

TECHNICAL MEMORANDUM

Utah Coal Regulatory Program

July 6, 2006

TO: Internal File

THRU: Wayne Hedberg, Permit Supervisor
Dana Dean, Environmental Scientist/Hydrology, Team Lead

FROM: Peter H. Hess, Environmental Scientist/Engineering

RE: Proposed Expansion Of Disturbed Area, Task ID #2524, Savage Services Corporation, Savage Coal Terminal, C/007/022

SUMMARY:

The Permittee, through Blackhawk Engineering Company, is proposing to disturb an additional 6.61 acres within the Savage Coal Terminal permit area (160.00 total permit acres). This will increase the disturbance to 128.89 acres; the increase amounts to 5.13%.

Savage Industries has negotiated with Canyon Fuel Company, LLC / Dugout Canyon Mine to wash coal which is incapable of meeting contract specifications in its natural state. This requires restarting the CV Spur wash plant, which was operated by the Beaver Creek Coal Company until 1984.

In the idle period from 1984 until present, the Permittee reclaimed the static thickener which removed product from the fine coal cleaning circuit, and allowed the decant water to be returned to the cleaning process. Since the plant is to be restarted, a new separation facility is needed to replace the dismantled thickener. The Task ID #2524 application's purpose is to permit an area in the undisturbed NW corner of the Coal Terminal property for the purpose of constructing four settling ponds where minus 28-mesh coal will settle out and allow effluent water to be decanted for return to the coal cleaning circuit.

The Division has identified this application as Task ID #2524 for the purpose of tracking and review.

This technical memo will address the adequacy of the application as it relates to the engineering requirements of the R645 Coal Mining Rules.

TECHNICAL ANALYSIS:

OPERATION PLAN

MINING OPERATIONS AND FACILITIES

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

Analysis:

Savage Services Corporation has contracted with Canyon Fuel Company, LLC / Dugout Canyon Mine to wash coal which was placed into storage on the Dugout Mine refuse pile area. In order to wash coal, Savage has proposed to start up the CV Spur wash plant facility, which was last operated by Beaver Creek Coal Company in 1984. During the period from 1984 to present, the clean coal thickener was dismantled. In order for Savage to now wash coal, they must permit and construct a facility to de-water minus 28-mesh coal, such that the effluent water can be returned to the plant wash circuit for re-utilization. The four fine coal-settling ponds being proposed are intended to take the place of the dismantled clean coal thickener.

Page 3-33, section 3.3.1, Plant Processing System gives a brief description of the coal washing process from the plant feed phase to refuse removal and washing via the coarse and fine coal plant circuitry. The minus 28-mesh fine coal / water slurry mixture will be pumped to the fine coal settling ponds which are being proposed. Only two cells, which are connected in series, will be utilized at a time. The other cells will be kept idle (for drying, cleaning etc.) until they are needed (i.e., the two cells being used reach maximum fines capacity).

The Task ID #2524 application contains dimensions of the settling impoundments being proposed.

The Task ID #2524 application does not contain a description of the construction methods to be used to construct the ponds. It is assumed that dozers will be used to develop the incisements; however, this information is not provided.

Will the cut material be pushed via dozer to the storage areas, or will it be hauled with scrapers, or truck and shovel methods? What is being proposed?

The volumes of each soil horizon to be removed should be calculated and submitted with the proposed construction method. A berm having a minimum height of 24 inches is depicted on FIGURE 3-13. However, there are no calculations presented as to...

- a) The volume of subsoil to be removed.
- b) The volume of subsoil to be used to construct the 24-inch berms about the cells.
- c) The volume of subsoil that will have to be stored in other areas. These subsoil storage areas must be permitted as ASCA's. Accordingly, a designed berm must be submitted to surround, contain and treat precipitation from a 10-year, 24-hour design event.

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- d) The Permittee must depict any needed subsoil storage areas on a revised surface facilities map, (See **R645-301-521.165**).

The application does not contain any discussion relative to possible enhancement of settling rates in the proposed ponds with either mechanical or chemical flocculation methods.

The application does not contain a description of the pond maintenance plan, including a description of the drying phase for the cleanout material. This must include the location where the mucked material will be allowed to dry. If the material will be allowed to dry to a certain moisture content before it is mucked from the cells, that must be indicated.

The application does not state where any coal processing waste generated by the washing of the Dugout Canyon Mine coal will be placed for final deposition. As the Savage refuse pile is currently being processed for shipment to Headwaters, a map must be provided to show where the Dugout product will be placed. If the coal processing waste from the washing of the Dugout Canyon coal is to be returned to the Dugout Mine waste rock facility, verbiage describing that process must be included.

Findings:

The Task ID #2524 application is deficient. In accordance with the requirements of:

R645-301-528, Handling and Disposal of Coal and Coal Mine Waste, the Permittee must provide a description of the coal fines handling process that will be used to return the mucked material from the settling ponds to the product pile. The Permittee must describe where the coal processing waste from the washing of the Dugout Mine coal will be placed for final disposal. The Permittee must indicate if temporary waste storage areas are needed prior to transportation of this material to its final placement.

R645-301-521.165, The location of each topsoil, (subsoil), coal preparation waste...will be clearly shown on a certified map.

EXISTING STRUCTURES

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

Analysis:

An “existing structure” is defined as 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 preparation plant at the Savage Coal Terminal was built between October of 1977 and December of 1978, (See page 3-1a, section 3.2.1.2, Facilities Construction Dates of the MRP). Thus, this facility is classified as an existing structure. As noted elsewhere within this document, the plant was idled in 1984, and has not seen coal-washing activity since that time.

The minimum regulatory requirements of this section of the R645 Coal Mining Rules require that the Permittee must “provide a compliance plan for each existing structure proposed to be modified or reconstructed for use in connection with or to facilitate the surface coal mining and reclamation operation.” “The compliance plan shall include:

- 1) Design specifications for the modification or reconstruction of the structure to meet the permanent program design and performance standards.
- 2) A construction schedule that shows dates for beginning and completing interim steps and final reconstruction.
- 3) Provisions for monitoring the structure during and after modification or reconstruction to ensure that the permanent program performance standards are met.
- 4) A showing that the risk of harm to the environment or to public health or safety is not significant during the period of modification or reconstruction.”

The application submitted as Task ID #2524 contains FIGURE 3-13, page 3-36a, which depicts the dimensions of the four settling basins that are being proposed. The raw coal feed rate into the preparation plant is stated as 450 TPH. This is identical to the feed rate that was established for the design of the plant and utilized from 1979 through 1984.

Each settling pond will have dimensions of 200 feet by 100 feet, and will have a depth of eight feet from the pond bottom to the discharge elevation of the decant stand pipe when constructed. All four basins will be incised. A berm having a minimum height of 24-inches (See FIGURE 3-13, page 3-36a, SECTION B-B’) will surround each basin to provide overflow protection. Minus 28-mesh material from the wash plant fine coal circuit will be circulated to one catch basin, which will be connected to a second basin by an inter-cell spillway (See section C-C’, Inter-Cell Spillway, FIGURE 3-13). When the elevation of the settled fines material reaches the maximum level, the slurry mix will self transfer through the inter-cell spillway to the in-series secondary cell. When the second cell reaches maximum fine level, the slurry line will be transferred to the other two, in series, settling ponds via manual valving procedures.

It is unclear how the Permittee arrived at the dimensions needed for the four slurry cells / settling ponds. The Permittee may have used settling rates, and plant discharge rates reporting to the now reclaimed thickener, or other information necessary to calculate adequate sizing for the four proposed basins.

In order for the Division to be assured that the four incised coal slurry containments are adequate in size to prevent unintentional discharges of this material, the Permittee must submit a settling pond design based upon the following:

- a. An estimated wash plant slurry discharge rate that is accurate to within plus or minus 10% of the actual volume. This can be based upon old CV Spur wash plant records, or through consultation with wash plant personnel or mineral preparation engineers.

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- b. An estimate of the percentage of solids in the coal slurry. This can be based upon old CV Spur wash plant records, or through consultation with wash plant personnel or mineral preparation engineers.
- c. The schedule on which the wash plant will be proposed to operate to wash the Dugout Canyon coal by Savage Services Corporation. Is this to be a five or seven day operating schedule? Will this be a two-shift wash/one-shift maintenance schedule? What is being proposed?

The Task ID #2524 application does not contain a design for the 1500 feet of two-inch PVC intake line that is depicted on FIGURE 3-13, nor for the six-inch PVC return line. The Division would like more information relative to line pressures necessary to pump coal slurry for the required distance from the wash plant to the settling cells. It is not known if PVC pipe has adequate strength to sustain the pressures necessary to pump coal slurry the required distance. The Permittee may want to consider an open slurry ditch having an effective gradient, or booster pumps along the proposed closed system to minimize pipe plugging.

A pond design based upon a finite wash plant slurry discharge rate, percent solids of the slurry and the maximum proposed operating schedule is necessary to ensure the Permittee that an adequate sediment volume has been designed into the wash plant fine coal circuit. This will allow an adequate amount of drying time for fines in the cells, such that cell cleaning can be initiated and conducted efficiently. If a sufficient volume is not designed for, the Permittee may find that all cells are filling to capacity before one of them is dry enough to initiate cleaning.

FIGURE 3-13, SAVAGE COAL TERMINAL SETTLING POND, does not depict a machinery access road into the cells for the purpose of cleaning them. The dike separating the four proposed cells is depicted as having a top width of fifteen to twenty feet. This is probably wide enough for a track hoe of moderate size to clean fines from the outside edge of the incisement. However, as previously noted, the ponds are 100 feet in width and 200 feet long.

The Permittee needs to submit a plan for cleaning and maintaining the four proposed settling ponds. This must include the method used to remove the fine coal material from the incisements. The application does not contain information relative to a maximum slurry level that would indicate when the Permittee must de-activate the pond for drying and cleaning purposes. The Permittee must include information relative to the installation of a maximum sediment level marker, and how monitoring of that level will be conducted.

The Permittee must include a discussion relative to inspection requirements for the settling ponds as stated in R645-301-514.300.

The Permittee must include a discussion relative to the capacity of the settling ponds, and if this capacity meets the requirements of R645-301-513.200, 533.600, and 30 CFR 77.216(a). If the basin capacity meets the requirements of 30 CFR 77.216(a), the Permittee must forward all design information to MSHA for review by that agency.

The method must include a brief description of where the settling basin cleanout material will be placed in order for it to dry (See R645-301-521.164). If the minus 28-mesh coal is to be placed immediately back into the clean coal pile, this needs to be stated. If the material is to be

stored adjacent to the settling ponds, those areas must be identified on Plate 8-1 (See R645-301-521.164).

The Permittee must include a statement relative to these additional acreages that may impact air quality in the area. If the current approval order has enough buffer to include the additional acreage which these piles comprise, and the proposed locations are well inside the permit / disturbed area boundary, then there is no air quality issue. If these additional acreages, or the proposed locations of the evaporation piles are close enough to the permit boundary to affect off-site air quality, then the Utah DEQ/Division of Air Quality must be involved in this permitting process.

The Task ID #2524 application depicts a two-foot high berm (minimum height) around the perimeter of the four settling basins to prevent overtopping of slurry. These dikes are shown to have a fifteen-foot top width, (See Figure 3-13). Figure 3-13 is P.E. certified by Mr. Dan Guy, Utah registered professional engineer.

Plate number 8-1, shows that the west pond is approximately eighty feet from the relocated undisturbed diversion UD-1 and 230 feet from the permit / disturbed area boundary.

The Permittee must describe provisions for monitoring the structure during and after modification or reconstruction to ensure that the permanent program performance standards are met.

The Permittee should consider implementing an electronic sediment / water level monitoring system to constantly monitor and report slurry levels to the wash plant control room. The slurry cells are approximately one thousand feet west of the wash plant building. Electronic monitoring is necessary to minimize the potential for pond over topping and off-site impacts.

This monitoring system should also be connected to the Savage Services Corporation administration building such that both the wash plant operator and the Permittee are being notified simultaneously.

Findings:

The Task ID #2524 application is deficient. In accordance with the requirements of:

R645-301-526, the Permittee must submit additional information relative to the design of the minus 28-mesh coal slurry settling ponds. The Permittee must submit an anticipated construction schedule for the building of the four sediment basins. The Permittee must describe provisions for monitoring the structure during and after modification or reconstruction to ensure that the permanent program performance standards are met. This must include a pond maintenance plan. The Permittee must make a showing that the risk of harm to the environment or to public health or safety is not significant during the period of modification or reconstruction.

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R645-301-513.200, 533.600, the Permittee must submit a discussion relative to settling basin capacity and whether the ponds meet any of the criteria established within 30 CFR 77.216(a).

R645-301-521.164, the Permittee must identify each coal storage location on a map. If the settling pond fines are to be allowed to dry in an area adjacent to the ponds, those areas must be depicted on a P.E. certified map.

RELOCATION OR USE OF PUBLIC ROADS

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

Analysis:

The construction of the four proposed fine coal settling basins will not require the relocation or use of public roads. All construction activities will occur inside the permit area / disturbed area of the Savage Coal Terminal.

Findings:

The requirements of this section of the R645 Coal Mining Rules are not applicable to this permitting action.

AIR POLLUTION CONTROL PLAN

Regulatory Reference: 30 CFR 784.26, 817.95; R645-301-244, -301-420.

Analysis:

As previously noted, the Permittee must discuss where the minus 28-mesh material will be placed in order for it to dry, during the settling pond cleanout process.

If the material will be placed in an area adjacent to the ponds, the areas must be depicted on a surface facilities map to meet the requirement of R645-301-521.164.

The Permittee must include a description of the coal fines drying process, which includes information relative to the drying locations. These additional acreages may impact air quality in the area. If the current approval order has enough buffer to include the additional acreage which these piles comprise, and the proposed locations are well inside the permit / disturbed area boundary, then there is no air quality issue. If these additional acreages, or the proposed locations of the evaporation piles are close enough to the permit boundary to affect off-site air quality, then the Utah DEQ/Division of Air Quality must be involved in this permitting process.

Findings:

The Task ID #2524 application is deficient. In accordance with the following regulations, the deficiencies must be addressed.

R645-301-244, -301-420; the Permittee must describe the settling pond maintenance / cleaning process, which must include the locations where the mucked material will be allowed to dry prior to re-blending with the wash plant output. The Permittee must state if the additional acreages are provided for in the currently approved air quality approval order.

COAL RECOVERY

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

Analysis:

The washing of coal from the Dugout Canyon Mine will affect the coal recovery from that operation. High ash coal that probably had minimum marketability at the time of its deposition at the Dugout Canyon waste rock site will now be washed to improve its quality and marketability.

Findings:

Coal recovery is not relevant to the Savage Coal Terminal permit area. The Coal Terminal is a processing / storage and loading facility. Coal recovery is relevant to the extraction of mineral from the natural deposit.

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 access to the four proposed settling ponds will require new construction. The road will be used to haul minus 28-mesh material from the settling ponds back to the main coal stockpile areas. Thus, the road is a primary road.

Plans and Drawings

The Task ID #2524 application does not contain information relative to the access routes necessary for the construction, operation or maintenance of the four proposed settling basins. The cleaning of the settling basins will require hauling coal on these access routes. Thus, the roads will be primary haul roads (See R645-301-527.121).

The application does not contain information relative to the following:

- 1) R645-301-527.200; a detailed description of each road...to be constructed, used, or maintained within the proposed permit area. The description must include a map, and appropriate cross sections.

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- 2) R645-301-527.210; the Permittee must submit information relative to the proposed access route, road width, road gradient, road surface, bridges, culverts, and other pertinent road drainage controls.
- 3) R645-301-534.300 through 534.340; Requirements for Primary Roads
 - a. 301-358; Protection of Fish, Wildlife and Related Environmental Values
 - b. 301-527.100; Road classification
 - c. 301-527.230; Road Maintenance Plan
 - d. 534.100; Road Use / Construction / Design
 - e. 534.200; Grade Limits / Width / Surfacing Material
 - f. 542.600; Reclamation Plan for Roads
 - g. 301-762; Commitment to Reclaim Upon Determination of No Further Use
 - h. 534.310; be located on the most stable available surfaces;
 - i. 534.320; be surfaced with rock, crushed gravel, asphalt or other material approved by the Division as being sufficiently durable for the anticipated volume of traffic, and the weight and speed of vehicles using the road;
 - j. 534.330; be routinely maintained;
 - k. 534.340; have drainage controls that are designed, installed, and maintained to sustain vertical soil pressure, the passive resistance of the foundation, and the weight of the vehicles using the road.

Primary Road Certification

R645-301-512.200; Plans and Engineering Designs; a design for a primary road requires a certification by a qualified registered professional engineer. As no design has been submitted, this requirement has not been met.

R645-301-512.250; Primary Roads; the professional engineer will certify the design and construction...of primary roads as meeting the requirements of R645-301-534.200 and R645-301-742.420.

Findings:

The Task ID #2524 application is deficient. The Permittee must address the following R645 Coal Mining Rules.

R645-301-527.200; a detailed description of each road to be constructed, used, or maintained within the proposed permit area. The description must include a map, and appropriate cross sections.

R645-301-527.210; the Permittee must submit information relative to the proposed access route, road width, road gradient, road surface, bridges, culverts, and other pertinent road drainage controls.

R645-301-534.300 through 534.340; Requirements for Primary Roads.

R645-301-358; Protection of Fish, Wildlife and Related Environmental Values.

R645-301-527.100; Road classification.

R645-301-527.230; Road Maintenance Plan.

R645-534.100; Road Use / Construction / Design.

R645-534.200; Grade Limits / Width / Surfacing Material.

R645-542.600; Reclamation Plan for Roads.

R645-301-762; Commitment to Reclaim Upon Determination of No Further Use.

R645-534.310; Roads must be located on the most stable available surfaces.

R645-534.320; Roads must be surfaced with rock, crushed gravel, asphalt or other material approved by the Division as being sufficiently durable for the anticipated volume of traffic, and the weight and speed of vehicles using the road.

R645-534.330; Roads must be routinely maintained.

R645-534.340; Roads must have drainage controls that are designed, installed, and maintained to sustain vertical soil pressure, the passive resistance of the foundation, and the weight of the vehicles using the road.

R645-301-512.200, Plans and Engineering Designs; a design for a primary road requires a certification by a qualified registered professional engineer. As no design has been submitted, this requirement has not been met.

R645-301-512.250, Primary Roads; the professional engineer will certify the design and construction...of primary roads as meeting the requirements of R645-301-534.200 and R645-301-742.420.

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:

Coal Mine Waste

The Task ID #2524 application states on Page 3-33, section 3.3.1, Plant Processing System that “refuse will be separated from the coal and placed in the refuse bin for loadout”. The capacity of the wash plant refuse bin is not known. It is not known how long it will take to fill this bin, based upon the wash plant feed of 450 tons per hour. The Permittee must describe the following relative to the coal mine waste handling process:

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- 1) The capacity of the refuse bin, in both tons and cubic yards.
- 2) The Permittee must determine and discuss if it will be necessary to temporarily store this material within the Savage permit area, (i.e., it is doubtful that a truck will be parked under this bin, in order that the bin can be emptied as needed.) The need for a temporary storage area is likely. The hauling of refuse from the bin to this placement area will be necessary until several truckloads are generated for transportation to the refuse pile selected for final deposition. This temporary storage area must be permitted, and shown on a map, in accordance with R645-301-521.165.
- 3) As stated elsewhere within this document, the refuse handling process must be described until the material reaches its final deposition / placement area, (i.e., at Savage, or at Dugout).

Refuse Piles

As previously mentioned, the Permittee must describe where the coal processing waste that is generated by the washing of Dugout Canyon Mine coal will be placed. If the refuse material is to be hauled back to the Dugout Mine waste rock pile, no further permitting action on the part of Savage Industries is needed. If the material is to see final deposition at the Savage Coal Terminal, the Permittee (Savage Services Corporation) must place and compact the Dugout waste in accordance with the provisions of the currently approved waste rock disposal plan.

Impounding Structures

The four settling basins being proposed are for minus 28-mesh coal fines slurry, and are therefore, not refuse settling impoundments. This section is not applicable.

Findings:

The Task ID #2524 application is deficient. The Permittee must provide additional information to the Division prior to receiving a recommendation for approval. In accordance with the requirements of:

R645-301-526, Mine Facilities; “the permit application will include a narrative explaining the construction,...use, maintenance, and removal of the mine facilities”.

R645-301-301-528, Handling and Disposal of Coal ... and Coal Mine Waste; the application must describe the settling ponds maintenance program, and how the fine coal material generated by the pond cleaning will be dried and returned to the product pile. The washing of coal will generate coal mine waste; a description of how this waste will be stored and handled is necessary for this application.

R645-301-301-536, Coal Mine Waste; the application must state where coal mine waste generated by the washing of Dugout Canyon Mine product will see final deposition.

SIGNS AND MARKERS

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

Analysis:

The Permittee has been asked to provide a discussion relative to pond capacities for the four proposed settling basins, and whether these pond capacities meet MSHA requirements established within 30 CFR 77.216(a).

The Division recommends that the Permittee notify the U.S. Department of Labor / Mine Safety and Health Administration / District 9 Manager relative to the Task ID #2524 proposal to construct the four settling impoundments. The Division estimates that each settling pond will have a capacity of approximately 2.8 acre feet, which is short of the required 20 acre foot capacity necessary to be classified as an MSHA impoundment. However, MSHA may require that the permanent identification markers required under 30 CFR 77.216-1 (b) be placed at the Coal Terminal pond locations. The 30 CFR 77 reference being used by this reviewer was last updated in June of 1992.

The R645 Coal Mining Rules do not require an identification sign at impoundments. However, R645-301-513, and 513.200 require that ponds meeting the requirements of 30 CFR 77.216(a) be signed for proper identification purposes.

Findings:

The Division recommends that the Permittee notify the Mine Safety and Health Administration relative to this proposal to construct four fine coal settling basins at the Savage Coal Terminal in order to become informed of any pertinent compliance requirements related to same prior to initiation of construction activities.

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

This amendment will not affect the currently approved affected area maps for the Savage Coal Terminal permit area.

Mining Facilities Maps

The Task ID #2524 application contains Plate 8-1, which is identified as "Savage Coal Terminal Soils Map". The four proposed settling basins are depicted in the NW corner of the Savage Coal Terminal permit area.

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A “proposed” revised surface facilities map needs to be submitted.

A road to access the area where the ponds are to be constructed must be depicted on the revised surface facilities map.

A drying area, or areas for the storage of the pond cleanout material is / are not depicted. If the fines are to be returned to the main coal storage piles, this must be described in the settling pond maintenance plan.

Certification Requirements

Plate 8-1, Savage Coal Terminal Soils Map, is not required to have P.E. certifications according to R645-301-512.

Findings:

The plan is deficient. In accordance with the requirements of:

R645-301-521.164 and 521.165, the Permittee must submit a revised “proposed” surface facility map that will depict the proposed locations of the following: a) coal storage / drying locations, b) topsoil / subsoil storage locations, and c) coal mine waste (temporary storage) locations.

RECLAMATION PLAN

GENERAL REQUIREMENTS

Regulatory Reference: PL 95-87 Sec. 515 and 516; 30 CFR Sec. 784.13, 784.14, 784.15, 784.16, 784.17, 784.18, 784.19, 784.20, 784.21, 784.22, 784.23, 784.24, 784.25, 784.26; R645-301-231, -301-233, -301-322, -301-323, -301-331, -301-333, -301-341, -301-342, -301-411, -301-412, -301-422, -301-512, -301-513, -301-521, -301-522, -301-525, -301-526, -301-527, -301-528, -301-529, -301-531, -301-533, -301-534, -301-536, -301-537, -301-542, -301-623, -301-624, -301-625, -301-626, -301-631, -301-632, -301-731, -301-723, -301-724, -301-725, -301-726, -301-728, -301-729, -301-731, -301-732, -301-733, -301-746, -301-764, -301-830.

Analysis:

The Task ID #2524 does not contain a reference to the approved MRP relative to a reclamation plan for the ponds, nor does it contain a reclamation plan specific to these ponds.

Section 3.5, Reclamation Plan, page 3-52 is where the approved reclamation plan for the Savage Coal Terminal is found.

Section 3.5.3, Final Abandonment, page 3-54a of the currently approved MRP discusses the following items relative to final reclamation:

- 1) Surface structures and facilities.
- 2) Monitoring wells.
- 3) Salvageable materials.

- 4) Non-salvageable materials.
- 5) Placement of non-coal waste (concrete, gravel, etc.).
- 6) Disposal of material costs.

Section 3.5.3.1, Removal of Impoundments and Diversions, page 3-54a-1, in the currently approved MRP discusses sedimentation ponds and diversions. The four fine coal-settling ponds are not sediment ponds. Therefore, the Permittee must include a discussion as to how the four impoundments are to be reclaimed.

That reclamation plan must include a commitment to clean all four cells of minus 28-eight mesh coal material prior to placement of the subsoil and topsoil horizons.

Findings:

The Task ID #2524 application is deficient in that there is no reclamation plan for the four proposed settling ponds. In accordance with the following:

R645-301-512, Certification.

R645-301-513, MSHA Compliance and Approvals.

R645-301-521, General Operation Plan.

R645-301-526, Mine Facilities.

R645-301-527, Transportation Facilities.

R645-301-528, Handling and Disposal of Coal / Coal Mine Waste.

R645-301-531, General Operational Design Criteria and Plans.

R645-301-533, Impoundments.

R645-301-534, Roads.

R645-301-536, Coal Mine Waste.

R645-301-542, et al, the Permittee must submit a reclamation plan for the for coal fines settling basins.

APPROXIMATE ORIGINAL CONTOUR RESTORATION

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Analysis:

As noted above, the Permittee has not submitted a reclamation plan for the four proposed settling ponds, and the currently approved MRP does not cover this type of facility. This section of the R645 Coal Mining Rules has not been addressed.

Findings:

The application is deficient. In accordance with the requirements of

R645-301-512, All backfilling and grading plans/designs must be P.E. certified including final surface configuration maps (R645-301-542.300).

R645-301-533, Impoundments; (553.120) “disturbed areas will be backfilled and graded to eliminate all...depressions”. The Permittee must submit a reclamation plan for the four proposed settling basins.

R645-301-553, the Permittee must submit additional information relative to how the four proposed fine coal settling basins will be reclaimed, including where the backfill material will come from, how the material will be placed, and to what contours. What method will be used to achieve compaction?

R645-301-542, No maps or plans have been provided relative to a reclamation plan.

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

The four proposed settling ponds will have a depth of approximately eight feet. The backfilling of these areas should be a relatively straightforward operation, assuming that the backfill material is in close proximity to the incisements. However, the volumes of topsoil and subsoil that were proposed to be removed during the construction of the incisements were not reported in the proposal.

The Coal Terminal is a very flat area, and regrading to approximate original contour should be easily accomplished.

Findings:

The application is deficient. The Permittee must address the R645 Coal Mining Rules listed under Approximate Original Contour Restoration.

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

No reclamation plan has been submitted for the primary road that will be constructed to build the settling ponds, and haul minus 28-mesh coal fines to the product pile for shipment.

Retention

No discussion has been provided relative to the retention of the aforementioned road.

Findings:

The application is deficient. In accordance with the requirements of:

R645-301-526, Roads, et al., the Permittee must provide additional information relative to the settling pond access road.

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:

Reclamation Backfilling And Grading Maps

The Task ID #2524 application does not contain any backfilling and grading maps.

Final Surface Configuration Maps

The Task ID #2524 application does not contain any final surface configuration maps.

Certification Requirements.

The Permittee has not submitted any maps associated with a reclamation plan for the four proposed settling ponds.

Findings:

The Task ID #2524 application is deficient. The Permittee has not submitted any maps that are relative to a reclamation plan for the settling ponds. In accordance with the requirements of:

TECHNICAL MEMO

R645-301-542, the Permittee must provide additional information (maps) relative to reclamation and the four proposed settling ponds.

COAL PREPARATION PLANTS NOT LOCATED WITHIN THE PERMIT AREA OF A MINE

Regulatory Reference: 30 CFR Sec. 785.21, 827; R645-302-260, et seq.

Analysis:

This section of the R645 Coal Mining Rules has been previously addressed by the Division via the permit findings document. That finding is considered as meeting the requirements of R645-302-260, et seq.

Findings:

The Savage Coal Terminal MRP meets the requirements of this section of the R645 Coal Mining Rules.

RECOMMENDATIONS:

The Task ID #2524 application is deficient. No recommendation for approval can be given at this time.