

# TECHNICAL MEMORANDUM

Utah Coal Regulatory Program

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September 29, 2008

TO: Internal File

THRU: James D. Smith, Permit Supervisor  
Dave Darby, Team Lead 

FROM: Wayne H. Western, Environmental Scientist III *W H W*

RE: MRP Update – R645 Format, Savage Services Corp., Savage Coal Terminal ACT/007/022 Task # 2955.

## SUMMARY:

On April 9, 2008, the Permittee submitted a revised copy of the mining and reclamation plan. The revisions in the MRP were to use an updated format for the document. This memo deals with bonding and engineering.

## DEFICIENCIES

**R645-301-521.190**, The Permittee must include in the MRP a table that shows the number of permitted and disturbed areas and whether they are owned by the federal government, state government, local government or private persons. The Division needs that information for reports that go to OSM.

**R645-301-526.100**, The Permittee did not meet the requirements of this section. R645-301.526.100 deals with structures that was used for coal mining and reclamation and were constructed prior to January 21, 1981. The main reason for that regulations is to show that structures constructed before January 21, 1981 meet the performance standards even if they do not meet the design standards.

**R645-301-527.100**, The Permittee must classify each road as primary or ancillary. The Permittee cannot make general statements such as the one in Chapter 5 page 6 “ All other roads on the site are considered Ancillary Roads”. The Permittee must state what the ancillary roads are used for.

**R645-301-521.252**, the Permittee must commit to placing perimeter signs around the permit boundaries rather than state that the permit boundaries are shown on a map.

**R645-301-527.270**, the Permittee must commit to place topsoil markers on topsoil piles rather than state what the signs will look like.

**R645-301-529**, The Permittee must address the closure of all underground openings including wells. The comment that the site is a surface mine is insufficient.

**TECHNICAL ANALYSIS:**

**ENVIRONMENTAL RESOURCE INFORMATION**

Regulatory Reference: Pub. L 95-87 Sections 507(b), 508(a), and 516(b); 30 CFR 783., et. al.

**PERMIT AREA**

Regulatory Requirements: 30 CFR 783.12; R645-301-521.

**Analysis:**

The Permittee did not meet the requirements of this section. The Permittee must include in the MRP a table that shows the number of permitted and disturbed areas and whether they are owned by the federal government, state government, local government or private persons. The Division needs that information for reports that go to OSM.

The Permittee showed the permit area on Plate 1-1. The Permittee give the legal descriptions of the permit area in Chapter 1 of the MRP.

**Findings**

The information that the Permittee provided in the application is not considered adequate to meet the requirements of this section. Before approval, the Permittee must provide the following in accordance with:

**R645-301-521.190**, The Permittee must include in the MRP a table that shows the number of permitted and disturbed areas and whether they are owned by the federal government, state government, local government or private persons. The Division needs that information for reports that go to OSM.

**MAPS, PLANS, AND CROSS SECTIONS OF RESOURCE INFORMATION**

Regulatory Reference: 30 CFR 783.24, 783.25; R645-301-323, -301-411, -301-521, -301-622, -301-722, -301-731.

**Analysis:**

**Affected Area Boundary Maps**

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The Permittee meet the requirements of this section. Plate 1-1 shows the permit area.

**Existing Surface Configuration Maps**

The Permittee meet the requirements of this section.

**Mine Workings Maps**

There are no mine workings at the site.

**Permit Area Boundary Maps**

The Permittee met the requirements of this section. Plate 1-1 shows the permit area.

**Findings:**

The information that the Permittee provided in the application is considered adequate to meet the requirements of this section.

**OPERATION PLAN**

**MINING OPERATIONS AND FACILITIES**

Regulatory Reference: 30 CFR 784.2, 784.11; R645-301-231, -301-526, -301-528.

**Analysis:**

The Permittee met the minimum requirements of this section. The information is in the engineering section of the MRP.

**Findings**

The information that the Permittee provided in the application is considered adequate to meet the requirements of this section.

## **EXISTING STRUCTURES:**

Regulatory Reference: 30 CFR 784.12; R645-301-526.

### **Analysis:**

The Permittee did not meet the requirements of this section. The term "Existing Structure" means a structure or facility used in connection with or to facilitate coal mining and reclamation operations for which construction began prior to January 21, 1981.

The main purpose of this regulation was to determine if the existing structures met the R645 Rules performance standards.

### **Findings**

The information that the Permittee provided in the application is not considered adequate to meet the requirements of this section. Before approval, the Permittee must provide the following in accordance with:

**R645-301-526.100**, The Permittee did not meet the requirements of this section. R645-301.526.100 deals with structures that was used for coal mining and reclamation and were constructed prior to January 21, 1981. The main reason for that regulations is to show that structures constructed before January 21, 1981 meet the performance standards even if they do not meet the design standards.

## **RELOCATION OR USE OF PUBLIC ROADS**

Regulatory Reference: 30 CFR 784.18; R645-301-521, -301-526.

### **Analysis:**

The Permittee met the requirements of this section. In Section 526.116, the Permittee states that there are no public roads within 100 feet of the permit boundary, except were the access road enters the disturbed area. The Permittee does not plan on conducting additional operations within 100 feet of a public road.

### **Findings:**

The information that the Permittee provided in the application is considered adequate to meet the requirements of this section.

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## COAL RECOVERY

Regulatory Reference: 30 CFR 817.59; R645-301-522.

### Analysis:

The Permittee met the requirements of this section. The site is a coal preparation facility and no mining occurs.

### Findings

The information that the Permittee provided in the application is considered adequate to meet the requirements of this section.

## SUBSIDENCE CONTROL PLAN

Regulatory Reference: 30 CFR 784.20, 817.121, 817.122; R645-301-521, -301-525, -301-724.

### Analysis:

The Permittee met the requirements of this section. The site is a coal preparation facility and no mining occurs.

### Findings:

The information that the Permittee provided in the application is considered adequate to meet the requirements of this section.

## SLIDES AND OTHER DAMAGE

Regulatory Reference: 30 CFR Sec. 817.99; R645-301-515.

### Analysis:

The Permittee met the requirements of this section. In Section 515 of the MRP, the Permittee describes how they will respond to slides and impoundment hazards.

## **Findings**

The information that the Permittee provided in the application is considered adequate to meet the requirements of this section.

## **ROAD SYSTEMS AND OTHER TRANSPORTATION FACILITIES**

Regulatory Reference: 30 CFR Sec. 784.24, 817.150, 817.151; R645-301-521, -301-527, -301-534, -301-732.

### **Analysis:**

#### **Road Classification System**

The Permittee did not meet the requirements of this section. The purpose of the reformatting is to get the MRP into the form of the R645 Rules. The Permittee has most of the road information in the Section 511, which is general information and does not deal specifically with roads.

In Section 511.100, the Permittee lists several roads and classifies them as primary and then make a blanket statement that all other roads are ancillary but does not provide information on the other roads. The Permittee must state in the MRP if there are ancillary roads and if so describe them.

#### **Plans and Drawings**

The Permittee met the general requirements for road plans and drawings. The plans and drawings contained the following:

- On Plate 5-4, the Permittee list the roads and shows typical cross sections. The site is flat, less than 5% grade so detailed profiles of the roads are not needed.
- There are no roads that are in channels of intermittent or perennial streams.
- There are not fords of perennial or intermittent streams.
- There are no natural stream channels that will be altered.
- There are no low-water crossings.

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**Performance Standards**

The Permittee did not meet the general performance standards for roads. All roads shall be located, designed, constructed, reconstructed, used, maintained, and reclaimed so as to:

- The Division considers that the designs meet the requirements to control erosion and air pollution when the hydrology and air quality requirements have been met.
- The Division considers that the Permittee has controlled damage to wildlife when the biology requirements have been met.
- The Division considers that the Permittee will prevent additional contributions of suspended solids to stream flow when the hydrology requirements have been met.
- The Division considers that the Permittee will neither cause nor contribute to, directly or indirectly, the violation of State or Federal water quality standard applicable to receiving waters when the hydrology requirements have been met.
- The Division considers that the Permittee will prevent or control damage to public or private property, including the prevention or mitigation of adverse effects on lands within the boundaries of units of the National Park System, the National Wildlife Refuge System, the National System of Trails, the National Wilderness Preservation System, the Wild and Scenic Rivers System, including designated study rivers, and National Recreation Areas designated by Act of Congress if the general requirements have been met.
- The Permittee meet the requirements for using nonacid- and nontoxic-forming substances in road surfacing. The Permittee stated that gravel or asphalt will be used as road surfaces.
- In Section 527.240 of the MRP, the Permittee committed to repair a road damaged by catastrophic event as soon as practicable.

In addition to the above, primary roads shall meet the following requirements:

- The Permittee had the Plate 5-4 which shows the roads and cross sections certified by a registered professional engineer.
- The Permittee adequately address the requirement that each primary road embankment shall have a minimum static factor of 1.3. In Section 511.100 of the MRP, the Permittee states that the safety factor has been achieved
- The Division considers that the Permittee met the requirements to minimize erosion if the general hydrology requirements have been met.
- The Permittee does not have fords in perennial or intermittent streams.
- The Division considers that the roads have adequate drainage control if the hydrology requirements have been met.
- The Permittee stated that the roads were surfaced with crushed gravel or asphalt.

### **Primary Road Certification**

The Permittee met the requirements of this section. The Permittee had Plate 5-4, Savage Coal Terminal Road Map certified by a registered professional engineer.

### **Other Transportation Facilities**

The Permittee met the requirements of this section. The Permittee shows the conveyors and rail systems on Plate 5-2, Savage Coal Terminal Facility Map. The Permittee also describes the conveyors and rail systems in the MRP.

### **Findings:**

The information that the Permittee provided in the application is not considered adequate to meet the requirements of this section. Before approval, the Permittee must provide the following in accordance with:

**R645-301-527.100**, The Permittee must classify each road as primary or ancillary. The Permittee cannot make general statements such as the one in Chapter 5 page 6 “All other roads on the site are considered Ancillary Roads”. The Permittee must state what the ancillary roads are.

## **SPOIL AND WASTE MATERIALS**

Regulatory Reference: 30 CFR Sec. 701.5, 784.19, 784.25, 817.71, 817.72, 817.73, 817.74, 817.81, 817.83, 817.84, 817.87, 817.89; R645-100-200, -301-210, -301-211, -301-212, -301-412, -301-512, -301-513, -301-514, -301-521, -301-526, -301-528, -301-535, -301-536, -301-542, -301-553, -301-745, -301-746, -301-747.

### **Analysis:**

#### **Disposal Of Noncoal Mine Wastes**

The Permittee meet the requirements of this section. The Permittee did address how they would handle noncoal waste in Section 511.100 and 528.334 of the MRP.

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**Coal Mine Waste**

The Permittee meet the requirements of this section. The information is located in Section 536 of the MRP. Because the Permittee only processes coal there will be no underground development waste or excess spoil generated at the site.

The Permittee's current plan is to haul all coal processing waste off site. The Permittee will ship coal processing waste generated from washing coal from the Dugout Mine back to the Dugout Mine's refuse pile. Coal mine waste deposited on the site up to 1984 is scheduled to be shipped off site as fuel to Sunnyside Cogeneration Associates power plant or a similar facility.

**Refuse Piles**

There are no refuse piles on site.

**Excess Spoil:**

The Permittee met the requirements of this section. The Permittee will not generate any excess spoil on the site.

**Findings:**

The information that the Permittee provided in the application is considered adequate to meet the requirements of this section.

**SUPPORT FACILITIES AND UTILITY INSTALLATIONS**

Regulatory Reference: 30 CFR Sec. 784.30, 817.180, 817.181; R645-301-526.

**Analysis:**

The Permittee did meet the requirements of this section. The Permittee did show the location of the support facilities on Plate 5-2, Savage Coal Terminal Facility Map.

**Findings:**

The information provided in the application is considered adequate to meet the minimum requirements of this section.

**SIGNS AND MARKERS**

Regulatory Reference: 30 CFR Sec. 817.11; R645-301-521.

**Analysis:**

The Permittee did not meet the requirements of this section. R645-301-521.252, the Permittee must commit to placing perimeter signs around the permit boundaries rather than state that the permit boundaries are shown on a map. R645-301-527.270, the Permittee must commit to place topsoil markers on topsoil piles rather than state what the signs will look like.

**Findings:**

The information provided in the application is not considered adequate to meet the minimum requirements of this section. Before approval, the Permittee must provide the following in accordance with:

**R645-301-521.252**, the Permittee must commit to placing perimeter signs around the permit boundaries rather than state that the permit boundaries are shown on a map.

**R645-301-527.270**, the Permittee must commit to place topsoil markers on topsoil piles rather than state what the signs will look like.

**USE OF EXPLOSIVES**

Regulatory Reference: 30 CFR Sec. 817.61, 817.62, 817.64, 817.66, 817.67, 817.68; R645-301-524.

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**Analysis:**

The Permittee met the requirements of this section. The Permittee does not plan on using any explosives at the site.

**Findings:**

The information provided in the application is considered adequate to meet the minimum requirements of this section.

**MAPS, PLANS, AND CROSS SECTIONS OF MINING OPERATIONS**

Regulatory Reference: 30 CFR Sec. 784.23; R645-301-512, -301-521, -301-542, -301-632, -301-731, -302-323.

**Analysis:**

**Affected Area Maps**

The Permittee meet the requirements of this section. Plate 5-1 shows the affected area, which the Division also considers the permit area.

**Mining Facilities Maps**

The Permittee meet the requirements of this section. Plate 5-1 shows the surface facilities.

**Certification Requirements**

The Permittee meet the requirements of this section. All appropriate maps have been certified.

**Findings:**

The information provided in the application is considered adequate to meet the minimum requirements of this section.

## RECLAMATION PLAN

### APPROXIMATE ORIGINAL CONTOUR RESTORATION

Regulatory Reference: 30 CFR Sec. 784.15, 785.16, 817.102, 817.107, 817.133; R645-301-234, -301-412, -301-413, -301-512, -301-531, -301-533, -301-553, -301-536, -301-542, -301-731, -301-732, -301-733, -301-764.

#### Analysis:

The Permittee met the requirements for reclaiming the site to the approximate original contours (AOC). The definitions of AOC are couched in terms of backfilling and grading in order to achieve certain results. The mining and reclamation plan must provide the basis for determining whether the proposed backfilling and grading plan will:

- Minimize off-site effects. The Division considers that requirement will be met if the biology and hydrology requirements.
- Achieve a final surface configuration which closely resembles the general surface configuration of the land prior to mining. The area was disturbed prior to the passage of SMCRA and there are no topographic. The surrounding area is flat and the general reclamation plan calls for restoring the land to the topography of the adjacent area.
- Provide a subsurface foundation for a vegetative cover capable of stabilizing the surface from erosion. The Division considers this requirement is meant is the biology requirements are meant.
- Support the approved postmining land use. The Division considers that this requirement is met if the postmining land use requirements are met.

#### Findings:

The information provided in the application is considered adequate to meet the minimum requirements of this section.

### BACKFILLING AND GRADING

Regulatory Reference: 30 CFR Sec. 785.15, 817.102, 817.107; R645-301-234, -301-537, -301-552, -301-553, -302-230, -302-231, -302-232, -302-233.

#### Analysis:

##### General

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The Permittee did not meet the requirements of this section. The requirements for backfilling and grading are as follows:

- Achieve the approximate original contour. The Division addressed those requirements in the AOC section of the TA.
- Eliminate all highwalls, spoil piles, and depressions. There are no highwalls or spoil piles on the site. The Permittee committed to remove the ponds and other major depression at the site.
- Achieve a postmining slope that does not exceed either the angle of repose or such lesser slope as is necessary to achieve a minimum long term static safety factor of 1.3 and to prevent slides. The Permittee did not address this issue.
- Minimize erosion and water pollution both on and off the site; and, support the approved postmining land use. The Division considers that the Permittee will meet those requirements if the biology and hydrology requirements have been met.

Specific backfilling and grading requirements that apply to the site are:

- There is no settled or vegetated fill on site.
- There is no spoil on the site.
- There is no mined out area on the site.
- There are no exposed coal seams on the site.

**Findings:**

The information provided in the application is considered adequate to meet the minimum requirements of this section.

**MINE OPENINGS**

Regulatory Reference: 30 CFR Sec. 817.13, 817.14, 817.15; R645-301-513, -301-529, -301-551, -301-631, -301-748, -301-765, -301-748.

**Analysis:**

The Permittee did not address this section of the regulations. The Permittee must address the requirements of underground openings, which includes wells.

**Findings:**

The information provide in the amendment is not considered adequate to meet the requirements of this section. Before approval, the Permittee must provide the following in accordance with:

**R645-301-529**, The Permittee must address the closure of all underground openings including wells. The comment that the site is a surface mine is insufficient.

**ROAD SYSTEMS AND OTHER TRANSPORTATION FACILITIES**

Regulatory Reference: 30 CFR Sec. 701.5, 784.24, 817.150, 817.151; R645-100-200, -301-513, -301-521, -301-527, -301-534, -301-537, -301-732.

**Analysis:**

**Reclamation**

The Permittee meet the requirements of this section. The Permittee committed to reclaim all roads.

**Retention**

The Permittee does not plan to retain any roads.

**Findings:**

The information provide in the amendment is considered adequate to meet the requirements of this section.

**HYDROLOGIC INFORMATION**

Regulatory Reference: 30 CFR Sec. 784.14, 784.29, 817.41, 817.42, 817.43, 817.45, 817.49, 817.56, 817.57; R645-301-512, -301-513, -301-514, -301-515, -301-532, -301-533, -301-542, -301-723, -301-724, -301-725, -301-726, -301-728, -301-729, -301-731, -301-733, -301-742, -301-743, -301-750, -301-751, -301-760, -301-761.

**Analysis:**

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**Hydrologic Reclamation Plan**

**Findings:**

**CESSATION OF OPERATIONS**

Regulatory Reference: 30 CFR Sec. 817.131, 817.132; R645-301-515, -301-541.

**Analysis:**

The Permittee met the requirements of this section of the regulations. The Permittee has a plan in Section 515 of the MRP for cessation of operations. The Permittee also addresses cessation in Section 541 of the MRP.

**Findings:**

The information provide in the amendment is considered adequate to meet the requirements of this section.

**MAPS, PLANS, AND CROSS SECTIONS OF RECLAMATION OPERATIONS**

Regulatory Reference: 30 CFR Sec. 784.23; R645-301-323, -301-512, -301-521, -301-542, -301-632, -301-731.

**Analysis:**

**Affected Area Boundary Maps**

The Permittee met the requirements of this section. The Permittee showed the affected area on several maps including Plate 5-1.

**Bonded Area Map**

The Permittee met the requirements of this section. The Permittee showed the bonded area on several maps including Plate 5-1.

### **Reclamation Backfilling And Grading Maps**

The Permittee did not meet the requirements of this section. The Permittee must have at least one map that shows the final contours at the same scale as Plate 5-2. In addition, the contour lines outside of the disturbed areas must be the same on the operational and final contour maps.

The Permittee needs to show two reclamation scenarios. The first scenario is that most of the material in the refuse pile has been removed. The second scenario is that the refuse pile is reclaimed in place.

### **Reclamation Facilities Maps**

The Permittee meet the requirements of this section. There are no reclamation facilities scheduled for the site.

### **Final Surface Configuration Maps**

The Permittee meet the requirements of this section.

### **Reclamation Surface And Subsurface Manmade Features Maps**

The Permittee did not meet the requirements of this section. The Permittee must include maps in the MRP that show the facilities that will remain after final reclamation, such as railroads and pipelines. The map must be at the same scale as the general reclamation maps.

### **Certification Requirements.**

The Permittee met the requirements of this section. The maps that the Permittee provided met the certification requirements.

### **Findings:**

The information provide in the amendment is not considered adequate to meet the requirements of this section.

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## **BONDING AND INSURANCE REQUIREMENTS**

Regulatory Reference: 30 CFR Sec. 800; R645-301-800, et seq.

### **Analysis:**

#### **General**

The Permittee met the requirements of this section. In Chapter 8 of the MRP, the Permittee addressed the general requirements for bonding and insurance.

#### **Form of Bond**

The Permittee met the requirements of this section. The bond is in Appendix 8-2 of the MRP.

#### **Determination of Bond Amount**

The Permittee met the requirements of this section. The Permittee gave the Division enough information to calculate the reclamation cost estimate. The reclamation cost estimate is in Appendix 8-1 of the MRP.

#### **Terms and Conditions for Liability Insurance**

The Permittee met the requirements of this section. The insurance information is in Appendix 8-3 of the MRP.

### **Findings:**

The information provide in the amendment is considered adequate to meet the requirements of this section.

**RECOMMENDATIONS:**

The Division should deny the application until all of the above mentioned deficiencies have been addressed.

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