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PERMITTING AND  
RECLAMATION DEPT.

# AMERICAN COLLOID COMPANY

*KUDLOCK/McAMIS SMALL SCALE MINING PERMIT  
for Access Road*

*Butte County, South Dakota*

*Request for Determination of Special,  
Exceptional, Critical or Unique Lands*

*June, 2013*

PMB 2020  
Department of Environment and Natural Resources  
Minerals and Mining Program  
523 E Capitol Ave  
Pierre, SD 57501-3182  
Telephone: (605) 773-4201 Fax: (605) 773-5286

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REQUEST FOR DETERMINATION  
SPECIAL, EXCEPTIONAL, CRITICAL,  
OR UNIQUE LANDS AND NOTICE OF  
INTENT TO OPERATE

Name of Operator American Colloid Company

Office Address 2870 Forbes Avenue  
Hoffman Estates, IL 60192

Telephone 1-800-426-5564

Local Address P. O. Box 2010  
Belle Fourche, SD 57717

Telephone (605) 892-7150

Legal Description portions of Sections 3 and 4, Township 9 North, Range 1 East  
and portions of Sections 33, 34, and 35, Township 10 North,  
Range 1 East, Butte County, South Dakota - see attached Metes  
and bounds legal descriptions

County Butte

Name and Address of Surface Owner

Sharon Kudlock and Kenneth N. Kudlock Family Trust, 11052 Kudlock Lane,  
Belle Fourche, SD 57717  
Steve and Renee McAmis, P.O. Box 754, Belle Fourche, SD 57717

Name and Address of Mineral Owner

Bob Shear, 17819 Prairie Winds Lane, Belle Fourche, SD 57717  
Sharon Kudlock, 11052 Kudlock Lane, Belle Fourche, SD 57717  
Norman Durr, 18681 Durr Lane, Belle Fourche, SD 57717

Name and Address of Surface Owners Within 500 Feet of the Proposed Mining Operation

Sharon Kudlock and Kenneth N. Kudlock Family Trust, 11052 Kudlock Lane,  
Belle Fourche, SD 57717  
Steve and Renee McAmis, P.O. Box 754, Belle Fourche, SD 57717  
John J. and Glenda Nikodym, 2235 Willow Creek Road, Belle Fourche, SD 57717  
American Colloid Company, P.O. Box 2010, Belle Fourche, SD 57717  
BLM, Miles City Field Office, 111 Garryowen Rd., Miles City, MT 59301  
**I declare and affirm under the penalties of perjury that this claim (petition, application, information) has been  
examined by me, and to the best of my knowledge and belief, is in all things true and correct.**

Signature Melody Smith

Title Environmental Specialist Date 7/5/2013

**FOR DEPARTMENT USE ONLY**

The land described in this Request for Determination of Special, Exceptional, Critical, or Unique Lands and Notice of Intent to Operate ( ) is ( ) is not eligible for inclusion on the list of special, exceptional, critical, or unique lands.

\_\_\_\_\_  
**Secretary, Department of Environment and Natural Resources**

Date \_\_\_\_\_

Operator Appeal Date \_\_\_\_\_

Intervenor Contest Date \_\_\_\_\_

The land described in this Request for Determination of Special, Exceptional, Critical, or Unique Lands and Notice of Intent to Operate ( ) is ( ) is not eligible for inclusion on the list of special, exceptional, critical, or unique lands.

\_\_\_\_\_  
**Chairman, SD Board of Minerals and Environment**

Date \_\_\_\_\_

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## Legal Descriptions for Kudlock/McAmis Small Scale Mining Permit (Access Road)

*the following legal descriptions identify lands under private ownership that will be included in a Small Scale Mining Permit that will allow for the development of an access road between the Shear/Clarkson East and Kudlock mine sites. The road will be used for moving mine equipment between the mine sites but WILL NOT be used for hauling bentonite, nor will any mining be allowed under this Small Scale Permit.*

*A 150'-wide corridor will be permitted which will allow for a 35'-wide access road and associated topsoil piles. Total acreage to be permitted = 20.6 acres. Total acreage proposed for disturbance = 6.0 acres.*

### Township 9 North, Range 1 East, Butte County, South Dakota

#### *Kudlock ownership:*

##### Section 12:

- a portion of the NE4SW4
- a portion of the NE4SE4SW4
- a portion of the SW4SE4

#### *McAmis ownership:*

- a portion of the S2S2SE4SE4

### Township 9 North, Range 2 East, Butte County, South Dakota

#### *Kudlock ownership:*

##### Section 7:

- a portion of the SW4SW4SW4SW4

##### Section 18:

- a portion of the NW4NW4NW4

### **Metes and Bounds for Kudlock/McAmis Small Scale Mining Permit (Access Road)**

Commencing at the rock marker at the west quarter corner of Section 12, Township 9 North, Range 1 East, Butte County, SD, thence North 89 degrees, 10 minutes, 38 seconds East a distance of 1,807.29 feet which is the point of beginning of an access road corridor which lies 75' on either side of the following described centerline:

Thence South 16 degrees, 47 minutes, 12 seconds East a distance of 245.84 feet  
Thence South 12 degrees, 1 minute, 1 second East a distance of 237.09 feet  
Thence South 21 degrees, 59 minutes, 11 seconds East a distance of 174.14 feet  
Thence South 31 degrees, 28 minutes, 54 seconds East a distance of 206.62 feet  
Thence South 40 degrees, 22 minutes, 7 seconds East a distance of 776.56 feet  
Thence South 41 degrees, 20 minutes, 38 seconds East a distance of 160.48 feet  
Thence South 8 degrees, 46 minutes, 53 seconds East a distance of 93.23 feet  
Thence South 7 degrees, 1 minute, 39 seconds East a distance of 575.37 feet  
Thence South 42 degrees, 10 minutes, 38 seconds East a distance of 451.55 feet  
Thence North 89 degrees, 9 minutes, 30 seconds East a distance of 2,250.66 feet  
Thence South 83 degrees, 49 minutes, 0 seconds East a distance of 26.12 feet  
Thence South 63 degrees, 43 minutes, 21 seconds East a distance of 34.40 feet  
Thence South 44 degrees, 45 minutes, 51 seconds East a distance of 42.14 feet  
Thence South 24 degrees, 17 minutes, 50 seconds East a distance of 38.64 feet  
Thence South 4 degrees, 7 minutes, 57 seconds East a distance of 48.06 feet  
Thence South 0 degrees, 0 minutes, 44 seconds West a distance of 630.79 feet to the end point in the NW4NW4, Section 18, T9N, R2E, totaling 5,991.69 feet in length.

**GENERAL DESCRIPTION OF THE TYPE OF MINING OPERATION  
PROPOSED AND HOW IT WOULD BE CONDUCTED**

ARSD 74:29:10:03 (5)

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American Colloid Company (ACC) is applying for a small scale mining permit (the Kudlock/McAmis Small Scale Mining Permit ) to build an access road between the Shear/Clarkson East Permit #471 and the Kudlock Permit #469 mine sites.

The road will be about 1.1 miles in length and will eliminate the need for ACC to load scrapers and dozers onto trailers and truck them down Highway 212 when moving from site to site, a time consuming and costly task (the cost to ACC is several thousand dollars each time the equipment is moved by truck and trailer on the highway). Road use will be limited and occasional and will not be year round although it could occur at any time of the year.

The small scale permit will cover 20.6 acres on private land in Section 12, T9N, R1E and Sections 7 and 18, T9N, R2E, Butte County. See the Legal Descriptions page at the front of this document.

The location is 6-7 miles northwest of Belle Fourche and approximately ½ mile north of Highway 212.

Actual affected acreage will be about 6 acres for a 35'-wide access road and associated topsoil piles.

Topsoil will be stripped and placed in temporary stockpiles along the road. The road will be bladed to have a 15'-wide top and 10'-wide ditches with 3:1 slopes that will contain water runoff along the roadway. If necessary, culverts will be placed to allow flow to continue in its natural drainage.

The road will be constructed along an existing two-track trail and across pasture land and will be used for moving mining equipment (scrapers and dozers and sometimes dozers on trailers) between the Shear/Clarkson East and Kudlock mine sites but will **not** be used for hauling bentonite. The length of use of the road could be up to 15 years, depending on customer clay needs at the associated mine sites.

Following its use as a mine access road, the road will be reclaimed unless the landowners request that it remain as a two-track trail. In that case, the road will be reduced in width, and the edges reclaimed and seeded.

**DEFINING IF LAND IS SPECIAL, EXCEPTIONAL, CRITICAL, OR UNIQUE**  
ARSD 74:29:10:03 (6) and SDCL 45-6B-33.3

Environmental baseline studies do not indicate that the land covered by the Kudlock/McAmis Small Scale Mining Permit (for an access road) is special, exceptional, critical or unique.

The access road will be built along an existing trail and across pasture land that does not appear to be ecologically fragile. Plant and wildlife species here are adapted to withstand wide ranges of fluctuation in temperature, moisture, sunlight, and wind. It is not expected that the proposed access road and its limited and occasional use will have a strong influence on the total ecosystem.

Plant and wildlife species are similar to those observed in the general bentonite region of northeastern Wyoming and the Belle Fourche, South Dakota area.

Vegetation

The access road site is similar to surrounding land. The road will follow an existing trail and across pasture land in an upland mixed grass prairie community that is similar in species composition, diversity, and amount of cover to that on adjoining lands.

Vegetation mapping and cover sampling was performed on adjoining lands for the Shear/Clarkson East Permit #471 in 2006 and for the Kudlock Permit #469 in 2001 and is representative of the plant species and amount of cover seen along the proposed access road.

On the Shear/Clarkson East project, absolute canopy cover averaged 27.9% with 52.4% litter and rock, and 30.6% bare ground. On the Kudlock project, absolute canopy cover averaged 30.6% with 44.2% litter and rock, and 42.4% bare ground.

Sample data shows that the following grasses are dominant in the mixed grass prairie on these sites: Western wheatgrass, Wheatgrass species, Japanese brome, Buffalo grass, Blue grama, Prairie Junegrass, and Green needlegrass, all common grasses on native rangeland.

As noted in an independent vegetation study conducted by Plant Ecologist, Dr. Warren Keammerer (Boulder, CO), in 1987 for the northeastern Wyoming bentonite region, the above species and amount of cover are typical for native lands in the area.

No plants species which are listed by the U. S. Fish and Wildlife Service as being threatened or endangered were encountered on the project.

Land use of the proposed permit land has been primarily as rangeland for cattle grazing, and grazing pressure is moderate for a few weeks in the summer.

### Soils

Soils studies were performed in 2001 for the Kudlock Permit and in 2006 for the Shear/Clarkson East Permit. Soils were mapped and sampled for various chemical properties. From this data, determinations were made about the depths of available topsoil.

Lohmiller clay was mapped in the south area of the proposed road and Twotop clay on the north side. These soils are not considered to be unusual or unique.

The topsoil recommendation for both soils is 10".

Range sites associated with these soils are Clay and Pierre Shale Plains. These range sites are not considered to be unusual or unique.

### Water Resources

There are no special, exceptional, critical, or unique water resources associated with the proposed road which will run for the most part along the top of a relatively level ridge that breaks off at the north and south ends. Surface water resources consist of weak ephemeral drainage at both ends of the road that may contain run-off during precipitation events or snow melt.

Groundwater will not be impacted by the access road.

No drinking water wells are located on the project.

### Wildlife

The wildlife habitats along the proposed access road and in the area are typical of the region, and no special, exceptional, critical, unique, or unusual wildlife features were identified.

The most common big game species seen in the area is the Pronghorn with most sightings on sagebrush flats about ½ mile southwest and south of the ridge where the access road will be located. White-tailed deer sightings are common along Crow Creek which is about ¾ to 1 mile northeast of the project.

Thunderbird Wildlife Consulting (Gwyn McKee, Project Manager, Gillette, WY) was contracted by ACC to perform raptor nesting surveys for the proposed

permit. Surveys were conducted in coordination with the South Dakota Dept. of Game, Fish & Parks (Stan Michals, Rapid City, SD) and were concentrated along the Crow Creek corridor.

ACC personnel also conducted bald eagle winter roost surveys along Crow Creek.

Attached is a summary of the bald eagle roost surveys and raptor nest surveys for 2013.

The bald eagle was removed from the endangered and threatened species list by the USFWS in July, 2007. The bird is an occasional winter visitor along the Crow Creek drainage but was not observed near the proposed access road. Two bald eagles were seen on one occasion during the winter roost survey, and they were located about 4 miles northwest of the proposed Kudlock/McAmis road.

One active Red-tailed hawk nest was documented in 2013, in the SW4SW4NE4, Section 17, T9N, R2E, about 1 ½ miles east of the proposed road.

Raptor species seen hunting within one mile of the proposed road include Golden eagle, Red-tailed hawk, Northern harrier, American kestrel, Great horned owl, Short-eared owl, Rough-legged hawk, and Bald eagle, none of which are unusual for the area.

Small mammals which have been noted in the vicinity of the proposed road include Red fox, Coyote, White-tailed jackrabbit, Deer mouse, Western harvest mouse, and Thirteen-lined ground squirrel, all common species.

No threatened or endangered species were encountered on the study area by Thunderbird Wildlife or ACC biologists.

ACC's final assessment is that no significant impacts to wildlife are anticipated by building of and occasional use of the proposed access road.

**Environmental baseline studies do not indicate that the proposed permit land has significant scenic, historic, archaeological, topographic, geologic, ethnologic, scientific, cultural, or recreational nature, as further described below:**

#### Scenic

The Kudlock/McAmis Small Scale Mining Permit (for an access road) is located along a two-track trail and across cattle pasture that is similar to surrounding lands and does not exhibit unique scenic or aesthetic qualities.

The proposed access road will be on a ridge about ½ mile north of Highway 212 and will be visible to motorists and ranchers in the area but should not have a strong impact because use will be limited and occasional.

The nearest residents are Steve and Renee McAmis who live approximately 1 mile east of the proposed road.

#### Historic and Archaeological

Llano Consultants (principal investigator, Jack Savini, Casper, WY) was contracted by ACC to conduct an extensive field survey of the proposed permit land with attention to any archaeological, historic, ethnologic, or cultural remains. The work was completed in 2013, and no resources were discovered. See the attached survey report.

#### Topographic

The proposed access road lies along the top of a northwest-trending ridge spur. Topography ranges from relatively flat on the top to moderately sloping off the sides. Elevations range from approximately 3,180' to 3,260'.

There is nothing significant or unique about the topography on the project.

#### Geologic

Geologic formations will not be affected by building of the access road. No mining will occur along the road. As recommended by previous soils surveys in the area, about 10" of topsoil is available for salvage along the proposed road. Soils will be temporarily stored in stockpile piles along the road and will be respread during road reclamation.

#### Ethnologic

There are no known ethnologic concerns on the proposed project.

### Scientific

Baseline vegetation, wildlife, and soils studies in the area did not indicate any unique scientific characteristics, nor have any threatened or endangered plant or wildlife species been observed.

Soils surveys in the area indicate that 10" of topsoil is available for salvage along the proposed road. Lab analyses of the soil samples did not reveal any unusual soil properties. The soil resources will be salvaged during road construction and replaced during reclamation activities.

No wetlands or water wells will be affected by the proposed access road.

### Cultural

There are no known cultural concerns on the proposed permit land as concluded from Llano Consultants' Class III survey on the project in 2013.

### Recreational

Primary land use on the proposed permit land has been for livestock grazing, and there are no unusual or aesthetic features which would suggest it be classified as a recreational site. There are no trees and no water resources within the permit boundary.

Recreational use is limited to deer and antelope hunting which is restricted by the private landowners.

Reclamation activities will restore the land to grassland pasture or to a two-track trail if desired by the landowners.

American Colloid Company  
Crow Creek Raptor Surveys  
Butte County, SD  
2013

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### BALD EAGLE ROOST SURVEYS

<u>Date</u>	<u>Survey Route</u>	<u>Results</u>	<u>Location</u>
1/13/2013	Crow Creek corridor	1 bald eagle in cottonwood	SE4SW4, Section 27, T10N, R1E
1/25/2013	Crow Creek corridor	1 bald eagle in cottonwood 1 bald eagle on ground	SE4SW4, Section 27, T10N, R1E SE4SW4, Section 27, T10N, R1E
2/8/2013	Crow Creek corridor	no bald eagles seen	
2/19/2013	Crow Creek corridor	no bald eagles seen	

### RAPTOR NEST SURVEYS

<u>Date</u>	<u>Survey Route</u>	<u>Results</u>	<u>Location</u>
NOTE: 3 major April snow storms			
4/4/2013	on ridges above Crow Creek	no raptor nesting activity observed	
NOTE: major precipitation events in May			
5/2/2013	aerial survey	red-tailed hawk incubating	SW4SW4NE4, Section 17, T9N, R2E
5/12/2013	on ridges above Crow Creek	no raptor nesting activity observed	
5/9/2013	on ridges above Crow Creek	no raptor nesting activity observed	
6/5/2013	Crow Creek corridor - E side	active red-tailed hawk nest in cottonwood	SW4SW4NE4, Section 17, T9N, R2E
6/6/2013	Crow Creek corridor	no other nesting activity observed	
	prairie dog town	burrowing owl	SW4SE4NE4, Section 33, T10N, R1E
6/13/2013	Crow Creek corridor	2 young in red-tailed hawk nest	SW4SW4NE4, Section 17, T9N, R2E
	prairie dog town	no sightings of burrowing owls	SW4SE4NE4, Section 33, T10N, R1E

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## APPENDIX D-3

# CULTURAL RESOURCES

## ABSTRACT

A files and document search was conducted for the American Colloid Company, Kudlock/McAmis Small Scale Mining Permit for an Access Road, Project, a proposed mine permit amendment including one inventory blocks totaling 20.6 acres in Butte County South Dakota .Ownership is all private surface. The files search sources were the South Dakota Historical Society State Preservation Office Records.

Project authorization was obtained and field work begun in May 9, 2013

The files search yielded previous inventories in the general vicinity to the current project block. A previous Class III inventory in 2001 covered the most easterly 300 feet of the project or 1.1 acres. The project was conducted by this author, is an acceptable survey and found no cultural resource within or near the current project boundaries

The project legal description and the SDSHS-SHPO files search printout are provided in Appendix One.

A Class III pedestrian inventory was conducted on 20.6 acres, the archaeology review to be administered by the South Dakota State Historical Society Archaeological Research Center in Rapid City, South Dakota and the State Historic Preservation Office in Pierre, South Dakota. The field inventory and research were completed May 11, 2013.

No new cultural sites or isolated finds were discovered by this inventory. No newly discovered or known cultural resources recommended as eligible for listing on the National Register of Historic Places occur in the project Area of Potential Effects. It is the authors opinion that there will be "No Historic Properties Affected " by the current project as planned.

The project is recommended to proceed with no further archaeological investigations.