

# ENVIRONMENTAL ASSESSMENT

## Area 54 Reclamation Project Abandoned Mine Land Reclamation Project PAD # KS-0054



Cherokee County, Kansas

Prepared by  
Kansas Department of Health and Environment  
Surface Mining Section



In Cooperation with  
United States Department of the Interior  
Office of Surface Mining Reclamation and Enforcement  
Tulsa Field Office  
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## Table of Contents

Section 1: Project Description Narrative.....	3
A. Description of the Proposed Action.....	3
B. Need for the Proposed Action.....	3
C. Alternatives Considered.....	4
D. Affected Environment.....	8
E. Environmental Impacts of the Proposed Alternatives.....	11
F. Summary.....	15
G. Persons and Agencies Contacted to Assist in the Preparation of the Environmental Assessment.....	16
H. Preparer.....	16
References/Correspondence.....	Sections 2-6
Section 2:	Consultation Letters/No Permit
Section 3:	Consultation Letters/Permit
Section 4:	Location Maps
Section 5:	Site Photographs
Section 6:	Construction Drawings (half scale)

**Area 54 KS-0054**  
**Section 33, Township 32 South, Range 22 East**  
**Cherokee County, Kansas**

**Section 1: Project Description Narrative**

**A. Description of the Proposed Action**

The Kansas Department of Health and Environment (KDHE), Surface Mining Section (SMS), has developed an abandoned mine land reclamation project, hereafter referred to as the Area 54 Reclamation Project. Funding will be from abandoned mine land grant monies awarded to the State of Kansas by the United States Department of Interior, Office of Surface Mining Reclamation and Enforcement (OSM). The OSM Tulsa Field Office Director, must issue an authorization to proceed with the Area 54 Reclamation Project in order to accomplish the purpose described below.

The purpose of the Area 54 Reclamation Project is to eliminate the public health and safety problems associated with Priority 2 dangerous highwalls and Priority 2 spoil areas at the location of the project in Section 33, Township 32 South, Range 22 East, in Cherokee County, Kansas and as located on the U.S.G.S Hallowell and Oswego, Kansas 7.5 minute quadrangles. There is one general project area which has been identified in the AML Inventory as Problem Area Description (PAD) # KS-0054 (**37.216479°**, **-95.006731°**). The problem area is the result of surface mining of the Mineral, Fleming and possibly Croweburg coal seams.

The Area 54 Reclamation Project will involve site specific solutions to eliminate safety hazards. Work will be done to alleviate the hazards associated with the highwalls adjacent to the interior roads on Kansas Department of Wildlife, Parks and Tourism (KDWPT) Mined Land Wildlife Area (MLWA) 24 with some minor work being conducted along Cherokee County road NW 100th Street. Various water control structures will be installed as needed to implement the reclamation plan. All disturbed areas will be revegetated with appropriate species. Erosion control devices will be placed and remain in place until acceptable vegetative cover has been achieved. Mitigation for wetland disturbances will be completed on the project site which is owned by the KDWPT.

The Surface Mining Section (SMS) of the Kansas Department of Health and Environment, Division of Environment, Bureau of Environmental Remediation, is the agency responsible for the reclamation of abandoned coal mines in Kansas under the Surface Mining Control and Reclamation Act of 1977 (P.L. 95-87). To this end, Federal funds are available through OSM for the reclamation of priority one and two problems which are hazards to the health and safety of the public.

**B. Need for the Proposed Action**

The proposed action is necessary to insure the health and safety of the general public utilizing the access roads within KDWPT MLWA Unit 24 and NW 100<sup>th</sup> Street just north of Hallowell, Kansas. The land where the hazards are present is publically owned and reclamation addresses public health and safety issues. The site where mitigation work will be completed for wetland disturbances is a part of the same publically owned area. The most common hazards associated

with the past mining on the Area 54 Reclamation Project area are 13,070 linear feet of Priority 2 dangerous highwall, 587 acres of Priority 2 spoil area and 26.7 acres of Priority 3 pits. Reclamation under the Area 54 Project will address some of these hazards. In the present condition, if a motorist were to lose control of their vehicle and leave the road, the vehicle could plunge over a highwall and into a strip pit lake, causing injury or death to the occupants. In several locations, drainage is creating gully erosion which may adversely impact the adjacent roadways.

### Priority 2 – Dangerous Highwalls

Site KS-0054 is located about two miles north of Hallowell in Cherokee County, Kansas, in Section 33, Township 32 South, Range 22 East. The project area includes 13,070 linear feet of Priority 2 dangerous highwall according to AMLIS. The highwalls range from 3 to 35 feet from the roads with water depths varying from 6-24 feet in most areas.

### Priority 2 -- Spoil areas

The problem areas contain 587 acres of Priority 2 spoil areas. Of these 587 acres, less than 20 acres will be impacted by reclamation activities with only the areas needed for borrow material being affected. Of this acreage, approximately 12 acres will be reseeded to a warm season native grass and forb mix and approximately an acre restored to parking areas.

### Priority 3 – Pits

The project area includes 26.7 acres of Priority 3 pits. Most of these will be left unaffected with only minor filling in some areas.

## **C. Alternatives Considered**

### **Alternative 1: Issue an authorization to proceed with the proposed project.**

Under this alternative, the OSM, Tulsa Field Office Director, would authorize construction activities in the amount of \$900,000 for use by the SMS in implementing the Area 54 reclamation proposal described in the following:

**KS-0054:** This problem area includes 13,070 linear feet of Priority 2 dangerous highwall and 587 acres of Priority 2 spoil area. The primary goal of the reclamation is to address the safety hazards attributable to past mining on the site. The traveling public is exposed to safety hazards along the access road within MLWA Unit 24. This curved, narrow road is used by local residents and hunting/fishing enthusiasts for access to various strip pits within MLWA Unit 24. Minor realignment of the road will be completed to avoid problems with line of sight. Portions of some hazardous highwalls will be filled. Where possible areas of the roads will be moved or removed to avoid the dangerous highwalls. The overall road width will be increased to handle traffic through the area. Boulder barricades will be used to prevent access. Drainage issues will be addressed with new or replaced culverts. Parking areas will be maintained, added or improved as needed. Gully erosion into Deer Creek along NW 100<sup>th</sup> Street will be repaired as the creek was relocated as a part of the mining operation.

Before and during grading operations, temporary devices will be used to control erosion and

minimize sediment transport. Erosion control devices will remain in place until acceptable vegetative cover has been achieved. Existing ditches which are to remain and newly constructed ditches will be protected with either vegetative cover alone, temporary or permanent erosion control mat and vegetation or with riprap depending upon the anticipated design flows and velocities. After grading is complete, “permanent” erosion control devices will be installed as shown on the plans.

The project will impact both isolated and jurisdictional wetlands. Field investigations conducted by Landplan Engineering indicated project activities would impact a total 0.78 acres of wetlands. In order to compensate for the loss of waters of the United States, KDHE will mitigate with the creation of 0.78 acres of emergent wetlands on site concurrent with reclamation.

Sedimentation control may include silt fences, hay bale dikes, bio-logs or combination barriers consisting of a hay bale dike backed up by a silt fence. Riprap and revegetation mat will be installed to control erosion. Other construction includes fertilizing, liming, seeding, and mulching.

The surface material on all project areas, which is a combination of rock and silt/clay material mixed together from mining operations, will be tested and treated with lime to buffer any acid producing materials that would impede revegetation efforts. An application of mulch will be applied with the lime to replace organic materials. All disturbed areas will be revegetated with warm season native species to help offset the loss of the variety of woody and herbaceous species present on the rough, irregular piles of overburden that were present before reclamation. Erosion control fabric will be installed on erosion sensitive areas.

Clearing and grubbing activities will be limited to the period of August 1 to April 1 to avoid Migratory Birds, northern long eared bat and the gray bat. Recommendations of the USFWS and the USACOE regarding equipment washing to prevent spread of invasive species will be implemented.

The SMS worked with the KDWPT MLWA Manager in the design of the project and will continue to work with them to coordinate construction activities. A summary of the recommendations of KDWPT Ecological Services Section follows (*italics*) along with details of how these recommendations will be implemented:

*Restore stream channels and wetland bed and banks impacted by temporary construction activities. We recommend adequate surveys prior to the impacts to completely offset the existing functions of the resources, including disturbed vegetation.* The existing stream, Deer Creek, flows outside of the area of construction. Wetland issues are covered by USACE-NWK-2017-00125 (GP-31K) from the U.S. Army Corps of Engineers.

*Restore all disturbed grassland vegetation with native warm season grasses and forbs.* The seeding mix for the area has been developed in conjunction with KDWPT MLWA management and includes native species.

*Restore woodland vegetation with appropriate species during restoration activities.* Clearing and grubbing was held to the minimum extent practicable. KDWPT MLWA

management prefers the planting of herbaceous species on disturbed areas since the

predominant cover is presently woody.

*Minimize amount of riparian vegetation removed. Minimize clearing and excavation of wetland and their associated vegetation.* The standard of practice for the SMS is to minimize disturbance to the greatest extent practicable.

*Equipment will not be run through any stream channel or wetland.* The stream is outside of the reclamation area. Some wetland fringes will be lost to reclamation but replaced in extent.

*All equipment will be thoroughly washed or cleaned prior to contact with waters and should be held to the bare minimum necessary to complete the project to prevent transport of exotic species.* This is a requirement also of the USFWS and U.S. Army Corps of Engineers and will be part of the construction specifications.

*Use approach fills of clean material etc. to avoid the cutting of banks.* Banks to be disturbed are being backfilled making this suggestion impossible.

*Construct sediment barriers across the construction right of way to prevent silt laden water and spoil from flowing into water body.* Since spoil will be used as backfill into some of the water bodies, this suggestion is impossible. Sediment control is mandated under KDHE Bureau of Water Stormwater Pollution and Prevention permitting.

*Maintain sediment barriers until vegetation is established.* Standard practice of the SMS.

*Consult U.S. Army Corps of Engineers regarding wetlands.* Wetland issues are covered by USACE-NWK-2017-00125 (GP-31K) from the U.S. Army Corps of Engineers.

A not likely to adversely affect determination was made by the USFWS based on the following:

- Avoid clearing and grubbing during the Northern long eared bat pup rearing months of June and July.
- Limit clearing and grubbing to the period of August 1 to April 1 to avoid bats and migratory birds.
- Clearing and grubbing during the MBTA period will be avoided unless a survey by a qualified biologist has been conducted.

Should construction work uncover any buried archeological materials, work will cease and the SHPO will be contacted. Documentation of consultation with those agencies which were contacted and did not require specific permits can be found in Section 2.

The reclamation plan discussed in Alternative 1 requires a Storm Water Pollution Prevention Plan. KDHE, Bureau of Water has issued a Stormwater Construction Permit for the project (KS Permit No. S-NE75-0011, Federal Permit No. KSR112650). Activities involving wetlands are authorized by Wetland issues are covered by USACE-NWK-2017-00125 (GP-31K) from the U.S. Army Corps of Engineers. For work on floodplain areas in Cherokee County, a floodplain fill permit was issued by the Kansas Department of Agriculture, Division of Water Resources WSN: LCK-0116, Notice No.: 2017005. Section 3 contains documentation of consultation with

agencies where permits were required with maps included in Section 4.

Although most work is being done within the MLWA, construction access and work along NW 100<sup>th</sup> Street may require short term intermittent closure of the county roads. During that time, the local traffic will be rerouted to the west to NW 100<sup>th</sup> Street or to the east to NW 90<sup>th</sup> Street. Local authorities will be notified in advance to allow for rerouting of emergency vehicles. The contractor will be responsible to comply with all state and county traffic laws while construction of the project is in progress.

A Storm Water Pollution Prevention Plan will be kept on the project site. Runoff water from construction activities will be directed into existing strip pit ponds, or through filter fence, or grass filter strips. Any damage to vegetation inadvertently caused by construction vehicles will be repaired.

Upon SMS acceptance of the work, the contractor will receive final payment, and following a one year guarantee period, be released from further contractual obligations. However, the SMS will continue to monitor the site to ensure that all problems have been corrected and that the vegetation on the site has been sufficiently established to control erosion. The SMS will also complete the long term monitoring and reporting requirements of the Corps of Engineers permit.

All areas except water surfaces and rock areas will be seeded. There are over 300 acres in the project area but less than 25 acres will be disturbed by construction activities with 12 acres being seeded to a warm season native grass mix and an acre being reclaimed to roads and parking areas. The final reclamation will be warm season native grass habitat, wetland, water, and access roads all of which will maintain the current land use of public recreation.

All construction activities are expected to be completed within one year from the date of issuance of the Notice to Proceed. Some of the vegetation mitigation measures may be delayed to the appropriate seeding time frames dependent upon the completion date of construction activities. Mitigation for wetlands will take place on the project site. Much of the existing site which has been drastically altered by past mining will not be disturbed, thereby minimizing the overall impact to existing vegetation, wildlife and aquatic habitat.

**Alternative 2: Do not issue an authorization to proceed with the proposed project [No Action].**

Under this alternative, the OSM, Tulsa Field Office Director, would deny the use of Federal funds in the amount of \$900,000 to implement the abandoned mine land reclamation proposal described above under Alternative 1. As a result, the current conditions would remain uncorrected and the situation would worsen over time. Preliminary investigations conducted by the SMS indicate that the dangerous highwalls will remain a concern and a hazard to the general public. Above all, the potential for injury to the public would remain high.

**Alternative 3: Other reasonable alternative(s)**

No additional alternatives were considered.

**D. Affected Environment**

## 1. General Setting:

The Area 54 Reclamation Project is an Abandoned Mine Land Reclamation Project located in Section 33, Township 32 South, Range 22 East Cherokee County, Kansas as shown on the accompanying location map in Section 4. Wetland mitigation activities are planned onsite. The land where the work will be conducted is publically owned and managed by the Kansas Department of Wildlife, Parks and Tourism for public recreation, primarily hunting and fishing.

Surface mining on KS-0054 was completed sometime before 1956 based on available historical aerial photography. The land was mined for Mineral coal and possibly some Fleming or Croweburg coal where present and thick enough to be recovered economically from the overburden according to the Kansas Geologic Survey. The coal beds underlying the Mineral coal include the Weir-Pittsburg coal bed which has been extensively mined in Cherokee County by both surface and underground methods. The Weir-Pittsburg seam was not mined in this area due to the thin nature of the coal bed at this location.

The area is well vegetated with a ranging array of woody and herbaceous species. This area is alternating spoil ridges and V-shaped valleys with steep drop offs to water filled final cut pits. Surface runoff is rapid on the ridges, producing numerous ponds and isolated pocket wetlands in the valleys. The spoil ridges range in size. Site hydrology, topography, and soil structure have been drastically altered by past mining activities. Wetlands within the project area are atypical, created by excavation activities from past mining operations. Vegetation in the wetland areas consists of an array of low quality species.

Following mining operations, the area was left to revegetate naturally for the most part. The presence of trees of the *Pinus sp.* (pine trees-possibly loblolly) supports the theory that this was one of the sites used in the 1950's-1960's for reforestation experimentation although the exact planting date and program have not been identified. Common tree, shrub and vine species on the spoil ridges include *Ulmus americana*, *Juniperus virginiana*, *Salix nigra*, *Maclura pomifera*, *Celtis occidentalis*, *Cercis Canadensis*, *Juglans nigra*, *Carya illinoensis*, *Rhus trilobata*, *Rhus copallinum*, *Cornus drummondii*, *Vitis riparia*, and *Rubus flagellaris*. The presence of *Lonicera maackii* (Bush Honeysuckle) and *Lonicera japonica* has become problematic on much of the abandoned mine land in southeast Kansas, these species have not overtaken this site at the present time.

In Section 33, the surface mined area comprises over 90% of the section with agriculture-cropland in the rest of the section. The majority of this past mined area is under the control of KDWPT and is actively managed for benefits to wildlife and attendant use by the public. Deer Creek, a perennial stream, enters section 33 about mid-section of the northeast quarter's northern boundary. From there it meanders through highly disturbed areas having been relocated by the coal company before exiting the section to the west about mid-section of the western boundary. Besides the first 600-700 feet of the stream entrance into Section 33, the remaining portion was channelized by the mining operation as it relocated the flow to facilitate mining.

Water from the project area exits into Deer Creek at or near the same location where Deer Creek crosses under NW 100<sup>th</sup> Street. Water from the south enters into the project area through culverts under Center Star Road. The water from the south is from a highly disturbed tipple

processing facility with coarse refuse and slurry waste having been being disposed in that section. On the east side of the project area, one of the pit runways was backfilled with mine waste. The east side of Section 33 was mined between 1963 and 1978 by P&M Coal Company. According to locals, the far south runway was partially backfilled with waste from the Mine 19 tippel which is located about 1 mile to the southwest. There are no known water quality issues on the project area although the mine waste may have had an influence in the past.

The project site is located about two miles north of Hallowell, Kansas. The areas are valued for the wildlife habitat land use and the attendant recreation use. Reclamation of the site will maintain the current land uses of public recreation. The area will be seeded to a warm season native grass and forbs mix on +/- 12 acres. Wetland vegetation will be allowed to propagate naturally from adjacent seed sources.

## **2. Other Affected Resource Values, including Special Areas of Consideration**

**a. Historic and Cultural Resources:** The Kansas State Historical Society has reviewed the Area 54 project area for historic and cultural resources, and determined that there are no historic or archeological sites within the area.

**b. Hydrology:** The majority of the disturbed area is drained by Deer Creek a relatively permanent water (RPW) located on the north and west side. Deer Creek flows to Lightning Creek and then to the Neosho River, the closest Traditional Navigable Water (TNW) to the site at a distance of approximately 5.2 aerial miles and about 7.4 river miles. The project site falls within the Neosho River watershed (Sub-basin of the Middle Neosho) within Kansas. The on-site water quality and quantity is good, although the potential for localized acid mine water exists due to the presence of unoxidized pyritic material in the shales contained in the spoil. Several unnamed tributaries and adjacent wetlands exist which are considered jurisdictional waters of the United States. The area also contains open water and emergent wetlands. The United States Army Corps of Engineers has authority over wetland issues. The Kansas Department of Agriculture, Division of Water Resources (DWR) has authority over placement of fill, weir construction, culvert construction and channel changes which may impact hydrology. The pit impoundments and the mitigation area are considered a part of Flood Zone A according to the Federal Emergency Management Agency (FEMA) flood map. Deer Creek is outside the reclamation area and will not be impacted.

Before and during grading operations, temporary devices will be used to control erosion and minimize sediment transport. Silt fences, hay bale dikes or combination barriers will be installed as needed to intercept and detain sediment. Erosion control devices will remain in place until acceptable vegetative cover has been achieved. Existing ditches which are to remain and newly constructed ditches will be protected with either vegetative cover alone, temporary or permanent erosion control mat and vegetation or with riprap depending upon the anticipated design flows and velocities. After grading is complete, "permanent" erosion control devices will be installed as shown on the plans.

**c. Vegetation:** The project site is located in an area of abandoned mined land with much of the surrounding area also in unreclaimed spoil. The project site is vegetated with a variety of native grasses, cool season introduced grasses and both desirable and undesirable forbs. There are jurisdictional wetlands present. Water tolerant and hydrophytic plant species can be found

adjacent to the water bodies and in low lying areas, while upland species grow on droughty spoil ridges. Common tree, shrub and vine species on the spoil ridges include *Ulmus americana*, *Juniperus virginiana*, *Salix nigra*, *Maclura pomifera*, *Celtis occidentalis*, *Cercis Canadensis*, *Juglans nigra*, *Carya illinoensis*, *Rhus trilobata*, *Rhus copallinum*, *Cornus drummondii*, *Vitis riparia*, *Pinus sp.* and *Rubus flagellaris*.

**d. Fish and Wildlife Resources:**

1. Threatened or endangered plant or animal species (Endangered Species Act): The KDWPT and the USFWS have reviewed the site for potential effects to threatened or endangered species. The USFWS concurred with the determination made by KDWPT that the project will not likely significantly adversely affect any T&E species. Letters from both of these agencies are part of Section 2.

2. Other wildlife in the area: The area adjacent to the project is valued as wildlife habitat for whitetail deer, turkey, rabbits, as well as other mammals, fish, birds, reptiles, and amphibians.

**e. Soils:** The site consists predominantly of the nonprime soil Kanima silty clay loam. Kanima soils are deep, moderately sloping to steep, well drained, moderately permeable soils on uplands that were formerly strip mined. These soils have a silty clay loam surface layer and a silty clay loam underlying layer. This map unit is classed by the NRCS as potential highly erodible (PHE). Kanima (8771) is the designation for Mine Dumps with 15-50% slope. Within the wetland mitigation area, there are some soil resources present although the area was classed as being mined. Any A horizon, topsoil, resources that are encountered will be salvaged and used for growth medium. Any B horizon, subsoil, resources will be used for fill.

**f. Recreational resource values:** The site is owned and managed by the Kansas Department of Wildlife, Parks and Tourism. It is used primarily for recreation, camping, fishing and hunting. In the late 1970's, much of the land strip mined for coal was donated by the coal companies to the State of Kansas, Department of Wildlife, Parks, and Tourism (KDWPT), for use as wildlife areas. The site of this project is Mined Land Wildlife Area Unit 24 (MLWA 24). It contains over 300 acres of strip mine spoil ridges and abandoned strip pits filled with water which are used by the public primarily for fishing and hunting. The coal company diverted Deer Creek and nearby tributaries around the mine area to keep drainage from interfering with the mining operation. Subsequent to the takeover by the KDWPT, the KDWPT constructed interior access roads, parking areas and boat ramps. Unfortunately, these roads and parking areas are located adjacent to steep drop offs into the very deep water filled pits, and erosion has resulted in gullies and drop offs forming in the roads throughout the site. Since these drop offs are a significant hazard to the public health and safety, the SMS has prepared a reclamation project to address them.

**g. Air Quality (Clean Air Act):** The project site is not in any State or locally designated special air quality zone. The primary sources that affect air quality are vehicle emissions. There are no gases or burning associated with the past mining activities. The overall air quality would be considered the same as the general region.

**h. Noise:** The project site is publically owned and used for recreation. The rural setting would be considered quiet. A destructive explosive test facility run by UTEC Corporation, LLC is located one mile to the west and a hunting lodge one mile to the south which holds regular trap shoots contribute to noise in the area.

**i. Topography:** Cherokee County is in the Osage Plains land resource area. The geology is of the lower Pennsylvanian system. The coal beds that were mined in the area are part of the Cabaniss Formation of the Cherokee Group of rocks in southeastern Kansas. The land surface is a rolling plain and consists of low hills and broad flats. The project site was surface mined which left a number of mine dumps with ridges and valleys and water filled pits. Historical aerial photos of the site show that the mining was completed by sometime in the 1956. Records indicate mining was done by The Pittsburg and Midway Coal Company. The property was donated to the State of Kansas by the coal company. There are no off-site borrows, disposals or accesses planned.

**j. Other:** Since the roads adjacent to the dangerous highwalls are traveled by the general public, safety and welfare of these motorists is of utmost importance. The socioeconomic impact of the land in public ownership is also unaffected as the area is open at all times to public use.

## **E. Environmental Impacts of the Proposed Alternatives**

### **Alternative 1: Issue an authorization to proceed with the proposed project.**

The proposed project would impact the following specific resource values present in and around the Area 54 Project:

#### **1. Resource Values**

**a. Historic and Cultural Resources:** The Kansas State Historical Society has reviewed the project area for historic and cultural resources, and determined that there are no historic or archeological sites within the area. Documentation is in Section 2.

**b. Hydrology:** The reclamation activities will not degrade the water resources of the area. During construction, sedimentation control measures will be in place. Surface stabilization of newly seeded areas will prevent adverse runoff. In order to compensate for the loss of waters of the United States, KDHE will mitigate with the creation of 0.78 acres of emergent wetland. Mitigation will be completed on site concurrent with reclamation. Activities involving wetlands are authorized by USACE-NWK-2017-00125 (GP-31K) from the U.S. Army Corps of Engineers. and found in Section 3. This permit addresses all jurisdictional water issues.

Authorization to discharge stormwater runoff from construction activities has been granted by the KDHE Bureau of Water (BOW) under KS Permit No. S-NE75-0011, Federal Permit No. KSR112650. For work on floodplain areas in Cherokee County, a floodplain fill permit was issued by the Kansas Department of Agriculture, Division of Water Resources WSN: LCK-0116, Notice No.: 2017005. Documentation is found in Section 3.

Surface waters exit the area via an unnamed tributary to Deer Creek, a perennial stream located on the north and west boundaries of the project area. Impacts to the hydrology of the project

area will be moderate in intensity, localized in context and short term in duration. Drainage and sedimentation control will be maintained throughout the project by proper sequencing of backfilling operations. All construction impacts will be temporary and short term in duration with the completion time for the project set at one year or less.

**c. Vegetation:** The project site is located in an area of abandoned mined land. It is surrounded by additional abandoned mined land and cropland. Where necessary, existing vegetation will be cleared and grubbed to make grading activities possible. New vegetation on the area will include warm season native grasses and forbs that will aid in the control of sediment movement, and add to the diversity of the vegetation on site. Mitigation for wetland losses will take place on the project site. This has been authorized by USACE-NWK-2017-00125 (GP-31K) from the U.S. Army Corps of Engineers found in Section 3.

Existing vegetation, both desirable and noxious species, will be destroyed in the preparation of the site. Woody species will remain prevalent in the adjacent areas. Wetland species are expected to again colonize the moist areas. Seeding of desirable species will take place over the rest of the site with 12 acres seeded to warm season native grasses and forbs. Impacts for all areas of vegetation will be localized in context and short term in duration with the completion within the year allowed for construction. Overall establishment of the vegetation may take up to three years on areas seeded to warm season native grasses. Vegetation monitoring will be a routine part of the site review for annual reporting to the Corps of Engineers. Maintenance will be on-going until the site is stable.

**d. Fish and Wildlife Resources:**

1. Threatened or endangered plant or animal species (Endangered Species Act): Clearing and grubbing will be done to minimize any impact to migratory birds according to the Migratory Bird Treaty Act following the recommendation of the USFWS and KDWPT. All impacts will be minor and of a short term in nature and the return of species to the site is anticipated to be non problematic. The KDWPT and the USFWS have reviewed the site for potential effects to threatened or endangered species. KDWPT did not believe that any federally or state listed T&E species occur within the project area. Letters from both of these agencies are part of Section 2.

With regards to the Northern long eared bat, the USFWS made a not likely to adversely affect determination based upon the SMS limiting clearing and grubbing activities to the period of August 1 to April 1. A USFWS IPaC consultation generated a list of four species to be considered on the project area. Of those species, the federally listed Northern long eared bat, *Myotis septentrionalis*, appeared to be the only species with potential habitat that will be disturbed. Construction work will eliminate existing trees including those with diameters greater than 9 inches. Dead trees with peeling bark are scattered throughout the area in addition to the living trees. Construction will be timed to avoid critical periods as all tree clearing and stockpiling work will be performed between August 1 and April 1. This will avoid the time period for not only the Northern long eared bat, but also any migratory birds. Should timing allow, an acoustic bat survey will be conducted in consultation with the USFWS to ascertain presence or absence of the *Myotis* species. The USFWS found

this plan acceptable.

2. Other wildlife in the area: There will be a temporary displacement of other wildlife in the area which will be short term in duration, no longer than the anticipated one year construction period. Not all areas will be immediately disturbed, thus limiting somewhat the initial impact.

**e. Soils:** Grading that will be completed on the Kanima soils will result in lesser slopes with decreased tendency to erosion because of improved vegetative cover and flatter slopes. Soil sampling will be completed so that the proper amendments may be applied for vegetative success on all disturbed areas. Impacts to the soils will be minor, local and long term in duration since the grading is a permanent change. The regraded Kanima soils may be reclassified by the NRCS during future map updates.

**f. Recreational resource values:** There will only be moderate disruption in the use of the site which will be short in duration. Since much of the surrounding area, land and water, will be undisturbed, the effects to the wildlife are expected to be of limited duration. The overall reclamation project will enhance the value for recreation by increasing the accessibility and safety of the area. Addition of wetland features will provide needed spawning areas for various fish species. The area will be closed to public access during the construction period of one year or less.

**g. Air Quality (Clean Air Act):** The U.S. Environmental Protection Agency established National Ambient Air Quality Standards in 1971. The KDHE, Bureau of Air, has adopted similar standards for statewide air quality protection. The legislation required air quality planning that classifies an area as “attainment” or “nonattainment”. Nonattainment refers to those areas that do not currently meet the national air quality standards. Cherokee County is considered an attainment area meeting the national standards for appropriate air quality. The proposed reclamation site is located in a rural area dominated by unreclaimed abandoned mine land and agricultural land. There may be a temporary increase in emissions on the project site due to the presence of construction equipment. This will be short term in nature and due to the limited amount of earthwork should be negligible. Contractors are required to keep equipment in good operating condition. Burning will not be allowed. Cherokee County is also a part of the Southeast Kansas Intrastate Air Quality Control Region. The closest air monitoring station is in Chanute, about 80 miles to the northwest. Air quality at that location is considered good.

**h. Noise:** There will be a negligible increase in noise due to the presence of construction equipment, but this will be local and short term in duration.

**i. Topography** There will be a minor local impact to the site topography. At the location of the pit impoundments, the backfill material that is placed will lessen the slopes into the water while being tied into the existing grade on the remaining sides. Disturbed areas will be regraded to slopes that can be seeded and maintained by mowing. Since the regrading is permanent, it is a long term but beneficial, impact.

**j. Other:** The improvements to the site because of the reclamation will result in improved safety. This is a beneficial impact. Temporary road closure may be required for site access. Proper signage will be placed according to Cherokee County Road Department requirements.

This will be moderate in intensity, local in context and short term in duration. Emergency service response time should not be affected as adequate alternative routes are present in the area. Authorities will be contacted in advance of construction so that alternative routes, if required, may be posted.

## **2. Cumulative Impacts**

There are no other ongoing or planned projects that conflict with the proposed action for the Area 54 Project site. The proposed project would be the only action impacting the resource values discussed above and these impacts will be short term.

### **Alternative 2: Do not issue an authorization to proceed with the proposed project (No Action):**

The following resource values would be impacted if the Area 54 Project site is left in an unreclaimed condition:

#### **1. Resource Values**

- a. Historic and Cultural Resources:** No impact.
- b. Hydrology:** No impact.
- c. Vegetation:** No impact.
- d. Fish and Wildlife Resources:** No impact.
- e. Soils:** No impact.
- f. Recreational resource values:** The public would not benefit from the improved site access and safety of the site.
- g. Air Quality (Clean Air Act):** No impact.
- h. Noise:** No impact.
- i. Topography:** No impact.
- j. Other Socio-Economic:** Since the area is used by the public for recreational purposes, their safety is of utmost importance. The public would not benefit from the improved safety of the site.

## **2. Cumulative Impacts**

Other than the proposed action, there are no ongoing or planned projects to remediate the adverse impacts of past mining at the Area 54 Reclamation Project site.

### **Alternative 3: No additional alternatives were considered.**

## **F. Summary**

The proposed Area 54 Reclamation Project would reclaim the public health and safety problems associated with dangerous highwalls and spoil areas left from past surface mining at the project site. The adverse impacts from undertaking the proposed project are expected to be minimal and short-term in duration, lasting only during the twelve month reclamation period. These impacts would be mitigated as previously described. The No Action alternative would allow a continuation of a serious hazard to those using the area if allowed to go uncorrected. Therefore, it is recommended that the Tulsa Field Office issue a finding of no significant impact and an Authorization to Proceed with the Area 54 Reclamation Project.

**G. Persons and Agencies Contacted to Assist in the Preparation of the Environmental Assessment**

William Joseph, Mitch Rollings, LaChelle Harris, Office of Surface Mining Tulsa Field Office, 645 South 101<sup>st</sup> East Avenue, Suite 145, Tulsa, Oklahoma 74128-4629 (918)581-6431

Janelle N. Phillips, P.E., C.F.M., Water Structures Program (Floodplain), Kansas Department of Agriculture, Division of Water Resources, 1320 Research Park Drive, Manhattan, KS 66502 785-564-6656

Scott Dodson, U. S. Army Corps of Engineers, Kansas State Regulatory Office, 2710 Northeast Shady Creek Access Road, El Dorado, Kansas 67042 (316)322-8247

Jason Luginbill, Michelle McNulty, John Miesner, U.S. Fish and Wildlife Service, 2609 Anderson Avenue, Manhattan, Kansas 66502 (785)539-3474

Larry Hook, Bureau of Water, Industrial Programs Section, Curtis State Office Building, 1000 SW Jackson Boulevard, Suite 420, Topeka, Kansas 66612 (785)296-5549

Samantha Pounds, Kansas Department of Wildlife, Parks and Tourism, 512 SE 25<sup>th</sup> Ave., Pratt, Kansas 67124 (620)672-5911

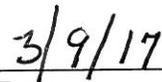
Jennie Chinn and Timothy Weston, Kansas State Historical Society, 6425 SW Sixth Avenue, Topeka, Kansas 66612 (785)272-8681

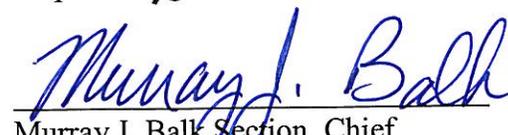
Lawrence L. Brady, Kansas Geological Survey, 1930 Constant Ave., Campus West, The University of Kansas, Lawrence, Kansas 66047 (785)864-3965

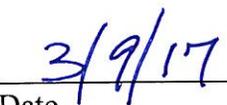
**H. Preparer of the Environmental Assessment**

Marlene N. Spence, Environmental Compliance and Regulatory Specialist, Kansas Department of Health and Environment, Surface Mining Section, 4033 Parkview Drive, Frontenac, Kansas 66763 (620)231-8540

  
Preparer's signature

  
Date

  
Murray J. Balk, Section, Chief  
Surface Mining Section

  
Date

## **Section 2**

### **Consultation Letters/No Permit**



6425 SW 6th Avenue  
Topeka KS 66615

phone: 785-272-8681  
fax: 785-272-8682  
cultural\_resources@kshs.org

---

Sam Brownback, Governor  
Jennie Chinn, Executive Director

KSR&C # 15-06-055  
February 16, 2017

Murray Balk  
Kansas Department of Health & Environment  
Via email

Re: Mined Land Reclamation Project  
Area 54  
Cherokee County

Staff of the State Historic Preservation Office (SHPO) has reviewed the information received February 7, 2017 regarding the above-referenced project in accordance with 36 CFR Part 800. In reviews of this nature, the SHPO determines whether a federally funded, licensed, or permitted project will adversely affect properties that are listed or determined eligible for listing in the National Register of Historic Places. As you noted, our office reviewed this project for Landplan Engineering in 2015. Since we see no significant changes in the current documentation, the SHPO has determined that the proposed project will not adversely affect any property listed or determined eligible for listing in the National Register. This office continues to have no objection to the Area 54 Mined Land Reclamation Project.

Thank you for giving us the opportunity to comment on this proposal. Please refer to the Kansas State Review & Compliance number (KSR&C#) listed above on any future correspondence. Please submit any comments or questions regarding this review to Tim Weston at 785-272-8681 ext. 214 or [tweston@kshs.org](mailto:tweston@kshs.org).

Sincerely,

Jennie Chinn  
State Historic Preservation Officer

Patrick Zollner  
Director, Cultural Resources Division  
Deputy State Historic Preservation Officer

Surface Mining Section  
4033 Parkview Dr.  
Frontenac, KS 66763



Phone: 620-231-8540  
Fax: 620-231-0753  
Murray.Balk@ks.gov  
www.kdheks.gov/mining/

Susan Mosier, MD, Secretary

Department of Health & Environment

Sam Brownback, Governor

February 6, 2017

Ms. Jennie Chinn, State Historical Preservation Officer  
Historic Preservation Department, Kansas State Historical Society  
6425 S.W. 6<sup>th</sup> Ave.  
Topeka, Kansas 66615-1099

RE: KSR&C No. 15-06-055  
36 CFR 800 Section 106 Consultation  
Area 54 Reclamation Project  
Cherokee County, Kansas

Dear Ms Chinn:

In June 2015, you were contacted by Landplan Engineering on behalf of the Kansas Department of Health & Environment, Surface Mining Section, with regards to the Area 54 Reclamation Project located in Section 33, T32S, R22E in Cherokee County, Kansas. Please refer to the attached map for the location. Reclamation was being considered by the Surface Mining Section to minimize the hazards typically associated with abandoned mining operations within Kansas Department of Wildlife and Parks Mined Land Wildlife Area Unit 24.

Funding for the project was not available until recently. We are requesting that you again look at this project and please provide a letter from the Historic Preservation Department stating whether or not this project will affect any property listed on the National Register of Historic Places or any historic or archeological site listed in the State inventory.

We would appreciate a reply at your earliest convenience. If you have any questions, please feel free to contact myself or Marlene Spence at (620) 231-8540.

Sincerely,

A handwritten signature in black ink that reads "Murray J. Balk".

Murray J. Balk, Chief  
Surface Mining Section

MJB:MNS

cc: MOB

Enc.



Area 54 Project Area  
GoogleEarth March 2015 Photo

6425 SW 6<sup>th</sup> Avenue  
Topeka, KS 66615



phone: 785-272-8681  
fax: 785-272-8682  
cultural\_resources@kshs.org

Kansas Historical Society

Sam Brownback, Governor  
Jennie Chinn, Executive Director

KSR&C No. 15-06-055

June 6, 2015

Andres Vicuna, P.E.  
Landplan Engineering  
1310 Wakarusa Drive  
Lawrence, KS 66049

Via E-Mail

RE: Mined Land Reclamation Project  
Area 54  
Cherokee County

Dear Mr. Vicuna:

The Kansas State Historic Preservation Office has reviewed the materials received June 2, 2015, in accordance with the Kansas Department of Health and Environment's requirement for a Notice of Intent for Stormwater Runoff from Industrial Activity. According to our records there are no historic properties within the boundaries of the above-referenced project site. Our office has no objection to the implementation of the project. If, however, any federal funds are to be used or if any federal permits might ultimately be required, the applicant will be required to comply with Section 106 of the National Historic Preservation Act (36 CFR 800).

Please refer to the Kansas State Review & Compliance number (KSR&C#) listed above on any future correspondence. If you have any questions regarding this review, please contact Tim Weston at 785-272-8681, ext. 214 or via e-mail at [tweston@kshs.org](mailto:tweston@kshs.org).

Sincerely,  
Jennie Chinn  
State Historic Preservation Officer

Patrick Zollner  
Director, Cultural Resources Division  
Deputy State Historic Preservation Officer

June 9, 2015

Mr. Andres Vicuna, P.E.  
Landplan Engineering  
1600 Genessee, Suite 400  
Kansas City, Missouri 64102

Re: Area 54 Reclamation Project  
Sect. 33, T. 32 S., R.22E.  
Cherokee County, Kansas

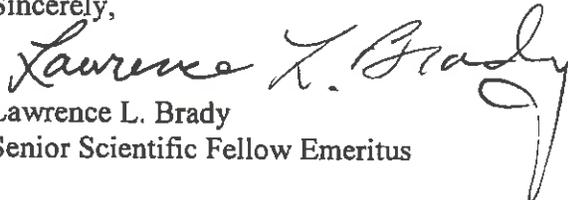
Dear Mr. Vicuna:

Your letter concerning the potential for future coal mining in the Area 54 Reclamation Project was referred to me for possible reply by the Kansas Geological Survey because of my past experience studying the geology and past coal mining in southeast Kansas. The location of the project area within the western 2/3rds of Section 33 as shown on the map enclosed with your request was previously strip-mined for the Mineral coal bed and the overlying Fleming coal and possibly the Croweburg coal depending on the thickness of that coal in that section. It is believed that all of the economic coal was removed in the project portion of Section 33, except for about a 300 to 400 ft. wide strip along the northern part of the section. This unmined area appears on the project map. However, it is not anticipated that further coal strip-mining will be undertaken in this area after the project is completed.

The next important coal underlying the Mineral coal in this area is the Weir-Pittsburg coalbed. This coal was mined extensively by underground methods in this part of the state, but based on KGS records deep mining starts about five miles northeast of this proposed reclamation project. Limited drill data indicates that the Weir-Pittsburg coal is not thick enough in the project area for further consideration of mining by underground or surface mining methods. Based on these factors, it is not believed that significant future coal mining will be undertaken in the project area by either surface or underground mining.

The above discussion represents our best assessment based on the information that the Kansas Geological Survey has about this locality and/or proposed project at the time of this writing. Other geologic conditions, not discussed herein, or for which the Kansas Geological Survey has no knowledge, may affect the viability or safe operation of reclamation work on this property.

Sincerely,

  
Lawrence L. Brady  
Senior Scientific Fellow Emeritus



Civil Engineering  
Landscape Architecture  
Community Planning  
Surveying

1310 WAKARUSA DRIVE | LAWRENCE, KANSAS 68049 | 785.843.7530 (p) | 785.843.2410 (f) | info@landplan-pa.com

June 2, 2015

Julie Bogle  
Kansas Geological Survey  
1930 Constant Avenue  
Lawrence, KS 66047

RE: Area 54 Reclamation Project

Julie,

Landplan Engineering, P.A. has been hired to prepare construction documents for the improvements of the internal roads and campsites of a recreation park located south of NW Lawton Rd, North of NW Center star Road , East of NW 100<sup>th</sup> Street and West of NW 90<sup>th</sup> Street. The park is located within former strip mines. The purpose is to minimize hazards typically associated with abandoned mine sites.

Landplan Engineering, P.A. requests a letter from the Kansas Geological Survey stating whether or not it is considered likely that the area of this project will be mined in the future.

Project: Area 54 Reclamation Project  
County: Cherokee  
Location: Section 33, Township 32 South, Range 22 East

Location map and concept included.

Please contact me if you have any questions regarding this request.

Sincerely,

Andres Vicuna, P.E.  
Landplan Engineering, PA



NORTH  
NTS

**FIGURE 1**  
**AREA 54**  
**LOCATION MAP**  
**LPE 20142012**



**LANDPLAN**  
**ENGINEERING** PA

Lawrence, KS • Kansas City, MO • The Woodlands, TX  
 1310 Wakarusa Drive, Suite 100  
 Lawrence, Kansas 66049  
 785.843.7530(p) | 785.843.2410(f)  
 Info@landplan-pa.com | www.landplan-pa.com



## Marlene Spence

---

**From:** Pounds, Samantha [KDWPT]  
**Sent:** Tuesday, January 24, 2017 8:33 AM  
**To:** Marlene Spence; Phillips, Janelle  
**Cc:** Murray Balk; Martin O'Brien; Phil Struble; Jenkins, David [KDWPT]  
**Subject:** KDWPT review, Area 54 AML Project, Cherokee County, (Notice# 2017005; Track# 20150667-2 and -3)  
**Attachments:** 20150667.djb.pdf

Dear Janelle Phillips and Marlene Spence,

We have received and reviewed the information in regards to the Area 54 Reclamation Site project-Floodplain Fill in Cherokee County, KS (Sec 33 T32S R22E). The details of the project were previously reviewed, and comments were provided by David Bender on June 2 (see attached). Those comments are still valid, and thus we encourage following suggested comments and recommendations. Please let me know if you have any questions.

Sincerely,



Samantha Pounds  
Ecologist, Ecological Services Section  
Kansas Dept. of Wildlife, Parks, and Tourism  
Pratt, KS 67124  
Office: (620)672-0792  
Cell: (620)388-6061

\*\*Please note my email address has changed to [samantha.pounds@ks.gov](mailto:samantha.pounds@ks.gov)\*\*

RECEIVED

JAN 24 2017

SURFACE MINING SECTION

## Marlene Spence

---

**From:** Marlene Spence  
**Sent:** Friday, January 06, 2017 10:13 AM  
**To:** Services, Ecological [ess@ksoutdoors.com](mailto:ess@ksoutdoors.com); 'Pounds, Samantha'  
**Cc:** Martin O'Brien; Murray Balk; 'Phil Struble'  
**Subject:** Area 54 AML Project KDWPT  
**Attachments:** Area 54 Reclamation page 2.pdf; 2015 KDWPT Consultation.pdf

Good morning Samantha,

In 2015, Landplan Engineering consulted with KDWPT-ESS regarding a proposed project in Cherokee County. Since over a year has passed since that initial consultation, we are recontacting your office in order that a determination can be made concerning any T&E species. The initial consultation request, response and a drawing showing the extent of the proposed site disturbance are attached for your information. The previous KDWPT tracking was:

Ref:D2.0202  
Cherokee  
Track: 20150667

Please advise if the previous response is still valid or what, if any, additional information is needed. Please feel free to contact us if you would like to make a site visit.

Thank you for your continued help with our projects.

Marlene

Marlene N. Spence  
KDHE Surface Mining Section  
4033 Parkview Drive  
Frontenac, Kansas 66763

Phone: (620)231-8540  
FAX: (620)231-0753

Please note my new email address is: [Marlene.Spence@ks.gov](mailto:Marlene.Spence@ks.gov)



Civil Engineering  
Landscape Architecture  
Community Planning  
Surveying

1310 WAKARUSA DRIVE | LAWRENCE, KANSAS 66049 | 785.843.7530 (p) | 785.843.2410 (f) | info@landplan-pa.com

June 1, 2015

Emma Foltz  
Office Manager  
Kansas Department of Wildlife & Parks  
512 SE 25th Avenue  
Pratt, KS 67124

RE: Area 54 Reclamation Project

Ms. Foltz,

Landplan Engineering, P.A. requests a threatened and endangered species review be performed for the following project.

Project: Area 54 Reclamation Project  
County: Cherokee  
Location: Section 33, Township 32 South, Range 22 East

Project Description: Landplan Engineering, P.A. has been hired to prepare construction documents for the improvements of the internal roads and campsites of a recreation park located south of NW Lawton Rd, North of NW Center star Road, East of NW 100<sup>th</sup> Street and West of NW 90<sup>th</sup> Street. The park is located within former strip mines.

Location map/concept included.

Please contact me if you have any questions regarding this request.

Sincerely,

Andres Vicuna, P.E.  
Landplan Engineering, PA



**FIGURE 1**  
**AREA 54**  
**LOCATION MAP**  
**LPE 20142012**



**LANDPLAN**  
**ENGINEERING** PA

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 1310 Wakarusa Drive, Suite 100  
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Operations Office  
512 SE 25<sup>th</sup> Ave.  
Pratt KS 67124-8147



Phone: 620-672-5911  
Fax: 620-672-6020  
www.ksoutdoors.com

Robin Jennison, Secretary

Sam Brownback, Governor

June 2, 2015

Andres Vicuna  
Landplan Engineering  
1310 Wakarusa Drive  
Lawrence, KS 66049

Ref: D2.0202  
Cherokee  
Track: 20150667

Ref: Area 54 Reclamation Project

Mr. Vicuna:

We have reviewed Area 54 Reclamation Project involving roadway improvements on the Mined Land Wildlife Area in Section 33, Township 32 South, Range 22 East, in Cherokee County. The project was reviewed for potential impacts on crucial wildlife habitats, current state-listed threatened and endangered species and species in need of conservation, and Kansas Department of Wildlife, Parks and Tourism managed areas for which this agency has administrative authority.

We note that the plan is to widen existing shoulders and provide parking and boat ramps within the wildlife area. We do not anticipate any significant impacts to state listed species and no special permits will be required. However, there will be impacts to several natural resources including open water habitats, wetland habitats, and woodland/riparian vegetation. In addition, many of these impacts will be taking place on the Mined Lands Wildlife Area, a state managed property. We request that the Public Lands Manager, David Jenkins, be contacted to coordinate any needs that they might have within the property boundary. Due to the impacts to aquatic resources, we recommend coordinating with the U.S. Army Corps of Engineers to offset impacts under the guidance provided by the 404 program. Finally, we recommend following several BMPs to reduce the overall impacts to natural resources.

- **Restore stream channels and wetland bed and banks impacted by temporary construction activities. We recommend adequate surveys prior to the impacts to completely offset the existing functions of the resources, including disturbed vegetation.**
- **Restore all disturbed grassland vegetation with native warm season grasses and forbs, we request following the NRCS Practice 643 (Restoration of Rare and Declining Habitats) planting recommendations.**
- **Restore woodland vegetation with appropriate species during restoration activities, we recommend contacting the Kansas Forest Service for guidance and planting specification.**
- **Minimize the amount of riparian vegetation removed. Minimize clearing and excavation of wetlands and their associated vegetation.**
- **Equipment will not be run through any stream channel or wetland. Use bridges (permanent or temporary) or skid mats across the streams and wetlands for travel during construction and for equipment.**

Operations Office  
512 SE 25<sup>th</sup> Ave.  
Pratt KS 67124-8147



Phone: 620-672-5911  
Fax: 620-672-6020  
www.ksoutdoors.com

Robin Jennison, Secretary

Sam Brownback, Governor

- All equipment will be thoroughly washed or cleaned prior to contact with waters and should be held to the bare minimum necessary to complete the project outside of restricted dates to prevent transport of exotic species such as the Zebra Mussel (*Dreissena polymorpha*).
- Use approach fills of clean granular material, swamp mats, skids or other suitable materials to avoid cutting the banks.
- Construct sediment barriers across the entire construction right-of-way to prevent silt laden water and spoil from flowing into water body. Silt fences used in conjunction with sand bags or wire mesh are the preferred sediment barrier, but hay bales may be used provided they are properly staked.
- Until final seeding is complete and vegetation fully established, maintain sediment barriers.
- Contact the U.S. Army Corps of Engineers to adequately offset any impacts to waters of the U.S.

Results of our review indicate there will be no significant impacts to crucial wildlife habitats; therefore, no special mitigation measures are recommended. The project will not impact any public recreational areas, nor could we document any potential impacts to currently listed threatened or endangered species or species in need of conservation. No Department of Wildlife, Parks, and Tourism permits or special authorizations will be needed if construction is started within one year, and no design changes are made in the project plans. Since the Department's recreational land obligations and the State's species listings periodically change, if construction has not started within one year of this date, or if design changes are made in the project plans, the project sponsor must contact this office to verify continued applicability of this assessment report. For our purposes, we consider construction started when advertisements for bids are distributed.

Thank you for the opportunity to provide these comments and recommendations.

Cc: David Jenkins, KDWPT

Sincerely,

A handwritten signature in black ink that reads "David Bender".

David Bender, Ecologist  
Ecological Services Section

Pratt Operations Office  
512 SE 25<sup>th</sup> Ave., Pratt, KS 67124-8174  
Phone 620-672-5911 Fax 620-672-6020 www.ksoutdoors.com



## Birgit Rigensberg

---

**From:** Luginbill, Jason <jason\_luginbill@fws.gov>  
**Sent:** Thursday, January 12, 2017 16:11  
**To:** Birgit Rigensberg  
**Cc:** Marlene Spence; Murray Balk  
**Subject:** Area 54 Abandoned Mine Land Reclamation Project KS-0054

Dear Ms. Rigensberg:

This communication is in response to your January 6, 2017 letter requesting review of the attached project for the Area 54 Abandoned Mine Land Reclamation Project KS-0054 - Cherokee County, Kansas.

The federally-listed species potentially occurring in Cherokee County include the endangered Neosho Mucket (*Lampsilis rafinesqueana*), the threatened Rabbitsfoot (*Quadrula cylindrica ssp. cylindrica*), Neosho Madtom (*Noturus placidus*), and the Northern Long-eared Bat (*Myotis septentrionalis*). Based on this office's information on these species, and the information submitted in the project review request, we concur with your determination that the project may affect, but is not likely to adversely affect the latter listed species. We appreciate your conservation efforts outlined in your letter to avoid the pup rearing months of June and July and to limit other construction activities to the period of August 1 through April 1.

Additionally, I reviewed the project for potential effects to species protected under the Migratory Bird Treaty Act (MBTA) and the Bald and Golden Eagle Protection Act (BGEPA). Based on the information submitted, the Service has no concerns under MBTA or BGEPA.

Thank you for the opportunity to comment on this project and please accept this email as our formal response. If you have any questions, please contact the office.

RE: 2017-CPA-0185

--  
Jason S. Luginbill - Field Office Supervisor  
U.S. Fish and Wildlife Service - Region 6  
Kansas Ecological Services Field Office  
2609 Anderson Avenue  
Manhattan, KS 66502  
Office: (785) 539-3474 Ext. 105  
Cell: (785) 313-0772  
Fax: (785) 539-8567

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JAN 12 2017

SURFACE MINING SECTION

Surface Mining Section  
4033 Parkview Dr.  
Frontenac, KS 66763



Phone: 620-231-8540  
Fax: 620-231-0753  
Murray.Balk@ks.gov  
www.kdheks.gov/mining/

Susan Mosier, MD, Secretary

Department of Health & Environment

Sam Brownback, Governor

**US Fish & Wildlife Service  
Received**

JAN 11 2017

January 6, 2017

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Kansas Field Office

Mr. Jason S. Luginbill - Field Office Supervisor  
U.S. Fish and Wildlife Service - Region 6  
Kansas Ecological Services Field Office  
2609 Anderson Avenue  
Manhattan, KS 66502

The U.S. Fish and Wildlife Service concurs with your determination. Please contact this office again if changes occur or new information becomes available.

1-20-17

Date Jason Luginbill  
KS Field Supervisor, USFWS

Dear Mr. Luginbill:

RE: Area 54 Abandoned Mine Land Reclamation Project KS-0054  
Not Likely to Adversely Affect Northern long eared bat or Neosho madtom Concurrence Request  
Consultation Code: 06E21000-2017-SLI-0149/Event Code: 06E21000-2017-E-00284

Dear Mr. Luginbill:

The US Department of Interior (DOI), Office of Surface Mining Reclamation and Enforcement (OSM) provides funding to the Kansas Department of Health and Environment (KDHE) Surface Mining Section (SMS) to complete reclamation of abandoned mined areas in Kansas. As the reclamation projects utilize federal funds, the SMS is tasked with obtaining National Environmental Policy Act (NEPA) clearance on behalf of OSM. The SMS is requesting concurrence from the U.S. Fish and Wildlife Service that the proposed Area 54 Abandoned Mine Land (AML) project is not likely to adversely affect the federally listed threatened Northern long eared bat (*Myotis septentrionalis*) nor the listed threatened Neosho madtom (*Noturus placidus*). The proposed project is located in Cherokee County Kansas-Section 33, Township 32 South, Range 22 East. The IPaC system was queried and the resulting Consultation Code and Event Code are provided above. The IPaC query also includes a general location map of the project.

The proposed project involves the relocation of interior roads within Kansas Department of Wildlife, Parks and Tourism Mined Land Wildlife Area (MLWA) Unit 24. In the current condition, the interior roads within Unit 24 are located close enough to the final pit impoundments left from mining that the impoundments qualify as a dangerous highwalls under the Department of Interior Office of Surface Mining Reclamation and Enforcement's Abandoned Mine Land Inventory System (AMLIS). The proximity of the impoundments to these access roads creates a hazardous condition for motorists utilizing the roadways.

The amount of disturbance in all areas has been kept to a minimum. Of the over 300 acres on site, less than 25 acres will be disturbed by reclamation construction. The amount of shoreline and surface acres of water should remain constant. All disturbed areas will be reseeded to a warm season native grass and forb mix. Wetland disturbances will be replaced with new wetland areas allowed to colonize naturally and will be authorized by a U.S. Army Corps of Engineers 404 permit (permit pending). Floodplain fill will be authorized by KDA-DWR (permit pending). Stormwater will be controlled and monitored under a Stormwater Pollution Prevention Plan



January 6, 2017

Mr. Jason S. Luginbill - Field Office Supervisor  
U.S. Fish and Wildlife Service - Region 6  
Kansas Ecological Services Field Office  
2609 Anderson Avenue  
Manhattan, KS 66502

Dear Mr. Luginbill:

RE: Area 54 Abandoned Mine Land Reclamation Project KS-0054  
Not Likely to Adversely Affect Northern long eared bat or Neosho madtom Concurrence Request  
Consultation Code: 06E21000-2017-SLI-0149/Event Code: 06E21000-2017-E-00284

Dear Mr. Luginbill:

The US Department of Interior (DOI), Office of Surface Mining Reclamation and Enforcement (OSM) provides funding to the Kansas Department of Health and Environment (KDHE) Surface Mining Section (SMS) to complete reclamation of abandoned mined areas in Kansas. As the reclamation projects utilize federal funds, the SMS is tasked with obtaining National Environmental Policy Act (NEPA) clearance on behalf of OSM. The SMS is requesting concurrence from the U.S. Fish and Wildlife Service that the proposed Area 54 Abandoned Mine Land (AML) project is not likely to adversely affect the federally listed threatened Northern long eared bat (*Myotis septentrionalis*) nor the listed threatened Neosho madtom (*Noturus placidus*). The proposed project is located in Cherokee County Kansas-Section 33, Township 32 South, Range 22 East. The IPaC system was queried and the resulting Consultation Code and Event Code are provided above. The IPaC query also includes a general location map of the project.

The proposed project involves the relocation of interior roads within Kansas Department of Wildlife, Parks and Tourism Mined Land Wildlife Area (MLWA) Unit 24. In the current condition, the interior roads within Unit 24 are located close enough to the final pit impoundments left from mining that the impoundments qualify as a dangerous highwalls under the Department of Interior Office of Surface Mining Reclamation and Enforcement's Abandoned Mine Land Inventory System (AMLIS). The proximity of the impoundments to these access roads creates a hazardous condition for motorists utilizing the roadways.

The amount of disturbance in all areas has been kept to a minimum. Of the over 300 acres on site, less than 25 acres will be disturbed by reclamation construction. The amount of shoreline and surface acres of water should remain constant. All disturbed areas will be reseeded to a warm season native grass and forb mix. Wetland disturbances will be replaced with new wetland areas allowed to colonize naturally and will be authorized by a U.S. Army Corps of Engineers 404 permit (permit pending). Floodplain fill will be authorized by KDA-DWR (permit pending). Stormwater will be controlled and monitored under a Stormwater Pollution Prevention Plan

authorization from KDHE-BOW (permit pending). The project is anticipated to be let for bids as early as June 2017 with construction scheduled to be completed in 365 days or less.

An IPaC query of January 5, 2017 (copy attached) resulted in four species for consideration. Each species is addressed below.

**Northern long-eared bat (*Myotis septentrionalis*)** Threatened: Cherokee County is in the White-Nose Syndrome Buffer Zone area within the Northern long eared bat range according to the USFWS map of August 31, 2016. The FWS recommends contacting The Kansas Natural Heritage Inventory for hibernacula and maternity roost tree location information, however the Kansas Natural Resource Planner web mapping application does not contain data on the Northern Long-eared Bat (*Myotis septentrionalis*) at this time. At this time there are no known infected hibernacula for the species within Cherokee County.

**Neosho madtom (*Norturus placidus*)** Threatened: The species is described as a night feeding bottom dweller found in the Neosho River. The impoundments on site are all deepwater habitats. Since none of the water filled pits on site are being backfilled, there should be no impact to this species as its presence on site is doubtful.

**Neosho mucket (*Lampsilis rafinesqueana*)** Endangered: There is no critical habitat within the project area.

**Rabbitsfoot (*Quadrula cylindrical ssp. cylindrical*)** Threatened: There is no critical habitat within the project area.

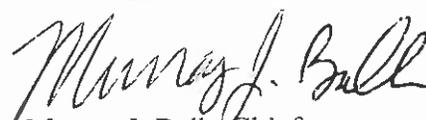
### Summary

At this time, the SMS does not propose conducting a bat survey, but will assume presence for the Northern long eared bat. Although some of the trees in the vicinity may be potential NLEB roosting trees, construction clearing and grubbing will be scheduled to avoid the pup season (June 1- July 31). Additionally construction will be scheduled to limit clearing and grubbing activities to the period of August 1 to April 1 to avoid both Migratory Birds and Northern long eared bats.

The Kansas Department of Wildlife, Parks and Tourism was contacted regarding state listed species that may be present on the site (2015 correspondence attached). KDWPT-Ecological Services Section, Pratt, Kansas has been recontacted (January 6, 2017) for an updated review of the area. All recommendations of KDWPT and USFWS will be integrated into the project.

Because of the timing of construction, the planting of native grasses, we conclude that the Area 54 Project is not likely to adversely affect the Northern long-eared bat (*Myotis septentrionalis*). We request your concurrence with our determinations. Please let us know what, if any additional information you may need. Feel free to contact myself or Marlene Spence of my staff.

Sincerely,

  
Murray J. Balk, Chief  
Surface Mining Section

Page 3  
USFWS-Area 54  
January 6, 2017

MJB:MNS  
Attachments

Ec: LaChelle Harris-OSMRE-Tulsa, Oklahoma  
KDWPT, Ecological Services Section, Pratt, Kansas  
Michele McNulty-USFWS Manhattan  
Phil Struble-Landplan, Lawrence, KS  
MOB-SMS

## **Section 3**

### **Consultation Letters/Permit**

## NOTICE OF INTENT (NOI)



For Authorization to Discharge Stormwater Runoff from Construction Activities  
 In accordance with the Kansas Water Pollution Control General Permit  
 Under the National Pollutant Discharge Elimination System (NPDES)

Submission of this Notice of Intent constitutes notice that the party identified in Section I of this form requests authorization for coverage under the Kansas Water Pollution Control general permit, or KDHE issued successor permits, issued for stormwater runoff from construction activities in the State of Kansas. Becoming a permittee obligates the discharger to comply with the terms and conditions of the general permit. **Completion of this NOI does not provide automatic coverage under the general permit. Coverage is provided and discharge permitted when the Kansas Department of Health and Environment (KDHE) authorizes the discharge of stormwater runoff from the construction activities identified on the NOI and supporting documentation. A signed and dated copy of the first page of the NOI indicating the Authorization will be provided to the owner or operator, or all three pages for Conditional Authorizations.** Upon authorization of the construction activity discharge, a Kansas permit number and a Federal permit number will be assigned to the construction project. **A complete request for Authorization for coverage under the general permit must be submitted or the request will not be processed (see listing on Page 3 of this NOI).** KDHE will notify owners or operators whose Notice of Intent (NOI) and supporting documentation for Authorization of stormwater runoff associated with construction activities are incomplete, deficient, or denied.  
**Please Print or Type.**

## I. OWNER OR OPERATOR ADDRESS, BILLING, CONTACT &amp; RECORDS LOCATION INFORMATION

A. Owner or Operator's Name: \_\_\_\_\_  
 Company Name: KDHE-SMS  
 Owner or Operator's Phone: 620.231.8540  
 Mailing Address: 4033 Parkview Drive  
 City: Frontenac State: KS Zip: 66763

B. Billing Contact Name: Same  
 Billing Contact Address (if different): \_\_\_\_\_  
 City: \_\_\_\_\_ State: \_\_\_\_\_ Zip: \_\_\_\_\_

C. Contact Name: M. N. Spence  
 Company Name: KDHE-SMS  
 Contact Phone: 620.231.8540  
 Mailing Address: 4033 Parkview Drive  
 City: Frontenac State: KS Zip: 66763  
 E-mail Address (optional): marlene.spence@ks.gov

D. Address where records will be kept (if not on-site):  
 Records Address: 4033 Parkview Drive  
 City: Frontenac State: KS Zip: 66763

## II. SITE INFORMATION

A. Project Name: Area 54  
 Site Address: NW 100th St and NW Center Star Road  
 City: Hallowell State: KS Zip: \_\_\_\_\_  
 (Nearest City to Project) County: Cherokee

B. LEGAL SITE DESCRIPTION:  
West 3/4 of  
~~QTR of~~ ~~QTR of~~ ~~QTR of~~ Section: 33  
 Township: 32 South; Range: 22  E  W  
 Latitude: 37.215968, Longitude: -95.007069  
 Deg. Min. Sec. Deg. Min. Sec.

## For Official Use Only:

Received  <b>RECEIVED</b>  JAN 25 2017  BUREAU OF WATER	Amount Paid: <u>\$60.00</u>	Authorized: <input checked="" type="checkbox"/> Y; <input type="checkbox"/> N
	Date: <u>2017-01-24</u>	Is Authorization Conditional? <input type="checkbox"/> Y; <input checked="" type="checkbox"/> N (if yes, see page 3 of NOI for conditions)
	Initials: <u>DRC</u>	 Reviewer <u>2017-03-01</u> Date
	Check No.: <u>Interfund</u> <u>10217427</u>	
 Secretary, Kansas Department of Health and Environment		
KS Permit No.: <u>S-NE75-0011</u>	Federal Permit No.: <u>KR112650</u>	

Send completed 3 page NOI form **with original signature** and all appropriate submittals (see page 3 of NOI) to:

Kansas Department of Health and Environment  
 Bureau of Water, Industrial Programs Section  
 1000 SW Jackson, Suite 420  
 Topeka, KS 66612-1367

Effective March 2, 2012

Note: A copy of the permit can be obtained at: [www.kdheks.gov/stormwater](http://www.kdheks.gov/stormwater) or by submitting a written request to KDHE.

KDHE Contact Information  
 Phone: (785) 296-5545  
 E-mail: [stormwater@kdheks.gov](mailto:stormwater@kdheks.gov)

*Please include an appropriate sediment control measure such as a ditch check below disturbed sections of ditches or other drainage channels along NW 100th St.*

**C. EXISTING CONDITIONS/USES**

- 1) Is any part of the project located on Indian Country land?  Y;  N  
**If yes:** Contact EPA regarding discharging stormwater runoff from industrial activities on Indian Country land.
- 2) If stormwater runoff drains to or through a Municipal Separate Storm Sewer System (MS4): MS4 Name: NA
- 3) Name of the first receiving water, stream, or lake: Deer Creek, River Basin: Neosho
- 4) Are contaminated soils present on the site or is there groundwater contamination located within the site boundary?  Y;  N  
**If yes:** On separate paper please explain in detail the locations, contaminants and concentrations.
- 5) Are there any contaminated soils that will be disturbed or any contaminated groundwater that will be pumped by the proposed construction activity?  Y;  N  
**If yes:** On separate paper provide a description of the special erosion and sediment control measures to be utilized.
- 6) Are there any surface water intakes for public drinking water supplies located within 1/2 mile of the site discharge points?  Y;  N
- 7) Are there any known historical or archeological sites present within the site boundary or any historic structures located within 1000 feet of the project site?  Y;  N  
**Note:** Include documentation of project-specific coordination with the Kansas Historical Society in making this determination.
- 8) Is any threatened or endangered species habitat located within the site boundary or in the receiving water body?  Y;  N  
**Note:** Include documentation of project-specific coordination with the Kansas Department of Wildlife, Parks & Tourism in making this determination.
- 9) Will the project impact the line or grade of a stream or does it include dredge or fill of a potential jurisdictional water body or wetlands?  Y;  N  
**If yes:** Include documentation of project-specific coordination with the US Army Corps of Engineers and/or the Kansas Department of Agriculture, Division of Water Resources in making this determination.
- 10) Are any Critical Water Quality Management Areas, Special Aquatic Life Use Waters, or Outstanding National Resource Waters located within 1/2 mile of the facility boundary?  Y;  N  
**If yes,** list the names of all such areas and waters: \_\_\_\_\_

**D. PROJECT DESCRIPTION**

- 1) Project Description: See attachments

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- 2) Does this NOI include all proposed soil disturbing activities associated with the entire common plan of development?  Y;  N  
**If no,** explain what development areas of the site are not included in this NOI and provide contact information, if available, for the party or parties that own or have operational control of these areas:  
 \_\_\_\_\_  
 \_\_\_\_\_
- 3) Anticipated project Start Date: Summer 2017, and Completion Date: Spring 2018
- 4) Estimated total area to be disturbed: +/-25 Acres Total area of the site: 430 Acres
- 5) Do you plan to disturb ten or more acres that are within a common drainage area?  Y;  N  
**If yes,** will a sedimentation basin be installed in that drainage area? (Attach design calculations for each sedimentation basin.)  Y;  N  
**If a sediment basin is not feasible,** on a separate sheet explain what similarly effective erosion and sediment control measures will be implemented in lieu of a sedimentation basin.

**E. Maps**

Include an area map showing the outline of the construction site and the general topographic features of the area at least one mile beyond the project site boundary.

**F. EROSION CONTROL PLAN AND BEST MANAGEMENT PRACTICES**

- 1) Provide a site plan showing the existing contour, proposed contour, the erosion control measures and the locations of stormwater management or pollution control features including BMPs. Incorporate details and notes as necessary to describe the erosion control plans and BMPs.
- 2) Provide a description of the best management practices which will be utilized to control erosion, sedimentation and other pollutants in stormwater runoff during construction.

- 3) Provide a summary of the sequence of major soil disturbing activities and the corresponding erosion control measures or BMPs.
- 4) Provide the name and License or Certification Number of the engineer, geologist, architect, landscape architect, or Certified Professional in Erosion and Sediment Control (CPESC) under which the construction stormwater pollution prevention plan has been developed.

<u>Philip W. Struble</u>	<u>KS 10293</u>	<u>Engineer</u>
Name	License or Certification Number	Profession or Field (Engineer, Architect, etc.)

**III. ANNUAL FEE**

Enclose a check for the first year of the annual permit fee specified in K.A.R. 28-16-56 et seq. as amended. Make the check payable to "KDHE". Per K.A.R. 28-16-56, as amended, the current annual permit fee for this general permit is \$60. An invoice for the annual permit fee will be sent to the contact person requesting a permit until such time as the permittee submits a Notice of Termination (NOT).

Failure to pay the annual fee will result in termination of the construction stormwater discharge Authorization.

**IV. OWNER OR OPERATOR CERTIFICATIONS**

I, the undersigned, certify that a Stormwater Pollution Prevention Plan (SWP2 Plan) will be or has been developed for the construction site described in this NOI and supporting documentation. I further certify that the plan will be implemented at the time construction begins, and, as required by the NPDES general permit for Stormwater Runoff from Construction Activity, will revise the SWP2 plan if necessary.

I understand that continued coverage under the NPDES general permit for Stormwater Runoff from Construction Activities is contingent upon maintaining eligibility as provided for in the requirements and conditions of the general permit, and paying the annual fee.

I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment.

McConnell Spence  
Signature (owner or operator)

1/24/17  
Date

Murray J. Balk, Section Chief  
Name and Official Title (Please print or type. Form with original signature must be sent to KDHE.)

**Conditions of Authorization - For Official Use Only:**

When indicated, Conditions of Authorization are as follows:

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A complete request for Authorization for coverage under the general permit must be submitted or the request will not be processed. A complete request for Authorization includes:

- An NOI form (construction stormwater) with an original authorized signature;
- The annual permit fee for the first year; (\$60.)
- An area map showing the outline of the construction site and the general topographic features of the area at least one mile beyond the project site boundary;
- A detailed site plan showing the existing contours, proposed contours, erosion and sediment control features, locations where stormwater runoff leaves the construction site;
- A narrative summary of the additional erosion and sediment control and other best management practices that will be utilized to prevent or reduce contamination of stormwater runoff from the construction activities;
- Total drainage area, storage capacity and design calculations for each sedimentation basin; and
- Copies of letters or e-mails documenting coordination with appropriate local, state or federal agencies.

Surface Mining Section  
4033 Parkview Dr.  
Frontenac, KS 66763



Phone: 620-231-8540  
Fax: 620-231-0753  
Murray.Balk@ks.gov  
www.kdheks.gov/mining/

Susan Mosier, MD, Secretary

Department of Health & Environment

Sam Brownback, Governor

January 24, 2017

Mr. Larry Hook  
Kansas Department of Health and Environment  
Bureau of Water, Industrial Programs Section  
1000 SW Jackson, Suite 420  
Topeka, Kansas 66612-1367

RE: Area 54 Road Reclamation Project  
Section 33, Township 32 South, Range 22 East  
Cherokee County  
SWPPP Application

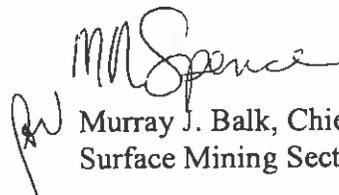
Dear Mr. Hook:

Enclosed please find a Stormwater Runoff from Construction Activities, Notice of Intent form, Storm Water Pollution Prevention Plan, and Construction Specifications Section 2301-Temporary Sediment Control Measures, and a half size set of construction drawings (wo/cross sections) for the Area 54 Reclamation Project located in Cherokee County. The SMS has contracted with Landplan Engineering of Lawrence, Kansas for the design and permit preparation of this project. Should you have questions related to the engineering, please contact Phillip W. Struble, P.E. and President of Landplan at 785-843-7530.

A Kansas Department of Agriculture, Division of Water Resources Floodplain Fill Permit has been submitted and a United States Army Corps of Engineers 404 Permit will be submitted in the near future. Please review the information and, upon approval, forward an 'Authorization to Discharge Permit' to this office. Construction of the project is expected to begin in the spring/summer of 2017.

The administration of the SMS will be contacting your department to arrange for the payment of the required application fee. Thank you for your assistance in this matter. If you have any questions regarding the supplemental attachments, please contact myself or Marlene Spence of my staff at (620) 231-8540 or [Murray.Balk@ks.gov](mailto:Murray.Balk@ks.gov), and [Marlene.Spence@ks.gov](mailto:Marlene.Spence@ks.gov).

Sincerely,

  
Murray J. Balk, Chief  
Surface Mining Section

Ec: Landplan, MOB  
Encls.  
MJB:MNS

1320 Research Park Drive  
Manhattan, Kansas 66502  
(785) 564-6700



900 SW Jackson, Room 456  
Topeka, Kansas 66612  
(785) 296-3556

Jackie McClaskey, Secretary

Governor Sam Brownback

February 17, 2017

KANSAS DEPT OF WILDLIFE PARKS & TOURISM  
DAVE JENKINS  
507 E 560TH AVE  
PITTSBURG KS 66762-7236

Re: Proj. No.: Area 54 Reclamation Site  
Floodplain Fill  
Deer Creek  
Cherokee County  
WSN: LCK-0116, Notice No.: 2017005

Dear Mr. Jenkins:

Consideration has been given to your application for a permit and approval of plans relating to the placement fill for embankment, roads and parking lots along Deer Creek at a location in Section 33, Township 32 South, Range 22 East, Cherokee County, Kansas.

In accordance with the provisions of K.S.A. 24-126, the Chief Engineer has approved the plans and issued the enclosed approval of application, authorizing construction of the proposed project. Please note the approval conditions on the reverse side of the approval document. Condition No. 9 requires the owner to notify this office within 30 days after the project is completed. A Notice and Proof of Completion form is enclosed for this purpose. Other special conditions have been added to limit the removal of timber and vegetation, to require the use of clean material for riprap, to prohibit the introduction of toxic or deleterious materials into the watercourse, and to require the project meet the floodplain management requirements of the community.

The one set of plans submitted to this office has been endorsed with the Chief Engineer's approval and will be retained in our files. Should you desire any copies of the plans with the Chief Engineer's approval shown thereon, please submit the required number.

Comments about this proposed project were received from several agencies during the environmental review process. Copies of the letters with recommendations from the environmental review agencies are enclosed for your information.

Kansas Dept Of Wildlife Parks & Tourism  
WSN: LCK-0116, Notice No.: 2017005  
Page 2

The work has been authorized to be completed on or before July 1, 2020. Approval for construction of this project will expire on that date unless the time is subsequently specifically extended by the Chief Engineer. Any desired extension of time should be requested in writing approximately 30 days prior to the expiration date.

Sincerely,



Janelle Phillips, P.E.  
Water Structures Program  
(785) 564-6656

Enclosure

pc: Murray Balk, Surface Mining Section- Kansas Dept Of Health & Environment  
Philip Struble- Landplan Engineering PA  
Jason Allison- Cherokee County FPA



KANSAS DEPARTMENT OF AGRICULTURE  
Jackie McClaskey, Secretary of Agriculture

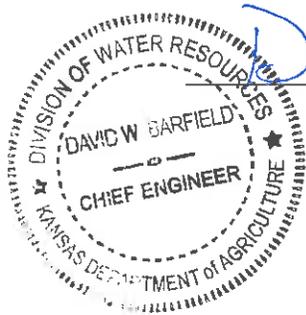
DIVISION OF WATER RESOURCES  
David W. Barfield, Chief Engineer

**APPROVAL OF APPLICATION**  
**NO. LCK-0116**  
K.S.A. 24-126

The Chief Engineer of the Division of Water Resources, Kansas Department of Agriculture, by virtue of the powers and duties imposed by K.S.A. 24-126, hereby issues this approval to Kansas Dept Of Wildlife Parks & Tourism, giving his consent to the placement fill for embankment, roads and parking lots along Deer Creek at a location in Section 33, Township 32 South, Range 22 East, Cherokee County, Kansas.

All work authorized by this approval shall be performed in accordance with the maps, plans, profiles and specifications filed with the application and approved by the Chief Engineer, and in accordance with plans for any changes or modifications subsequently approved by the Chief Engineer subject to the provisions of the aforementioned statute, its regulations and the attached approval conditions.

Witness my hand this 17<sup>th</sup> day of February, 20 17.



David W Barfield  
David W. Barfield, P.E.  
Chief Engineer  
Division of Water Resources  
Kansas Department of Agriculture

State of Kansas )  
)SS  
County of Riley )

The foregoing instrument was acknowledged before me this 17<sup>th</sup> day of February, 20 17, by David W. Barfield, Chief Engineer, Division of Water Resources, Kansas Department of Agriculture.



Karen Hunter  
Notary Public

**RECORD THIS INSTRUMENT IN THE OFFICE OF THE REGISTER OF DEEDS  
OF THE COUNTY WHEREIN THE WORK IS LOCATED**

### APPROVAL CONDITIONS

1. This approval grants no water rights nor other property rights, nor does it authorize any injury to private property, invasion of private rights nor impairment of senior water rights, nor does it exempt the applicant from obtaining consent from appropriate federal, state or local government.
2. The work shall at all times be subject to supervision and inspection by representatives of the Division of Water Resources.
3. No changes in the work, maps, plans, profiles and specifications as approved shall be made except with the written consent of the Chief Engineer.
4. Any work authorized by this approval will be maintained in a condition satisfactory to the Chief Engineer and substantially in accordance with the approved plans.
5. The clearing of trees, brush, drift and other debris, in order to maintain the work substantially in accordance with the approved plans is hereby authorized, except that the removal of plantings made specifically for habitat or environmental mitigation is not authorized by this approval.
6. Any excess material deposited in the stream channel incidental to the construction and maintenance of the project authorized by this approval shall be removed and the channel restored to a condition satisfactory to the Chief Engineer and substantially in accordance with the approved plans.
7. All areas disturbed by construction or other exposed soil areas shall be seeded and maintained with a mixture of grass or other vegetation appropriate to the soils, climate and project in order to minimize erosion and protect the project integrity.
8. If the work is not completed on or before the 1st day of July, 2020, this approval, if not specifically extended, shall cease and be null and void. If, upon the expiration or revocation of the approval, the work has not been completed, the applicant shall, at his own expense and to such extent and in such time and manner as the Chief Engineer may require, remove all or any portion of the uncompleted work and restore the watercourse to a satisfactory condition. No claim shall be made against the State of Kansas on account of any such removal or alteration.
9. Within thirty (30) days after the completion of the work authorized in this approval, the applicant shall file with the Division a statement that the work has been performed in accordance with this approval and the approved maps, plans, profiles and specifications.
10. The Chief Engineer reserves the right to require such changes in the maps, plans, profiles and specifications as may be considered necessary. The Chief Engineer further reserves the right to modify, suspend or revoke this approval at any time, should the applicant fail to comply with any of the conditions of this approval or regulations of the Division without sufficient cause or should such action be deemed necessary in the interest of public safety and welfare.
11. That the clearing of timber and vegetation is restricted to the absolute minimum required to accomplish the work and not interfere with the beneficial use of project.
12. Only graded rock, quarry-run rock and/or clean concrete rubble shall be used in the work as approved. If concrete rubble is used, all large slabs should be broken up and all exposed reinforcement rods, trash, and other extraneous materials shall be removed prior to placement. No asphalt material shall be placed as fill material.
13. No deleterious or toxic materials shall be introduced into the watercourse or reservoir by runoff, leaching or disposal during or in connection with the work authorized by this permit.
14. The project must meet the floodplain management requirements of the community.

## Phillips, Janelle

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**From:** Kathy Haynes <k.haynes@kcc.ks.gov>  
**Sent:** Tuesday, January 10, 2017 1:36 PM  
**To:** Phillips, Janelle  
**Subject:** RE: ECA#2017005

A review of Conservation Division files failed to indicate any environmental concerns within the acreage described in this application.

In the event unexpected circumstances are encountered during construction, such as the discovery of abandoned oil, gas or exploratory holes or lead lines, the applicant should contact, Steve Korf at (620) 432-2300, so appropriate regulatory response can be made.

If you have any questions or concerns, please call me at (316) 337-6243.

**Kathy Haynes**  
*Department of Environmental Protection and Remediation*



Conservation Division  
Kansas Corporation Commission  
266 N. Main Ste 220 | Wichita, KS | 67202-1513  
Phone (316) 337-6243 | Fax (316) 337-6232 | <http://kcc.ks.gov/>

*This transmission, email and any files transmitted with it, may be: (1) subject to the Attorney-Client Privilege, (2) an attorney work product, or (3) strictly confidential under federal or state law. If you are not the intended recipient of this message, you may not use, disclose, print, copy or disseminate this information. If you have received this transmission in error, notify the sender (only) and delete the message. This message may also be subject to disclosure under the KORA, K.S.A. 2010 Supp. 45-215 et seq.*

---

**From:** Phillips, Janelle [<mailto:Janelle.Phillips@ks.gov>]  
**Sent:** Tuesday, January 10, 2017 11:35 AM  
**To:** Andy Klein; Kathy Haynes; Environmental Services, KDWP [KDWP]; KSHS; Paul Liehti; KDA SCC Office Assistant; Scott Satterthwaite  
**Cc:** Murray Balk; Jenkins, David [KDWP]; [phils@landplan-pa.com](mailto:phils@landplan-pa.com); Schemm, Doug; Dodson, Scott T NWK ([Scott.T.Dodson@usace.army.mil](mailto:Scott.T.Dodson@usace.army.mil)); [jallison198@gmail.com](mailto:jallison198@gmail.com); Marlene Spence  
**Subject:** ECA#2017005

The Water Projects Environmental Coordination Act, K.S.A. 82a-325 to 327, requires this agency to provide seven other agencies in the state government an opportunity to review and comment on your application for a period of not less than 30 days. The environmental coordination process has been initiated, but a thorough review of your project may not yet have been performed. You will be informed of any changes that may be necessary to comply with our rules and regulations and any concerns or comments we receive from the environmental coordination agencies.

This letter does not provide any permission to begin the construction of your project. **Construction can begin only after written approval has been obtained from the Chief Engineer of this agency.** If you have any questions or comments please contact this office by writing or calling (785) 564-6656.

**Notice No.:** 2017005

**Date of Notice:** 1/10/2017

**WS No.:** LCK-0116

**Expiration Date:** 2/9/2017

**Project No.:** Area 54 Reclamation Site – Floodplain Fill

In and along Deer Creek at a location in Section 33, Township 32 South, Range 22 East, Cherokee County, Kansas.

<https://agriculture.ks.gov/eca-user-login>

<https://agriculture.ks.gov/divisions-programs/dwr/stream-and-floodplain-permits/environmental-coordination-notices>

Janelle N. Phillips, P.E., C.F.M., LEED-AP  
Stream Permit Team Lead  
Water Structures Program  
Kansas Department of Agriculture  
Division of Water Resources  
1320 Research Park Drive  
Manhattan, KS 66502  
785-564-6656  
My email has changed: [janelle.phillips@ks.gov](mailto:janelle.phillips@ks.gov)

*Analytical-Consistency-Learner-Discipline-Deliberative*

6425 SW 6<sup>th</sup> Avenue  
Topeka, KS 66615



phone: 785-272-8681  
fax: 785-272-8682  
cultural\_resources@kshs.org

Kansas Historical Society

Sam Brownback, Governor  
Jennie Chinn, Executive Director

MEMORANDUM

To: ECA Permit Applicant  
From: Kansas State Historical Society  
Bob Hoard, State Archeologist  
Re: Historic and Prehistoric Cultural Resources

Because of time and budget constraints, the Kansas State Historical Society has elected to waive review of permit applications under the Water Projects Environmental Coordination Act (KSA-82a-325 *et seq.*). However, digging, grading, and other types of construction activities may reveal the presence of buried historic and/or prehistoric archeological sites or artifacts within your project area. If archeological materials are encountered during construction, please contact me at 785-272-8681 ext. 269 or by email at [rheard@kshs.org](mailto:rheard@kshs.org) and do not further disturb the site. If the materials appear to be significant, we may ask for the opportunity to document or salvage the.

In the event human burials or remains are encountered, the Kansas Unmarked Burial Sites Preservation Act (KSA 75-2741 through 75-2754) requires the finder to immediately report these discoveries to the local law enforcement agency. If the remains are not the result of criminal activity, their fate will be determined by the Unmarked Burial Sites Preservation Board. Encountering an unmarked burial does not necessarily stop a project. Discussion with the Board may lead to modification of the project, and in some cases the burial is removed and the project allowed to proceed. Human burials and associated artifacts must not be further disturbed after their discovery, until law enforcement officials or the Unmarked Burial Sites Preservation Board has determined the appropriate action. The Unmarked Burial Sites Preservation Act provides substantial penalties for intentionally disturbing human burials and grave goods, whether located on public or private property. If you find a bone that you suspect may be human, leave it where it is and get expert help to identify it. The county coroner, a medical doctor, or an archeologist can help.

**What to Look For**

Archeological sites from the historic and prehistoric periods may be buried. Prehistoric sites can be recognized by the presence of discolored earth, bones, stone tools (arrow heads, knives, scrapers), stone flakes (thin, sharp edged pieces of stone produced when making chipped stone tools), burned stones, and pieces of coarse, unglazed pottery. Stone flakes are the most commonly found artifact.

Historic period sites can be recognized by the presence of stone, brick, or concrete foundation walls, or concentrations of these materials. Many of the items used in historic times are similar to those used today. Bottles, cups, tin cans, buckets, hand tools, glass fragments, and other items can be easily recognized. If you are unsure of the significance of what you have found, contact my office.

Thank you for assisting in preserving the archeological heritage of Kansas.

\*\*\*\*\*

These actions do not constitute compliance with Section 106 of the National Historic Preservation Act. If this project receives federal funding, licensing, permitting or assistance you must contact the State Historic Preservation Office (785-272-8681 ext. 240) prior to construction for a review of the undertaking under federal law.

Surface Mining Section  
4033 Parkview Dr.  
Frontenac, KS 66763



Phone: 620-231-8540  
Fax: 620-231-0753  
Murray.Balk@ks.gov  
www.kdheks.gov/mining/

Susan Mosier, MD, Secretary

Department of Health & Environment

Sam Brownback, Governor

January 6, 2017

Ms. Janelle N. Phillips  
Mr. Doug Schemm  
Kansas Department of Agriculture  
Division of Water Resources  
1320 Research Park Drive  
Manhattan, KS 66502

RE: Application for Floodplain Fill Permit  
Area 54 Abandoned Mine Land Reclamation Project

Dear Ms. Phillips and Mr. Schemm:

Enclosed please find an Application for Permit for a Floodplain Fill for our reclamation project located in Cherokee County, Kansas. The associated application fee (\$300) will be made by interagency transfer per the attached purchase order.

The permit application package includes supplemental information as well as a ½ size set of drawings. Please note, that both an application for a Bureau of Water Stormwater Pollution Prevention Permit and an US Army Corps of Engineers 404 Permit will be made in the near future. In 2015, the Kansas Department of Wildlife Parks and Tourism made a determination that an Action Permit was not needed, however they will be recontacted as this clearance was only valid for one year. Based on the enclosed IPaC consultation, the US Fish and Wildlife Service will be contacted for a "not likely to adversely affect finding" with the SMS adjusting construction timing to avoid species disturbance. The State Historical Preservation Officer also had no objections to this project. Information regarding these clearances is included for your information only as we are aware that the Department of Agriculture does its own agency notification.

Please contact Phillip Struble, P.E., and President of Landplan Engineering as indicated on the permit application if you need additional engineering information. If you require other project information, please feel free to contact Martin O'Brien, Project Manager at [Martin.Obrien@ks.gov](mailto:Martin.Obrien@ks.gov) or myself.

Thank you for your continued assistance with our projects as we remediate safety hazards left by coal mining in Kansas.

Sincerely,

A handwritten signature in black ink that reads "Murray J. Balk". The signature is written in a cursive style.

Murray J. Balk, Chief  
Surface Mining Section

MJB:MNS

Ec: Landplan-Struble, MOB (wo/plans)

Enc.



**DEPARTMENT OF THE ARMY**  
KANSAS CITY DISTRICT, CORPS OF ENGINEERS  
STATE REGULATORY PROGRAM OFFICE - KANSAS  
2710 N.E. SHADY CREEK ACCESS ROAD  
EL DORADO, KS 67042-8644

March 08, 2017

Kansas State Regulatory Office  
(NWK-2017-00125)  
(CHEROKEE, KS GP-31K)

KDHE-Surface Mining Section  
c/o Murray Balk  
4033 Parkview Drive  
Frontenac, Kansas 66763

Dear Mr. Balk:

This letter concerns your application, submitted on January 19, 2017, for a Department of the Army (DA) permit to conduct reclamation activities by relocating roads away from water bodies and backfilling portions of pit areas to reduce potential hazards (dangerous high walls) to public safety, the project site is referred to as the Area 54 Abandoned Mine Land Reclamation Project. The proposed work associated with the Area 54 Abandoned Mine Land Reclamation Project will involve: relocating and closing roads, filling approximately 0.78 acres of wetland pit impoundments by utilizing on site material to backfill the existing water bodies. Reclamation will consist of creating approximately 0.78 acres of wetlands, replacing wetland features, and seeding the disturbed area to native grasses and trees. The project is located in Section 33, Township 32 South, Range 22 East, Cherokee County, Kansas (Lat: 37.215968°, Lon: -95.007069°).

The Corps of Engineers has jurisdiction over all waters of the United States. Discharges of dredged or fill material in waters of the United States, including wetlands, require prior authorization from the Corps under Section 404 of the Clean Water Act (33 USC 1344). The implementing regulations for this Act are found at 33 CFR 320-332.

We have reviewed the information furnished and have determined that the proposed project is authorized by General Permit No. 31K (GP-31K), provided you ensure that the general and special conditions listed in the permit are met. These general and special conditions may be downloaded from the following location:

[http://www.nwk.usace.army.mil/Portals/29/docs/regulatory/permits/2016-01-27\\_GP31K\\_Permit\\_Document.pdf](http://www.nwk.usace.army.mil/Portals/29/docs/regulatory/permits/2016-01-27_GP31K_Permit_Document.pdf). In addition, the following special condition applies to this project:

- In order to ensure that impacts associated with creating the wetland pit impoundment, located within the Area 54 Abandoned Mine Land Reclamation Project, are temporary in nature, KDHE must monitor this site for a period of up to 5 years to ensure that wetland characteristics return once construction is complete. An annual monitoring report concisely assessing the status of the permittee responsible compensatory mitigation must be submitted to the El Dorado Regulatory

Office by December 31 every year over a period of five years, beginning one year from the completion of construction. The results of the mitigation site survey shall be documented in an annual progress report as specified in RGL 08-03, [http://www.usace.army.mil/Portals/2/docs/civilworks/RGLS/rgl08\\_03.pdf](http://www.usace.army.mil/Portals/2/docs/civilworks/RGLS/rgl08_03.pdf). The permittee shall be responsible to perform any corrective actions deemed necessary by this District to insure the success of the mitigation/preservation activities. The monitoring report will document the success and/or failure of mitigation work and provide site color photographs depicting mitigation work/preservation efforts from fixed points within the project area.

The Kansas Department of Health and Environment (KDHE) has certified that this general permit will not violate existing state water quality standards provided you comply with the conditions included in their attached water quality certification. All conditions included in the water quality certification become conditions of this GP-31K verification, please carefully review all conditions associated with this permit. If you have any questions concerning state water quality standards or compliance issues with the associated certification conditions, please contact KDHE at 785-296-5573, Bureau of Water - NPS Section, 1000 SW Jackson Street, Suite 420, Topeka, Kansas 66612-1367.

Special condition "a" of GP-31K requires you to sign and submit the enclosed "Compliance Certification" upon completion of the authorized work and any required mitigation.

This GP verification is valid until January 27, 2021. Should your project plans change or if your activity is not complete within the specified verification term, you must contact this office for another permit determination.

Although an individual DA permit is not required, other Federal, state and/or local permits may be required. You should verify this yourself.

We are interested in your thoughts and opinions concerning your experience with the Kansas City District, Corps of Engineers Regulatory Program. Please feel free to complete our Customer Service Survey form on our website at: [http://corpsmapu.usace.army.mil/cm\\_apex/f?p=regulatory\\_survey](http://corpsmapu.usace.army.mil/cm_apex/f?p=regulatory_survey). You may also call and request a paper copy of the survey which you may complete and return to us by mail or fax.

Mr. Scott Dodson, Regulatory Specialist, reviewed the information furnished and made this determination. If you have any questions concerning this matter, please feel free to contact Mr. Dodson at 316-322-8247 (FAX 316-322-8259). Please reference Permit No. 2017-00125 in all comments and/or inquiries relating to this project.

Enclosures

Copies Furnished (electronically wo/enclosure):

Environmental Protection Agency,

Watershed Planning and Implementation Branch  
U.S. Fish and Wildlife Service, Manhattan, Kansas  
Kansas Department of Wildlife, Parks and Tourism  
Kansas Department of Health and Environment  
Kansas Department of Agriculture

## COMPLIANCE CERTIFICATION

*Special condition "a" of this permit document requires that you submit a signed certification regarding the completed work and any required mitigation. This certification page satisfies this condition if it is provided to the Kansas City District at the address shown at this bottom of this page upon completion of the project.*

**APPLICATION NUMBER:** NWK-2017-00125

**APPLICANT:** Kansas Dept. of Health and Environment  
Surface Mining Section  
c/o Murray Balk  
4033 Parkview Drive  
Frontenac, KS 66763

**PROJECT LOCATION:** Project is located in Section 33, Township 32 South, Range 22 East, Cherokee County, Kansas (Lat: 37.215968°, Lon: -95.007069°).

- a. I certify that the authorized work was done in accordance with the Corps authorization, including any general or specific conditions.
- b. I certify that any required mitigation was completed in accordance with the permit conditions.
- c. Your signature below, as permittee, indicates that you have completed the authorized project as certified in paragraphs a and b above.

\_\_\_\_\_  
(PERMITTEE)

\_\_\_\_\_  
(DATE)

Return this certification to:

Dodson  
U.S. Army Corps of Engineers  
Kansas State Regulatory Office  
2710 NE Shady Creek Access Road  
El Dorado, KS 67042

Surface Mining Section  
4033 Parkview Dr.  
Frontenac, KS 66763



Phone: 620-231-8540  
Fax: 620-231-0753  
Murray.Balk@ks.gov  
www.kdheks.gov/mining/

Susan Mosier, MD, Secretary

Department of Health & Environment

Sam Brownback, Governor

January 17, 2017

Ms. Sarah.M.Reznicek  
U. S. Army Corps of Engineers  
Kansas State Regulatory Office  
2710 Northeast Shady Creek Access Road  
El Dorado, Kansas 67042

RE: Request for Authorization under General Permit GP31K to conduct reclamation activities on the **Area 54 Abandoned Mine Land Reclamation Project** (Preliminary Jurisdictional Determination)

Dear Ms. Reznicek:

The Kansas Department of Health and Environment, Surface Mining Section is providing for your review an application (Form 4345) and supporting materials for the purpose of obtaining authorization to conduct reclamation activities on abandoned mine land. The **Area 54 Abandoned Mine Land Reclamation Project** is located in Section 33, T32S, R22E of Cherokee County, Kansas. Engineering and wetland delineation was completed by Landplan Engineering of Lawrence, Kansas. Phillip W. Struble, PE and President of Landplan is the project engineer. The application delineates and assesses all adverse impacts to the waters of the United States and adjacent wetlands within the project area. Mitigation will take place on site.

As is shown in the project description, the completion of this project is vital to the safety of the traveling public using the Kansas Department of Wildlife, Parks and Tourism Mined Land Wildlife Area 24. Your prompt attention to this request would be greatly appreciated. If you have any questions regarding this proposed project, or would like to make an onsite assessment, please contact Phil Struble of Landplan who is acting as my agent for this project or Marlene Spence of my staff at (620) 231-8540 or me. We can be reached by email at [Murray.Balk@ks.gov](mailto:Murray.Balk@ks.gov) and [Marlene.Spence@ks.gov](mailto:Marlene.Spence@ks.gov). Thank you for your continued cooperation with reclamation efforts in Kansas.

Sincerely,

A handwritten signature in black ink that reads "Murray J. Balk".

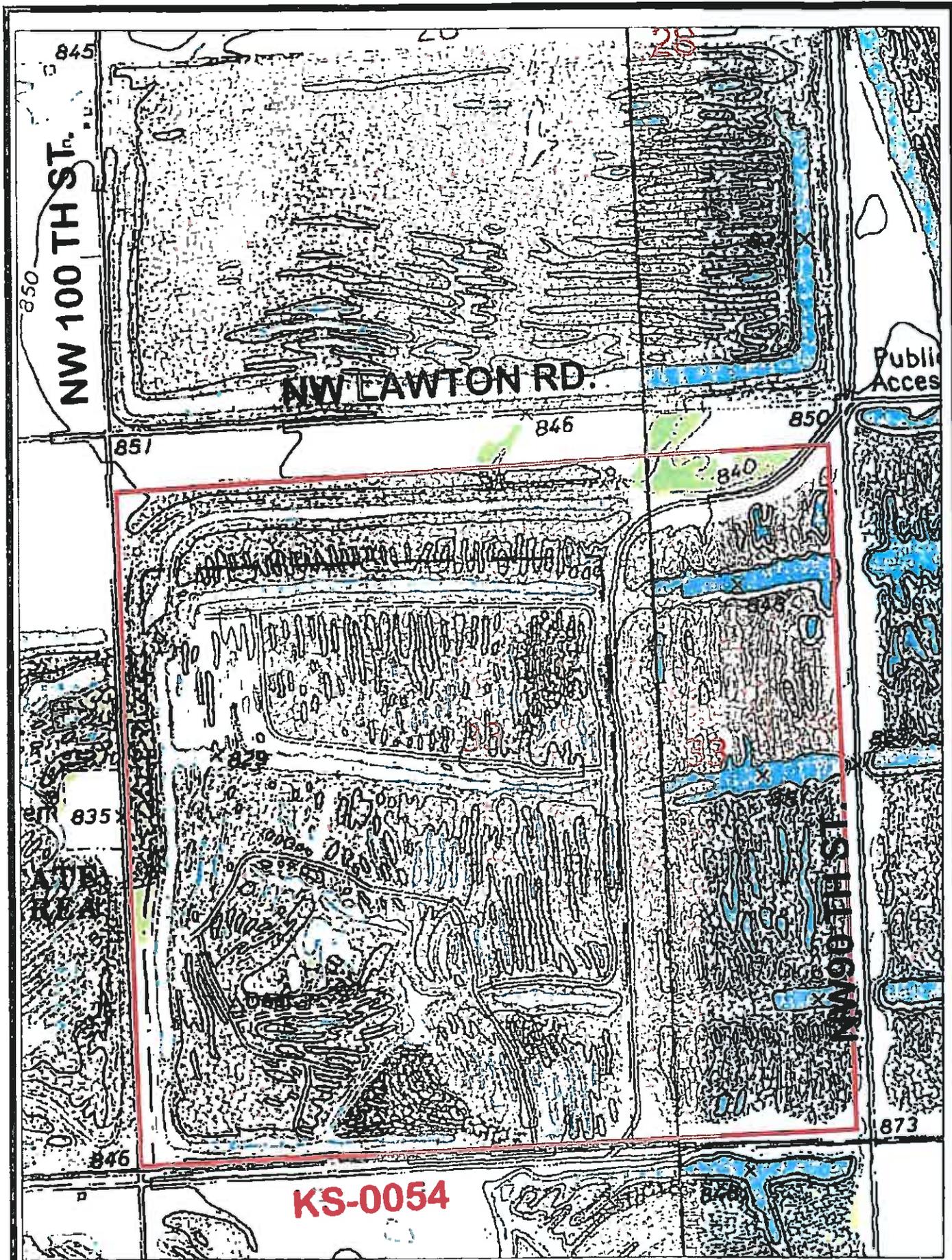
Murray J. Balk, Chief  
Surface Mining Section

Encl.  
MJB:MNS

Ec: Landplan, MOB

## **Section 4**

### **Location Maps**



County: Cherokee

PAD NUMBER: KS-0054

Quad: Hallowell

Date: 07/15/2011

Location: S33,T32S, R22E

Problems: Dangerous Highwall



MAP SCALE 1" = 2000'



NFIP

NATIONAL FLOOD INSURANCE PROGRAM

PANEL 0150C

# FIRM

FLOOD INSURANCE RATE MAP  
CHEROKEE COUNTY,  
KANSAS  
AND INCORPORATED AREAS  
PANEL 150 OF 500  
(SEE MAP INDEX FOR FIRM PANEL LAYOUT)

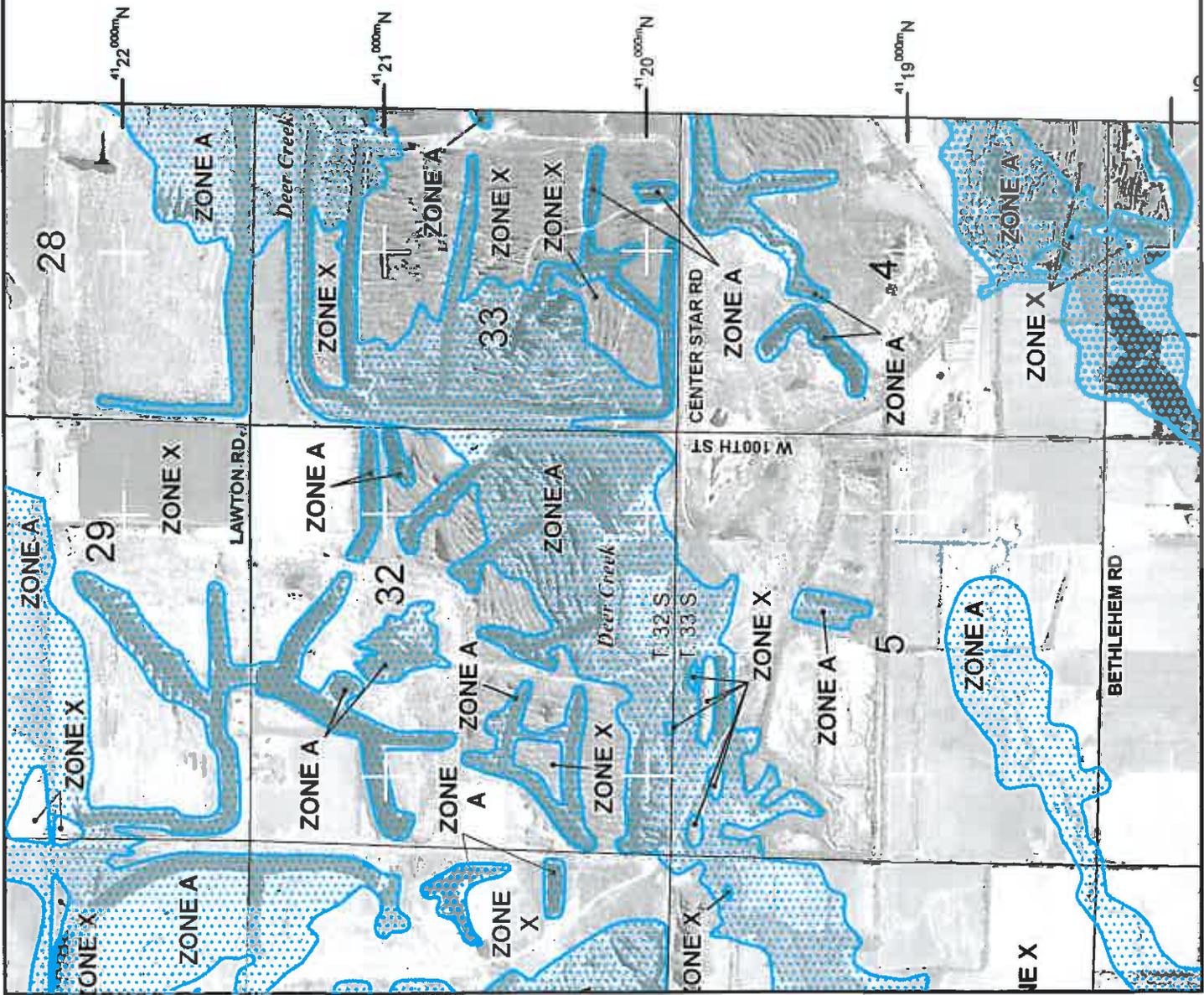
CONTAINS:  
COMMUNITY  
CHEROKEE COUNTY  
NUMBER  
20084  
PANEL  
0150  
SUFFIX  
C

Notice to User: The Map Number shown below should be used when placing map orders. The Community Number shown above should be used on insurance applications for the subject community.



MAP NUMBER  
20021C0150C  
EFFECTIVE DATE  
NOVEMBER 19, 2008

Federal Emergency Management Agency



This is an official copy of a portion of the above referenced flood map. It was extracted using F-MIT On-Line. This map does not reflect changes or amendments which may have been made subsequent to the date on the title block. For the latest product information about National Flood Insurance Program flood maps check the FEMA Flood Map Store at [www.mec.fema.gov](http://www.mec.fema.gov)

Soil Map—Cherokee County, Kansas  
(Area 54 )



Map Scale: 1:9,860 if printed on A portrait (8.5" x 11") sheet.

0 100 200 400 600 Meters

0 450 900 1800 2700 Feet

Map projection: Web Mercator Corner coordinates: WGS84 Edge ticks: UTM Zone 15N WGS84

## MAP LEGEND

 Area of Interest (AOI)	 Spoil Area
 Area of Interest (AOI)	 Stony Spot
 Soils	 Very Stony Spot
 Soil Map Unit Polygons	 Wet Spot
 Soil Map Unit Lines	 Other
 Soil Map Unit Points	 Special Line Features
 Special Point Features	 Water Features
 Blowout	 Streams and Canals
 Borrow Pit	 Transportation
 Clay Spot	 Ralls
 Closed Depression	 Interstate Highways
 Gravel Pit	 US Routes
 Gravelly Spot	 Major Roads
 Landfill	 Local Roads
 Lava Flow	 Background
 Marsh or swamp	 Aerial Photography
 Mine or Quarry	
 Miscellaneous Water	
 Perennial Water	
 Rock Outcrop	
 Saline Spot	
 Sandy Spot	
 Severely Eroded Spot	
 Sinkhole	
 Slide or Slip	
 Sodic Spot	

## MAP INFORMATION

The soil surveys that comprise your AOI were mapped at 1:24,000.

Warning: Soil Map may not be valid at this scale.

Enlargement of maps beyond the scale of mapping can cause misunderstanding of the detail of mapping and accuracy of soil line placement. The maps do not show the small areas of contrasting soils that could have been shown at a more detailed scale.

Please rely on the bar scale on each map sheet for map measurements.

Source of Map: Natural Resources Conservation Service  
Web Soil Survey URL:  
Coordinate System: Web Mercator (EPSG:3857)

Maps from the Web Soil Survey are based on the Web Mercator projection, which preserves direction and shape but distorts distance and area. A projection that preserves area, such as the Albers equal-area conic projection, should be used if more accurate calculations of distance or area are required.

This product is generated from the USDA-NRCS certified data as of the version date(s) listed below.

Soil Survey Area: Cherokee County, Kansas  
Survey Area Data: Version 16, Sep 20, 2016

Soil map units are labeled (as space allows) for map scales 1:50,000 or larger.

Date(s) aerial images were photographed: Jul 23, 2010—Nov 19, 2010

The orthophoto or other base map on which the soil lines were compiled and digitized probably differs from the background imagery displayed on these maps. As a result, some minor shifting of map unit boundaries may be evident.

## Map Unit Legend

Cherokee County, Kansas (KS021)			
Map Unit Symbol	Map Unit Name	Acres In AOI	Percent of AOI
8100	Hepler silt loam, 0 to 3 percent slopes, frequently flooded	0.2	0.1%
8670	Coalvale silty clay, 1 to 5 percent slopes	8.7	1.8%
8771	Kanima silty clay loam, 15 to 50 percent slopes	413.2	85.4%
8863	Parsons silt loam, 0 to 1 percent slopes	3.2	0.7%
9999	Water	58.5	12.1%
<b>Totals for Area of Interest</b>		<b>483.8</b>	<b>100.0%</b>

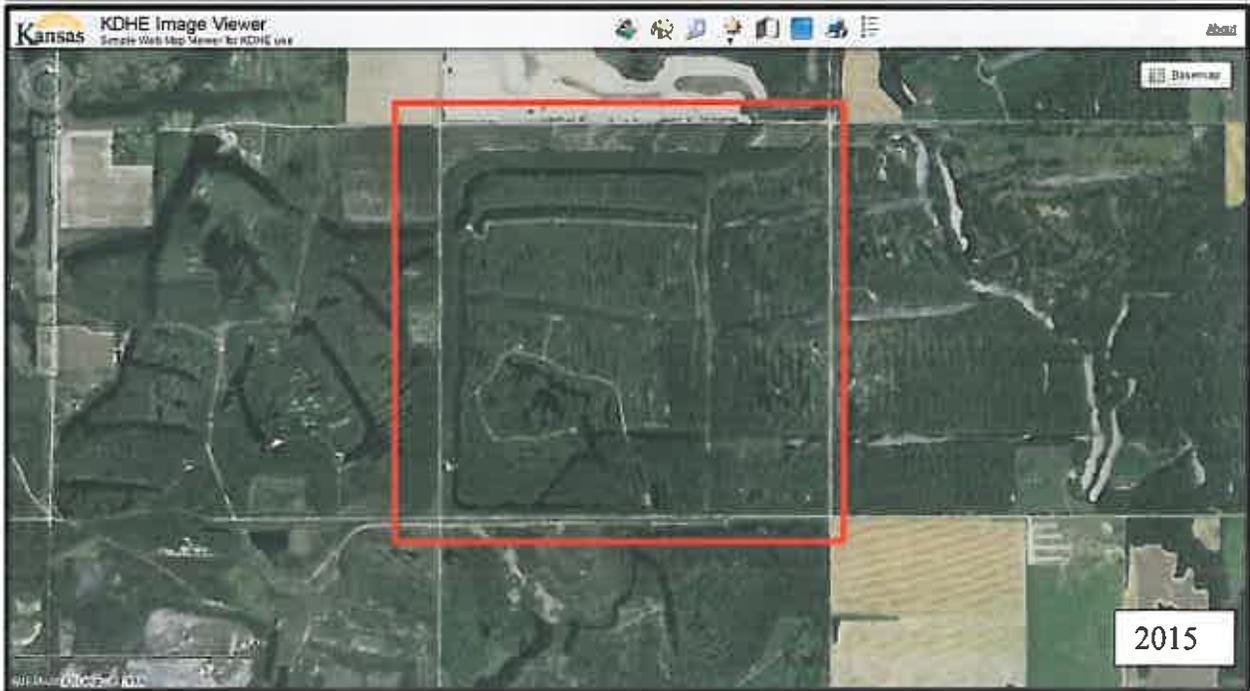
## **Section 5**

### **Site Photographs**



This series of historical photos showing the area before and at various times following mining.





Before the enactment of surface mining regulations, multiple reforestation attempts on abandoned mine land were made. The Loblolly pines in the photo of remnants of some of those early reforestation attempts. Reclamation has been designed to avoid these trees to the extent possible.



To make the area accessible to hunters and fishermen, the Fish and Game Commission had roads pushed through the spoil ridges. The roads created dams like the one shown with deep water dangerously close to the roadway and a steep drop off on the other side.



Typical road adjacent to dangerous highwall in Area 54 (MLWA Unit 24).





Three impoundments meet in the photo above and are connected by subsurface seepage. The reclamation plan includes connecting two pits for boat traffic and the installation of a rock lined spillway system into the third.



Area 54 (MLWA Unit 24) is used by the public on a regular basis for camping and socializing.



There are over 13,000 linear feet of dangerous highwall in the project area.





Access to the pits for fishing is highly desired, but there are no improved boat ramps within the project area. Boat ramps are gravel as shown below and subject to erosion.





Drainage systems installed at the time the roads were pushed through were inadequate and are in disrepair as in the case of this section of vitrified clay pipe.

The roads winding through the area were placed without any consideration to line of sight. During full summer foliage, oncoming traffic may be obscured by brush.



## **Section 6**

### **Construction Drawings (half scale)**