

Storm Water Management Plan

Project Name: 7East Grout Borehole Pad Site

SITE DESCRIPTION			
Project Name and Location: (PARCEL #, Section, Township, & Range; and Address)	7East Grout borehole pad construction and access roads. Parcel 945161001 Sections 16 5N 86W. 30779 RCR 33	OWNER Name, Address, and Phone #:	Sage Creek Land & Reserves, LLC 701 Market Street STE 862 St. Louis, MO 63101 307-685-6720
Description: (Purpose and Types of Soil Disturbing Activities)	Contruction of one 300 x 300 feet Grout borehole pad and associated access roads.	CONTACT Name, Address, & Phone #:	Miranda Kawcak Twentymile Coal, LLC 29515 RCR 27 Oak Creek, CO 80467 970-870-2716 / 970-439-8273
# Cubic Yards of soil cut/fill and/or amount of surface area moved.	7East Pad: ~3400 Cu.Yd. cut/fill balance		
Site Area:	The site is approximately 3 acres of which .4 acres will be disturbed by construction activities.		
Sequence of Major Activities			
The order of activities will be as follows:		<div style="display: flex; align-items: center;"> <div style="width: 20px; text-align: center; margin-right: 10px;">5</div> <div></div> </div> <div style="display: flex; align-items: center;"> <div style="width: 20px; text-align: center; margin-right: 10px;">6</div> <div></div> </div> <div style="display: flex; align-items: center;"> <div style="width: 20px; text-align: center; margin-right: 10px;">7</div> <div></div> </div> <div style="display: flex; align-items: center;"> <div style="width: 20px; text-align: center; margin-right: 10px;">8</div> <div></div> </div> <div style="display: flex; align-items: center;"> <div style="width: 20px; text-align: center; margin-right: 10px;">9</div> <div></div> </div>	
1 Establishment of temporary drainage and sediment control 2 Removal of topsoil and placed in stockpiles 3 Construction of finished drill pad and borehore 4 Construction of of perimeter ditch with rock check dams around pad area.			
Name of Receiving Waters:	Fish Creek		
CONTROLS			
Erosion and Sediment Practices			
Stabilization Practices			
Temporary Stabilization -	Refer to the attached Exhibit 49FF. Temporary stabilization includes wattles or equivalent devices at all topsoil stock piles and along the fill sides of the pad		
Permanent Stabilization -	Refer to the attached Exhibit 49FF. A run-off diversion ditch will be constructed on the appropriate sides of the pads to catch all drainage from the pad area and divert any run-off from entering the pad area.		
Weed Control -	Refer to the attached Weed Management Plan		
Structural Practices			
Routt County Planning Dept. administrative use permit PL18-141			
Storm Water Management			
Drainage and sediment from disturbed areas will be controlled by an integrated system, using grading and berms to limit and control surface runoff, mud pits excavated within the footprint of the pad to contain all drilling fluids, and either rock check-dams, silt fence, or straw bales/wattles installed at the low point of the drill pad to contain sediment and control any discharge.			
Maintenance:	The drill pad surfaces will have approximatnly 8" of compacted pitrun and 3" of compacted road base or screened rock applied. Access to the site will be by a constructed 150 foot long by 25 feet wide graveled access road. Pad will be plowed in winter if access is necessary.		

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OTHER CONTROLS	
Waste Disposal:	All waste will be disposed of at the Twentymile trash collection sites.
Waste Materials	Minor amounts of cardboard, wooded stakes, and misc. steel pipe that will be removed as the construction progresses
Hazardous Waste	No hazardous waste except fuels and oils for the equipment used will be present at the construction site
Sanitary Waste	A portable toilet will be placed on site during construction. The toilet will be inspected and cleaned weekly.
TIMING OF CONTROLS/MEASURES	
The proposed drill sites construction will be initiated as soon as possible after the receipt of the permit approvals with the completion of the site prior to 10/30/2021.	
CERTIFICATION OF COMPLIANCE WITH FEDERAL, STATE AND LOCAL REGULATIONS	
On July 1st, 2021 Twentymile Coal, LLC submitted a Minor Revision (TR21-97) to the Colorado Division of Mining, Reclamation, and Safety (CDRMS) requesting approval of TR21-97 to our existing Mining Permit for the installation, operation, and reclamation of this pad site MR21-319 is schedule to be approved September 4th, 2021.	
MAINTENANCE/INSPECTION PROCEDURES	
Erosion and Sediment Control Inspection and Maintenance Practices	
1	The installed wattles and diversion ditch will be inspected bi-annually for erosion and proper functionality.
2	The topsoil piles will be seeded following construction
3	Rock Check-dams will be installed at the ends of the diversion ditched to help control sediment and erosion.
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INVENTORY FOR POLLUTION PREVENTION PLAN

The materials or substances listed below are expected to be present onsite during construction:

- Straw or Equivalent wattles
- 8-12" fractured limestone for rock check dams
- Pitrun and road base for access road and pad
- Wooden Stacks for stabilization of wattles
- Steel pipe for the borehole surface casing, borehole shaft casing, and misc. fittings
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Spill Control Practices

In addition to the good housekeeping and material management practices discussed in the previous sections of this plan, the following practices will be followed for spill prevention and cleanup:

- Please refer to the attached Twentymile SPCC Plan
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STORM WATER MANAGEMENT PLAN CERTIFICATION

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 gathered and evaluated the information submitted. Based on my inquiry of the person or persons who manage the system, or of 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 for knowing violations.

Signed: Miranda Kawcak

Date: 7/29/2021