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State of Utah
DEPARTMENT OF NATURAL RESOURCES
DIVISION OF OIL, GAS AND MINING

Michael O. Leavitt
Governor
Kathleen Clarke
Executive Director
Lowell P. Braxton
Division Director

1594 West North Temple, Suite 1210
PO Box 145801
Salt Lake City, Utah 84114-5801
801-538-5340
801-359-3940 (Fax)
801-538-7223 (TDD)

October 25, 2001

TO: Internal Files

THRU: Priscilla W. Burton, Senior Reclamation Specialist/Soils Scientist & Team Lead

FROM: Susan M. White, Senior Reclamations Specialist/Biologist

RE: Contour Mining, Lodestar Energy, Inc, White Oak Mine, C/007/001-SR01A-2

SUMMARY:

On February 2, 2001, the Division received a proposal from Lodestar Energy, Inc., to surface mine the coal occurring along the contour of the White Oak Mine surface facilities. A second submission of the proposal was received September 10, 2001 and a third submission on October 19, 2001. This technical analysis reviews the October 19, 2001 submittal.

Paul Baker, Division Biologist, wrote the first technical analysis for this contour mining proposal, dated May 31, 2001. His technical analysis was modified to reflect the September 10, 2001 submission of mining plans.

The application to conduct contour mining does not meet the requirements of the regulations and should not be approved.

TECHNICAL ANAYLSIS:

GENERAL CONTENTS

IDENTIFICATION OF INTERESTS

Regulatory Reference: 30 CFR 773.22; 30 CFR 778.13; R645-301-112

Analysis:

The applicant and operator are Lodestar Energy, Inc., and the application includes the applicant's address, telephone number, employer identification number, and resident agent. It also shows who will pay the abandoned mine reclamation fee and lists the applicant's officers. Appendix 1-1 shows when the officers assumed their positions as required in R645-301-112.330.

All of the Lodestar Energy stock is owned by Lodestar Holding, Inc., which is owned by IRACOAL, Inc. Appendix 1-1 includes the names, addresses, social security numbers, and starting dates of the officers and directors of these companies. It also shows appropriate identification information for affiliated coal mining and reclamation operations. Some of the ownership and control information is new, and it needs to be checked in the Applicant/Violator System.

Tables 112.500 and 112.600 and Maps 112.500 and 112.600 of the current MRP show surface and subsurface land ownership information.

Maps and text of the MRP are referenced by various names such as Belina Mine Complex , White Oak complex, Whisky Creek, Loadstar Energy, Mountain Operations. The original names for the underground mines were Belina No. 1 and No. 2 mines. The names were changed to White Oak No. 1 and No. 2 when purchased by White Oak Mining & Construction. Lodestar Energy retained the White Oak No.1 and No. 2 names. The surface mining to recover the barrier coal at this complex is called Whisky Creek No. 1 Mine.

Findings:

The information provided in the application meets the minimum Identification of Interests requirements of the regulations.

RIGHT OF ENTRY

Regulatory Reference: 30 CFR 778.15; R645-301-114

Analysis:

The surface contour mining will increase the disturbed area by 8.2 acres. The mining will disturb an additional 17.3 acres already within the disturbed area boundary of 60.9 acres. Total surface disturbance within the permit area is 151.0 acres. The project is on surface land owned by the Omans and Madsens. Appendix 1-2 of the MRP contains detailed right of entry information. The lease agreements allow underground and surface mining, surface facilities and reclamation (Appendix 1-2).

The Oman's lease agreement, dated September 17, 1996 refers to the surface facilities area as the "40-acre parcel". The Division was concerned the additional surface mining disturbance might exceed the 40 acres allowed in the surface lease agreement. David Miller, Lodestar Mining, checked the acreages and reported that the surface disturbance on the Oman's land is a "generous" 36.2 acres.[1] The Oman's lease agreement requires that all trees cut by the mine which exceed five inches diameter must be trimmed and stacked on the west side of the state highway.

The coal is owned by Carbon County. Dennis Dooley, Carbon County, will monitor the coal lease for the county. Federal coal underlies the Madsen property in Pit 12 and 13. Lodestar does not own the rights to mine the federal coal. Plate 5-1C shows the federal coal boundary. Section 114 Right of Entry Information of the MRP commits to survey and mark on the ground the Carbon County/Federal coal lease property line

Findings:

The information provided in the application meets the minimum Right of Entry requirements of the regulations.

ENVIRONMENTAL RESOURCE INFORMATION

VEGETATION RESOURCE INFORMATION

Regulatory Reference: 30 CFR 783.19; R645-301-320.

Analysis:

Much of the disturbed area was disturbed before vegetation measurements were taken. Drawing R645-301-323.100 shows vegetation communities in the area. Near the mine surface facilities are aspen, spruce/fir, and grass/forb/elderberry communities. Vegetation cover and productivity information for these communities is included in Appendix 321.

The upper Whisky Creek riparian area disturbed by the surface mining is less than one third acre in size. A quantitative study of the upper Whisky Creek area was conducted in August 2001, prior to disturbance. Three sub-types occurred within this zone:

[1] Phone conversation with David Miller and Susan White, October 12, 2001.

Sub-type	Length (feet)	Width (feet)
Riparian	236	10
Spruce	204	*
Rock transition	844	*

*** Not determined**

The three sub-types were intermixed throughout the length of Whisky Creek. Only the riparian subtype was considered to be different enough from the already described vegetation types to warrant separation and analysis. The riparian sub-type had 66 percent vegetative cover. Sixty-six percent cover seems low for this vegetation type. JBR[2] states in response to this low cover value:

"Aerial cover estimates for grasses, rushes, and sedges in particular are basically basal cover, and many times may be overestimated. The Daubenmire frame utilized in the Whisky Creek sampling is very useful for focusing on the specific quadrat to obtain an accurate estimate of cover."

No woody species were encountered in the cover sampling of the riparian community. Aspen, spruce and current occurred along the slopes though out the channel. Sampling for tree and shrub density in this portion of Whisky Creek was not required.

Information in the plan about other vegetation communities is adequate.

Findings:

The information provided in the application meets the minimum Vegetation Resource Information requirements of the regulations.

MAPS, PLANS, AND CROSS SECTIONS OF RESOURCE INFORMATION

Regulatory Reference: 30 CFR Sections 780.14; 779.24; 779.25,R645-301 Sections 323; 411; 521; 622; 722; 731.

Analysis:

Vegetation Reference Area Maps

[2] E-mail from Linda Matthews to Susan White, dated October 10, 2001.

Drawing R645-301-323.100 is a map of the vegetation communities in the permit area, and shows two specific reference areas near the mine complex (in addition to a reference area near the loadout).

Findings:

The information provided in the application meets the minimum Vegetation Reference Area Maps requirements of the regulations.

OPERATION PLAN

AIR POLLUTION CONTROL PLAN

Regulatory Reference: 30 CFR Sections 780.15; 816.95; 817.95.R645-301 Sections 244; 420.

Analysis:

Appendix 4-1 contains a copy of the cover letter submitting a Notice of Intent for an Air Quality Permit to the Division of Air Quality. The Notice of Intent should be replaced with the approved Air Quality Approval Order when available.

Section 420. Air Quality, is a fugitive dust control plan for the surface mining operations. The plan calls for:

- Watering of the pit and ramps out of the pit when temperatures allow.
- Controlling the size of blast according to MSHA.
- Rocking and grading of the pit access to reduce fine airborne particulates.

Findings:

The information provided in the Application meets the minimum Air Pollution Control Plan requirements of the regulations.

FISH AND WILDLIFE INFORMATION

Regulatory Reference: 30 CFR Sections 780.16; 784.21, 784.21; 816.97; 817.97.R645-301 Sections 322; 333; 342; 358.

Analysis:

Protection and enhancement plan

The plan contains several commitments about personnel training, reclamation habitat enhancement, and avoiding disturbances to streams and riparian areas. During surface mining and early reclamation all flow from upper Whisky Creek will pass though a sediment pond prior to entering the stream. This should control most downstream sediment.

Endangered and threatened species

Through water depletions, the mine has the potential of adversely affecting four threatened and endangered fish species of the upper Colorado River. The current mining and reclamation plan has some discussion about effects of underground mining on both water quality and the amount of water available. The surface mine is expected to use about 1.3 acre-feet of water annually from dust suppression[3]. A mitigation fee is required when the annual depletion exceeds 100 acre-feet.

There is little or no likelihood of adversely affecting any other listed threatened or endangered species, but, as discussed in the environmental resource information section of this review, there is a chance Williamson's sapsuckers, a sensitive species, could be in the area. Nearly all birds are protected by either state or federal law, so "taking" them, through killing them directly, by destroying an active nest, or other means, is illegal. Probably the easiest way to avoid this problem is to do the mining outside the nesting season, but the application does not include a mining schedule. Because the applicant does not yet have approval for the mining operation, it may be difficult to establish a schedule, but it should be possible to commit to not beginning the operation or tree cutting associated with it between about April and July. If this is not possible, the Division will need to consider other protection and mitigation options that might be available.

Bald and Golden Eagles

Although bald eagles could occasionally fly through the area and some may winter in the Scofield area, the proposed operations are not expected to have effects on bald eagles. No golden eagle nests have been found in either helicopter or ground surveys in the immediate area although it is possible there are some nests nearby. Two raptor nests found in 1998 near Boardinghouse Canyon were classified as red-tailed hawk and unidentified buteo nests. Annual helicopter monitoring for cliff nesting raptors was conducted from 1993 through 2001. Helicopter surveys were suspended in 2001.

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[3] Acre-feet of water used provided by David Miller in a phone conversation with Susan White on October 4, 2001.

Wetlands and habitats of unusually high value for fish and wildlife

It appears there are small wetlands associated with Whisky Creek, but, as discussed in the resource information section of this technical analysis, they are not large enough to be regulated by the Army Corps of Engineers. The applicant will need to reclaim them as far as possible in the reclamation process.

Other habitats of unusually high value will either not be damaged, would be protected by following commitments in the existing mining and reclamation plan, or will be protected by following commitments the Division is requiring.

Findings:

Information provided in the application meets the minimum Fish and Wildlife Information requirements of the regulations.

VEGETATION

Regulatory Reference: 30 CFR Sections 816.100; 817.100; 817.121(c).R645-301Sections 330; 331; 332.

Analysis:

Spoil and topsoil may be stockpiled a maximum of twelve to fourteen months. The spoil pile will be seeded with an annual grain such as barley at the rate of 100 PLS per acre. Annual grains are selected for seeding in the opposite season from which they would normally be planted for crops. For example winter wheat is planted in the fall for an early summer seed crop. A seed crop is undesirable for interim seeding therefore; spring wheat should be planted in the fall to prevent seed production. It is important that the grain seed be tested and purchased from a seed dealer rather than from an individual farmer.

The Permittee describes further efforts to minimize disturbances and adverse impacts during mining by seeding 100 PLS lbs. per acre barley on all slopes that are rough graded (Section 532.100. Disturbed Area). Slopes that are protected by snow or that will be topsoiled within the next three months will not be seeded with the barley until an appropriate time.

The Division recommends an application of about one ton per acre of straw or hydromulch after seeding of the barley to further control erosion. The mulch should be certified as noxious weed free. Purchasing good quality seed and noxious weed free straw is far less expensive than trying to control weeds.

Findings:

The information provided in the application meets the minimum Vegetation requirements of the regulations

RECLAMATION PLAN

POSTMINING LAND USES

Regulatory Reference: 30 CFR Sections 780.23; 784.12; 784.200; 785.16; 816.133; 817.13.R645-301 Sections 412; 413; 414.R645-302 Sections 270; 271; 272; 273; 274; 275.

Analysis:

The applicant is proposing no changes from the pre-mining land uses. The post-mining land uses are grazing and wildlife habitat. A grazing plan for the reclaimed area is detailed in section 412 of Chapter 4. The plan is base on a five year rest rotation cycle. This is similar to the Forest Service plan for the area.

Appendix 1-2 contains a letter from Milton A. Oman dated December 21, 1983. The letter confirm in a round-about way the agreed postmining land use of wildlife, recreation and grazing. The letter refers to the Belina portals of the Belina complex but fails to list the section were the portals are located. The letter lists Sections 13, 17, 18, and 19 but not section 30. The letter also states that the road to the mine site may be left. No mention about a road above the mine site as currently proposed. A road in that location did not exist at the time of this letter.

The modified agreement, dated February 16, 2001, between Milton A. Oman, Ltd., and the applicant says:

"Lessor [Milton A. Oman, Ltd.] will construct or reconstruct an access road as a connection between the Access Road (also known as the Whisky Canyon haulroad) and the gas pipeline access road, from South Fork Canyon to Whisky Creek Canyon, which will provide continued access to the Property for the Lessor. Lessor agrees to sign, at Lessee's [Lodestar's] request, any and all documents required for Lessee to obtain the consent of all appropriate regulatory agencies for leaving such access road and the Whisky Creek Canyon haulroad as permanent roads not to be reclaimed as part of the final reclamation of the Property."

This agreement makes it clear the one landowner desires a road from above the mine coming on to the surface facilities area. The agreement states that the Oman's will construct the road. Justification for the road is property access (Chapter 4, section 412.200). No long-term maintenance agreement for the gravel road was provided nor is it needed if the Oman's construct the road.

Milton A. Oman, Ltd., is also willing to allow the road up Whisky Creek Canyon, but the application does not justify the road below the mine being left. In other words, it does not indicate for what purpose the road would be used if it remained following reclamation, it does not show that the road is necessary considering that there is other access to the canyon, and it does not show the desires of other entities over whose land the haulroad crosses. Although the applications alludes to the possibility the main part of the haulroad might remain for the postmining land uses, it commits to reclamation. Lacking adequate information for retaining the road, the Division anticipates the haulroad will be reclaimed.

Findings:

Information provided in the application is not considered adequate to meet the minimum Post Mining Land Uses requirement of the regulations. As a stipulation to the permit, the Permittee must provide the following in accordance with:

R645-301-412, The operator must remove all references to constructing the 1200-foot section of road since the Oman's desire to construct it themselves or the lease agreement must be modified. Comments from the landowners concerning the postmining land use for section 30 must be provided.

PROTECTION OF FISH, WILDLIFE, AND RELATED ENVIRONMENTAL VALUES

Regulatory Reference: 30 CFR Sec. 816.97; R645-301 Sections 333; 342; 358.

Analysis:

The planed wildlife habitat enhancement measures are to spread around rocks and brush and other woody debris on the reclaimed area to provided habitat enhancement. The upper portion of Whisky Creek will be reclaimed. French drains will be installed so that springs and seeps should resurface, although perhaps not in their original location. The primary wildlife habitat needs are to provide adequate forage and cover and to maintain water supplies. If the applicant follows the revegetation plan, the number of conifers in the reclaimed area will be reduced compared to adjacent spruce/fir areas. This additional foraging area will benefit most wildlife species.

The plan for reclaiming Whisky Creek will create a channel with more steep and flat sections and reduce the amount of moderate slopes than existed previously. Only 18 percent of the premining channel contained what was considered riparian vegetation. Creating greater flat

sections should increase the amount of riparian type of vegetation. The PPermittee proposes to create a channel using similar material as the preexisting channel.

Findings:

Information in the proposal is adequate to meet the requirements of the Protection of Fish, Wildlife and Related Environmental Values section of the regulations.

CONTEMPORANEOUS RECLAMATION

Regulatory Reference: 30 CFR Sections 785.18; 816.100; 817.100.R645-301 Sections 352; 553; R645-302 Section 280; 281; 282; 283; 284.

Analysis:

The surface mining operation is proposed to be completed in 14 to 20 months. Prior to this, all but a few loading and transportation surface facilities will be removed. Plate 5-1C shows the general sequence of mining operations on the site, and Table R-3 is a generalized reclamation timetable.

Surface mining of the barrier coal will create additional spoil. Spoil from the development of the first four months will be stockpiled on the coal stockpile pad as described in Sections 526.300 and 528 and shown on Figure 9-3, Temporary Spoil Storage in Chapter 9 of the application. This spoil will remain until the final pit is reclaimed (Section 528.200). The initial cell development will generate a "life of mine" temporary spoil storage pile of 305,049 cubic yards as indicated in Chapter 9. This spoil pile will not be utilized until final reclamation of the last pits and therefore must be vegetated and stabilized in the interim. The temporary spoil pile will be seeded with an annual grain at the rate of 100 PLS pounds per acre.

After the spoil is stockpiled from the first three pits any additional spoil removed will be directly placed in the previous pit and rough graded. Areas rough graded during the year will be topsoiled and seeded in the fall (page R-2 and R-35). Revegetation treatments will be applied on all lands as soon as possible after mining and in the first normal season for seeding and planting.

Findings:

Information provided in the application meets the minimum Contemporaneous Reclamation requirements of the regulations.

REVEGETATION

Regulatory Reference: 30 CFR Sections 816.111, 816.113, 816.114, 816.116; 817.111; 817.113; 817.114; 817.116.R645-301 Sections 244; 353; 354; 355; 356,R645-302 Sections 280; 281; 282; 283; 284.

Analysis:

Timing

Seeding will occur in the fall. Fall is the accepted seeding window for this area. The site is at 9000 feet elevation and that will limit late fall seeding. Transplants will be planted in the fall immediately after seeding. Cuttings will be planted as early in spring as possible. Transplants should be ordered now to insure availability in fall 2002.

Mulching, seeding, and other soil stabilizing practices.

The soils surface preparation techniques are vital for both erosion control and for vegetation establishment.The proposed surface mining operation will generate some slash and other woody debris that should be used on newly-graded areas. This material could be used in lieu of silt fences or berms around the base of stockpiles. Depending on the exact sequence of operations, the woody debris could either be stockpiled then spread later or it could be spread on graded areas as it is generated. Portions of the stream have a lot of woody debris, and some of this material could be used in reclaiming Whisky Creek. This is consistent with the current mining and reclamation plan in which the applicant commits to use brush, downed trees, rocks, etc., to place on the recontoured surface to achieve a more natural appearance and to enhance the habitat (page R-25).

This site has high precipitation, steep slopes, and long slopes so it is important for good mulching methods to be used to control erosion. In the experience of the Division and other mine operators, one of the best mulching methods is a combination of a noxious weed free straw and wood fiber mulch. The Permittee will incorporate one to two tons per acre noxious weed free alfalfa when roughening the topsoil. The Permittee commits to after seeding:

- Spreading straw at the rate of one tons per acre
- Gluing straw to the soil surface with 500 pounds per acre of wood fiber mulch and 80 pounds per acre tackifier (page R-23).

Seed mixtures

Seed mixtures and shrub and tree transplants are listed in Table R-1. The upland seed and planting mixes in the plan are acceptable. Frequently modifications are needed to the seed mixtures at the time of ordering because of unavailability. This should be done with the Division's concurrence. The riparian seeded mixture for upper Whisky Creek contains sedges,

grasses and forbs found occurring on site. Many of these species maybe difficult to obtain commercially and every effort should be made to collect seed and/or plugs from adjacent areas. The State's Lone Peak Nursery will custom grow specific species provided enough lead time. Information can be obtained from:
http://www.nr.utah.gov/slf/Forestry%20Fire%20&%20State%20Lands_files/lonepeak/Home2.htm
Bitterroot Restoration at: http://www.revegetation.com/BRIWeb/plant_prop.html also contract grows plants.

The seed mixture was designed to combine the south-west and north facing aspect seed mixtures into one. The seed mixture contains enough diversity so that species adapted to the different aspects will dominate. Shrub planting will also occur on all aspects. Aspens will be planted on the south-west facing aspects and conifers planted on north-east aspects. Some aspens should also be planted on the north aspects.

Planting methods

All seeds will be broadcast seeded. Broadcast seeding methods include hand broadcasting with a cyclone type spreader or hydroseeding. The seeding rates shown with the seed mixes are for broadcast seeding.

Shrubs and trees will be grouped to develop an edge effect for wildlife. The groupings will be located near the riparian area and where previous trees were clumped. They can be placed in fairly large clumps, and for aesthetic purposes, these clumps should be placed to hide any terraces or other areas that do not appear natural. On north through east aspects, mountain lover should be planted with clumps of conifers with the other species in more open areas. Mr. Oman in a letter dated December 21, 1983 requested that more Aspen than "evergreens" be planted because of greater forage production with Aspen.

Pest control

Musk thistle is a state-designated noxious weed, and it is a serious problem in the mine area. The application says that, prior to any earth moving activity, all areas affected by noxious weeds will be sprayed. It is likely musk thistle will invade the newly revegetated area. There could also be some problems with whitetop, another noxious weed. The operator will spray after noxious weed emergence and prior to flowering in the spring and fall. 24D, Tordon, Escort or equivalent in direct application will be used. The County Weed Control will be consulted when needed (page R-25). It is crucial that the applicant be vigilant with the weed control program. The Weed Web at: http://extension.usu.edu/coop/ag/crops/weedweb/index.htm provides current information for weed control programs.

Standards for success

According to page R-32 of 37 and Table R-2 of the current mining and reclamation plan, revegetation success will be judged on the basis of comparison with reference areas. For the mine complex, the reference areas are those areas devoid of man's activities that have at least a 100-foot buffer zone from disturbed areas. Specific reference areas are shown on Drawing R645-301-323.100. The success standards and reference areas meet the minimum requirements however it is highly recommended that the Permittee have a qualified person in revegetation review these commitments since the site is being reclaimed with the surface contour mining operation.

Baseline information was obtained on the upper Whisky Creek area in August 2001 (Appendix 3-1). The success standard for the reclaimed upper Whisky Creek is that a minimum of 18 percent of the relocated stream channel to meet the cover and diveristy standards of the riparian community measured in the JBR study in Appendix 3-1 (Page R-25). The remaining 82 percent of the length of relocated upper Whisky Creek will meet the success standard of the sagebrush-grass or grass-forb-elderberry reference area cover and shrub density standards.

To judge whether vegetation is adequate to control erosion, the applicant will place erosion pins on slopes at the time of reseeding (page R-28). These pins will be used as a guide to overall erosion characteristics of the reclaimed area. A discussion is not provided detailing numbers of pins or what quantitative information will be obtained from the pins. This reviewer questions the usefulness of these pins and any inferences made to amounts or rates of sediment loss. Any rills or gullies that disrupt the postmining land use or vegetation reestablishment, or that cause or contribute to a violation of water quality standards will be filled, regraded, revegetated, or otherwise stabilized.

Diversity will be judged by three different measures. These measures are the mean number of species encountered per sample, total number of species, and MacArthur's Index. Using three measures is acceptable to the Division. The reclaimed area does not need to meet or exceed all three measures but do need to show diversity similar to the undisturbed. Arguments will need to be made to support diversity in the revegetated community at the time of Phase III bond release. The plan does not discuss revegetation success standards for compatibility with the postmining land use. However, the seed mixtures proposed are commonly used for wildlife and grazing uses. The plan also does not mention seasonality, but since it does not appear there are any warm season species in the area, the standard can simply be that all reestablished species will be cool season species.

Findings:

The information provided in the application meets the minimum Revegetation requirements of the regulations.

STABILIZATION OF SURFACE AREAS

Regulatory Reference: 30 CFR Sections 816.95; 817.95. R645-301-244.

Analysis:

The Division is very concerned about soil surface stabilization. Many of the reclaimed slopes will be graded to 2h:1v with 200 to 400 foot length slopes. An erosion control plan incorporating best management practices is critical. Concave and complex slopes erode less than convex or uniform slopes. The plan commits to concave and complex slope shapes in reclamation (page R-11)

Straw bales will be utilized as well as other appropriate sediment control devices downstream of all construction (page R-9 and R-22 of 37). The PPermittee should consider using vegetative material, slash and salvaged debris windowed as a sediment barrier during operations. This material can then be spread during topsoiling to provide for addition surface stabilization and habitat enhancement.

Revegetation will occur promptly (page R-9 and R-22 of 37). Extreme surface roughening will be used on all slopes prior to the distribution of topsoil (page R-12 and R-25). The roughening process can occur during topsoil placement or while incorporating organic materials (i.e. hay). Proper roughening is so important that the commitment is made to roughen as described in the technique sheets in the Division's reclamation manual, The Practical Guide to Reclamation in Utah, found at: ftp://dogm.nr.state.ut.us/PUB/MINES/Coal_Related/RecMan/Reclamation_Manual.PDF (page R-11). The technique sheets are also useful to give to equipment operators to illustrate the degree of roughness required.

After seeding, straw will be spread at the rate of one to two tons per acre. The straw will then be glued to the soil surface with 500 pounds per acre of wood fiber mulch combined with a tackifier (page R-23). A surface bonding agent may be used to reduce slippage of the material (page R-12 of 37). The MRP does not hint at what this surface bonding agent is unless it refers to the tackifier.

The Permittee commits to the following:

- Application of one ton noxious weed free alfalfa hay incorporated during surface roughening.
- Application of one ton noxious weed free straw to cover seeded surface
- Application of 500 pounds hydromulch and 150 pound tackifier over straw to glue straw to surface.

Erosion pins on slopes (R31 of 37) used to monitor erosion. All slopes will be monitored. Rills or gullies that disrupt the postmining land use or the re-establishment of vegetative cover or degrade water quality (Page R31 of 37) will be corrected within 60 days. Erosion monitoring will follow the 1990 Office of Surface Mining publication entitled "Erosion Condition Classification System - Technical Note - Method for Evaluation of Erosion of Reclaimed Coal Lands in Western United States."

Findings:

The information provided in the application meets the minimum Stabilization of Surface Areas requirements of the regulations.

RECOMMENDATION:

One deficiency remains, R645-301-412, and must be provided prior to permit approval or the permit conditioned with the requirement to address this deficiency. If the permit is stipulated then the deficiency must be responded to prior to beginning of reclamation activities. The deficiency concerns the lease agreement for the road and landowner comments of the Oman surface property. It is my understanding that the Oman estate is currently being settled since the death of Mrs. Oman. The deficiency cannot be adequately responded to until the estate is settled.

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