit has been downsized.

Post-Mining water quality and quantity estimates are based on several factors:

1. Baseline surface water quality
2. Estimated impact during mining
3. Size of the permit area compared to the impacted watershed
4. Amount of previous mining within the watershed

Impact from these mines will best be seen in surface water monitoring site TC-DN2 downstream on Town Creek. See Map No. 2 for surface water monitoring locations.

iv. Ground Water

Groundwater in the Warrior Basin occurs in fractures and along bedding planes in the Pottsville Formation. The sandstone beds within 250 to 350 ft. of the surface generally contain the most productive water-bearing openings. Regionally, the primary source of recharge to groundwater is rainfall, which averages 54 inches per year. According to the U.S. Geological Survey Report: Geohydrology and Susceptibility of Major Aquifers to Surface Contamination in Alabama; Area 2 Water-Resources Investigations Report 88-4177 , the Pottsville aquifer is tightly cemented and has small primary porosity and permeability, and the yields of public water for wells completed in this aquifer are less than 0.15 Mgal/d (million gallons per day). This aquifer is also commonly high in iron.

Domestic Wells

A well inventory conducted in March, 2013 showed 84 structures or residences within a ½ mile radius of the mine site.

Company Installed Wells

To characterize existing groundwater conditions at the site and adjacent, six groundwater monitoring sites were utilized for information. These include monitoring wells X-1, X-3B, X-9R2, X-10, X-14 and X-15. These wells covered the initial permit area, which was much larger than the area currently being permitted. Groundwater potentiometric maps were included in the application. They show consistent water levels over several months as well as a shallow groundwater table.

Well locations that will be used for performance monitoring can be seen in Map No. 2. They include wells X-1, X-9R, X-3B and REPJPMW1, which will be added upon disturbance in Increment No. 2

There are no known wellhead protection zones or public water supply wells in or within 1,000 feet of the proposed permit area.

See Map No. 2 for groundwater monitoring locations.

B. Coal Processing Waste

Coal processing waste (gob and slurry) will not be generated or disposed of at the site.

C. Material Damages

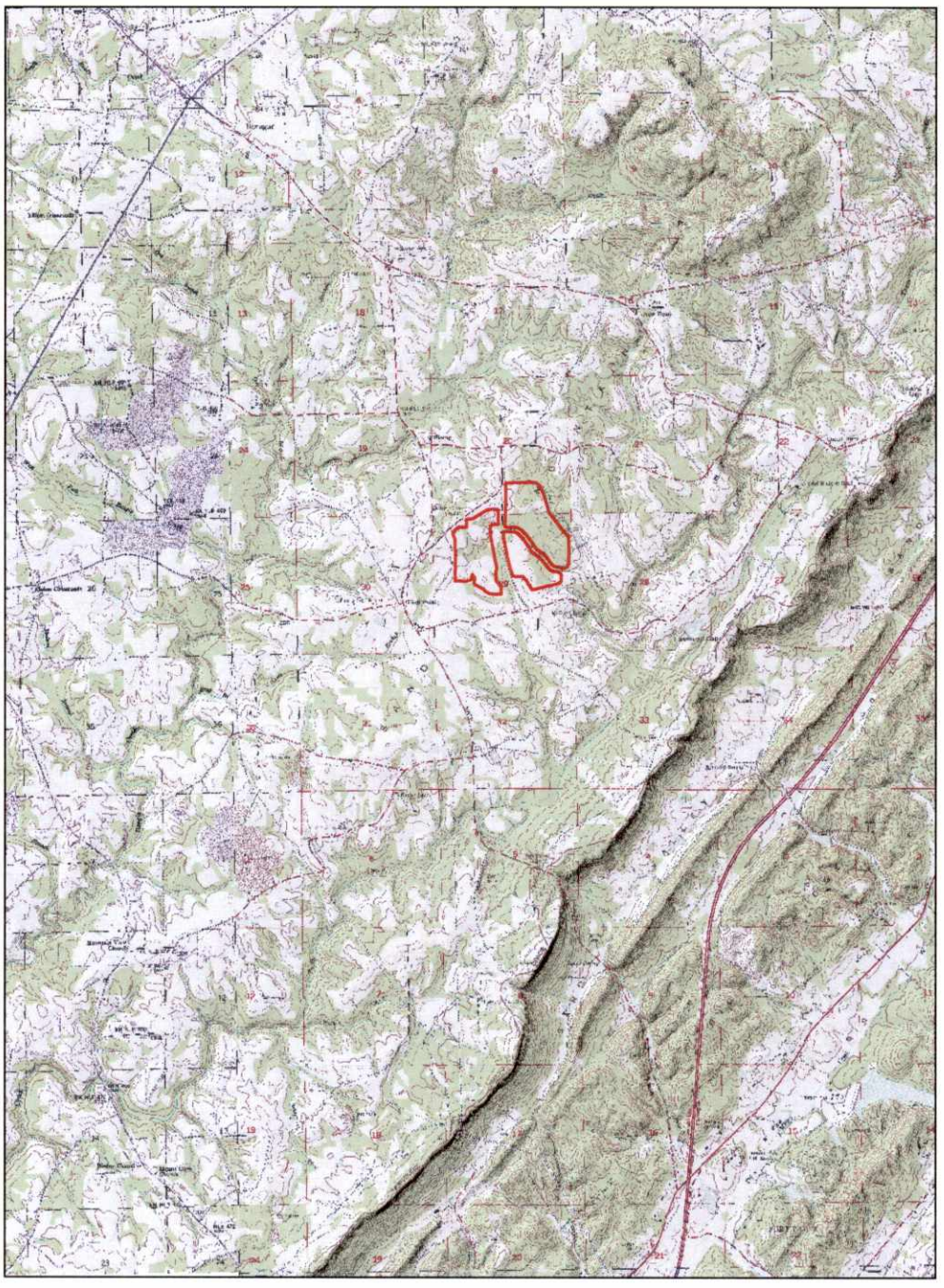
"Material Damage" is not defined in SMCRA or at 30 CFR §701.5. The intent of not defining "material damage to the hydrologic balance" is for regulatory authorities to develop a definition based on regional environmental and regulatory conditions. It can be considered a long term effect on the hydrologic balance by the mining operation that prevents the reasonable foreseeable future use of surface or ground water from supporting its current, potential or existing use outside of the permit area.

With respect to the CHIA, material damage to the hydrologic balance means quantifiable changes to the hydrologic balance caused by surface mining and reclamation operations to the extent that these changes would significantly affect present or potential uses as designated by the regulatory authority and that cannot be mitigated by reclamation or provision of alternate water supplies. This includes the hydrologic impact that results from the cumulation of flows from all coal mining sites in a cumulative impact area. Examples of material damage are: permanent destruction of a major regional aquifer; temporary contamination of an aquifer in use that cannot be mitigated; and solute contributions to streams above receiving stream standards.

A CHIA is based on the best currently available data and is a prediction of mining-related impacts to the hydrologic balance. Permittees (and permit applicants) are required to monitor water quality and quantity. Exceeding material damage thresholds might also cause significant reduction of the capability of an area to support aquatic life, livestock and wildlife communities.

P-3981 Map No. 1

1

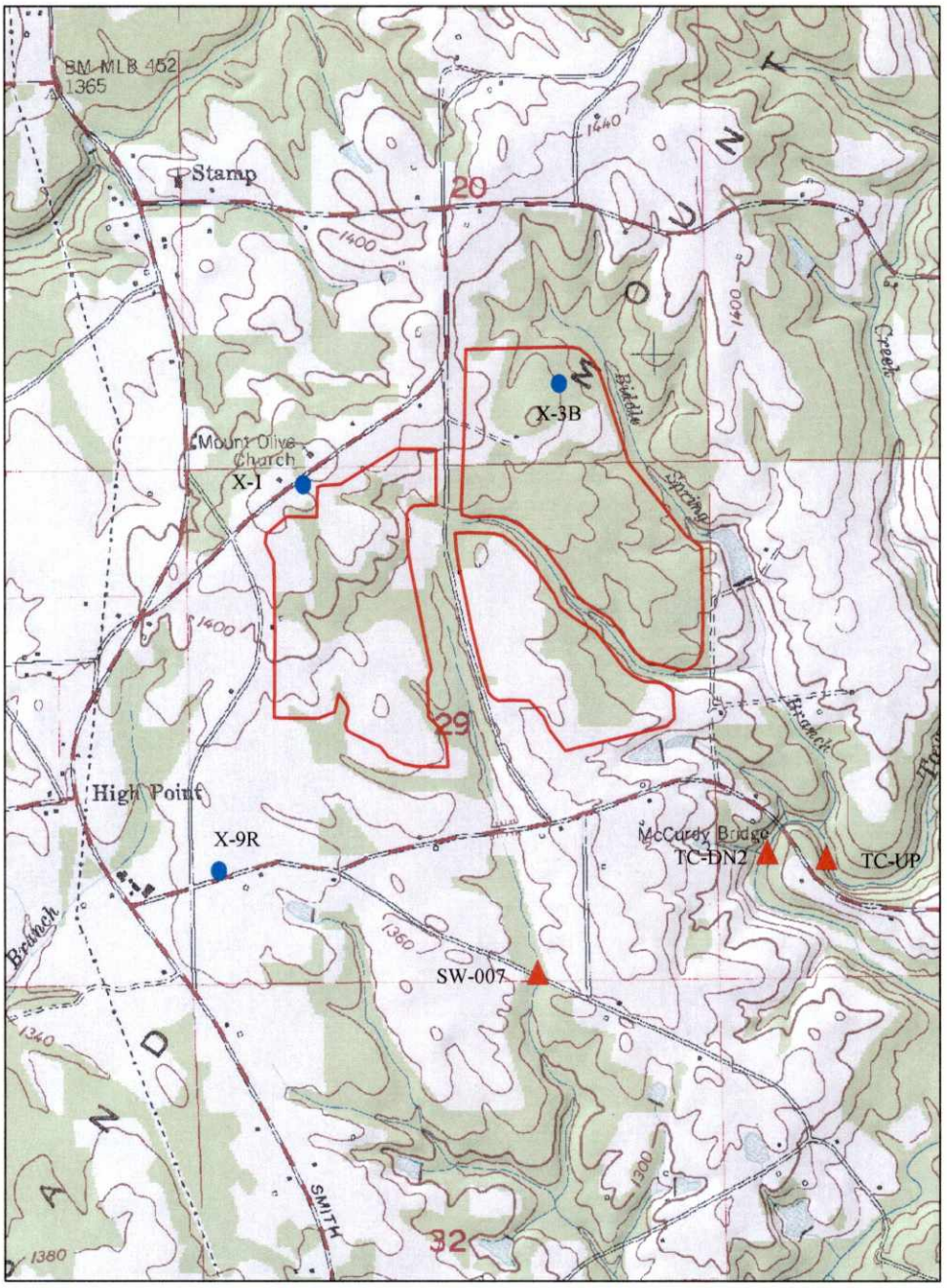


USGS Shaded Relief Mosaic and Dugout Valley USGS Quad. 0 0.325 0.65 1.3 1.95 2.6 Miles

Permit Boundary

P-3981 Map No. 2

1



USGS Shaded Relief Mosaic and Dugout Valley USGS Quad.

0.075 0.15 0.3 0.45 0.6 Miles

Permit Boundary

Surface Water Site

Groundwater Monitoring Site