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State of Utah

DEPARTMENT OF NATURAL RESOURCES
DIVISION OF OIL, GAS AND MINING

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February 6, 2002

Rick Olsen, General Manager
Canyon Fuel Company, LLC.
P.O. Box 1029
Wellington, Utah 84542

RE: Approval of Gilson Well, Canyon Fuel Company LLC., Dugout Canyon Mine, C/007/0039-AM01H, Outgoing File

Dear Mr. Olsen:

The above-referenced amendment is approved effective February 6, 2002. A stamped incorporated copy is enclosed for your copy of the Mining and Reclamation Plan.

If you have any questions, please feel free to call me at (801) 538-5268.

Sincerely,

Pamela Grubaugh-Littig
Permit Supervisor

sjd/sd
Enclosure
cc JoeWilcox, OSM
Richard Manus, BLM
Mark Page, Water Rights, w/o enc
Dave Ariotti, DEQ, w/o enc
Derris Jones, DWR, w/o enc
Steve Boyden, SITLA, w/o enc
Price Field Office
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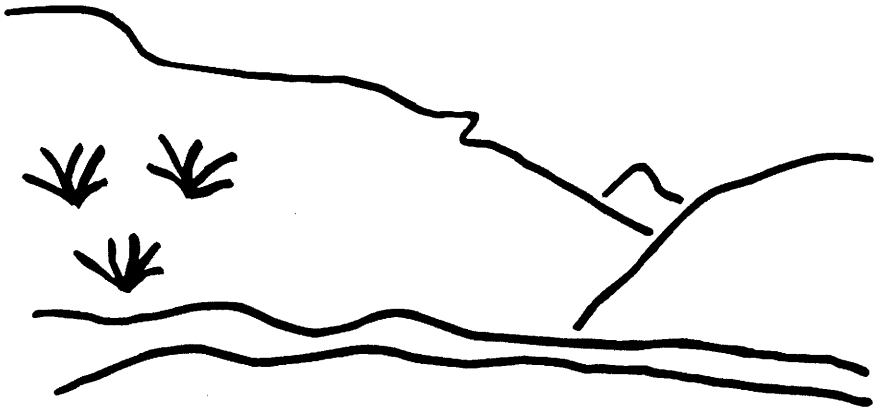
State of Utah



Utah Oil Gas and Mining

Coal Regulatory Program

Dugout Mine
Gilson Well
C/007/039-01H-1
Technical Analysis
January 28, 2002

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TECHNICAL ANALYSIS

INTRODUCTION

Canyon Fuel Co., LLC submitted a proposal to drill well, 450 feet from the water tanks along the east side of the water tank access road. The well will be 300 feet in depth and will intercept water collecting in the Gilson seam. The drill pad will be fairly level, adjacent to and even with the roadway, extending five feet into the existing stream channel. A retaining wall for the pad will stand fifteen feet from the channel to the pad surface (see Dwg G-346 and GE4B001 in Chapter 5).

The proposal will require relocation of the west fork of Dugout Creek for a stretch of about 50 feet. A stream alteration permit has been obtained from the Division of Water Rights. The alteration permit expires on November 19, 2002.

The Division under ACT/007/039-AM99G on January 14, 2000 first reviewed the application for the Gilson Seam Well. The application was withdrawn and resubmitted on August 4, 2001 and given the file number AM01H. The first technical review was dated October 19, 2001 and a response to deficiencies was received on December 4, 2001. This submittal was reviewed and had no deficiencies. This amendment should receive final approval.

INTRODUCTION

GENERAL CONTENTS

IDENTIFICATION OF INTERESTS

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

Minimum Regulatory Reference:

The operator of the coal mine and all owners and controllers of the operation must be identified by name and address. The Division with the Applicant/Violator System must crosscheck the information provided and other sources such as DOGM inspection and enforcement records, State corporation commission or tax records. If the Division identifies any errors in the ownership or control information, the applicant must be contacted to resolve the matter immediately. If the Division discovers that none of the persons identified in the application has had any previous mining experience, the applicant will be contacted to verify this fact.

The Applicant/Violator System will be updated with new information received by the Division.

Analysis:

This is not an action requiring a new permit; the Division does not require updated ownership and control information. The area to be disturbed is within the current permit area, so no new land ownership information is needed.

Findings:

Information provided in the application is adequate to meet the requirements of this section of the regulations.

RIGHT OF ENTRY

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

Minimum Regulatory Reference:

Documents giving legal right to enter the permit area must be detailed in the application by date, type of document, land description and rights claimed. Any pending litigation over these legal rights must be disclosed.

The written consent of the landowner for the extraction of the coal by surface mining methods must also be included when the surface and mineral owners are different. Also a copy of the conveyance that grants the legal authority to extract the coal by surface methods will be included.

The Division does not have the authority to adjudicate property rights disputes.

Analysis:

The area proposed to be disturbed is within the current permit area, and, according to Plate 1-1 in the mining and reclamation plan, the surface is owned by the applicant, Canyon Fuel Company. No additional right of entry information is needed.

Findings:

Information provided in the application is adequate to meet the requirements of this section of the regulations.

ENVIRONMENTAL RESOURCE INFORMATION

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

HISTORIC AND ARCHEOLOGICAL RESOURCE INFORMATION

Regulatory Reference: 30 CFR 783.12; R645-301-411.

Minimum Regulatory Requirements:

Describe and identify the nature of cultural historic and archeological resources listed or eligible for listing on the National Register of Historic Places and known archeological sites within the proposed permit and adjacent areas. The description shall be based on all available information, including, but not limited to, information from the State Historic Preservation Officer and local archeological, historical, and cultural preservation groups.

Identify and evaluate important historic and archeological resources that may be eligible for listing on the National Register of Historic Places, through the collection of additional information, conduct of field investigations, or other appropriate analyses.

Analysis:

A cultural resources survey found two sites in the mine area, but neither of them are near the proposed disturbance. There are no cemeteries, public parks, or units of the National Trails System or the Wild and Scenic Rivers System located in the permit area. This information is in the current mining and reclamation plan, and no further information is needed.

Findings:

Information provided in the application is adequate to meet the requirements of this section of the regulations.

VEGETATION RESOURCE INFORMATION

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

Minimum Regulatory Requirements:

Provide a map that delineates existing vegetative types and a description of the plant communities within the area affected by surface operations and facilities and within any proposed reference area. The description shall include information adequate to predict the potential for reestablishing vegetation. The map or aerial photograph is required, sufficient adjacent areas shall be included to allow evaluation of vegetation as important habitat for fish and wildlife for those species of fish and wildlife as identified under the fish and wildlife resource information.

Analysis:

The current mining and reclamation plan contains quantitative information about the vegetation communities in the area proposed to be disturbed. No additional information is required.

Findings:

Information provided in the application is adequate to meet the requirements of this section of the regulations.

FISH AND WILDLIFE RESOURCE INFORMATION

Regulatory Reference: 30 CFR 784.21; R645-301-322.

Minimum Regulatory Reference:

The application shall include fish and wildlife resource information for the permit area and adjacent area. The scope and level of detail for such information shall be determined by the Division in consultation with State and Federal agencies with responsibilities for fish and wildlife and shall be sufficient to design the protection and enhancement plan required under the operation and reclamation plan.

Site-specific resource information necessary to address the respective species or habitats shall be required when the permit area or adjacent area is likely to include:

(1) Listed or proposed endangered or threatened species of plants or animals or their critical habitats listed by the Secretary under the endangered Species Act of 1973, as amended (16 U.S.C. 1531 et seq.), or those species or habitats protected by similar State statutes;
(2) Habitats of unusually high value for fish and wildlife such as important streams, wetlands, riparian areas, cliffs supporting raptors, areas offering special shelter or protection, migration routes, or reproduction and wintering areas; or
(2) Other species or habitats identified through agency consultation as requiring special protection under State or Federal law.

Analysis:

Habitat in the area to be disturbed is the same as what was disturbed when the mine was built. The baseline information in the plan is adequate for the proposed disturbance.

The proposal includes relocating a portion of Dugout Creek, and the application includes a copy of the stream alteration permit issued by the Division of Water Rights. Although the channel area includes riparian habitat, Water Rights apparently decided not to require information concerning whether a wetland exists. The stream channel is very confined through this portion of the canyon, and jurisdictional wetlands, if they do exist, would be extremely small. Because the Division of Water Rights is the lead agency on stream alteration permits and decided not to require wetland information, the Division has determined it will not seek further information or mitigation for wetlands.

Findings:

Information provided in the application is adequate to meet the requirements of this section of the regulations.

SOILS RESOURCE INFORMATION

Regulatory Reference: 30 CFR 783.21; 30 CFR 817.22; 30 CFR 817.200(c); 30 CFR 823; R645-301-220; R645-301-411.

Minimum Regulatory Requirements:

Provide adequate soil survey information on those portions of the permit area to be affected by surface operations or facilities consisting of a map delineating different soils, soil identification, soil description, and present and potential productivity of existing soils.

Where selected overburden materials are proposed as a supplement or substitute for topsoil, provide results of the analysis, trials and tests required. Results of physical and chemical analyses of overburden and topsoil must be provided to demonstrate that the resulting soil medium is equal to or more suitable for sustaining revegetation than the available topsoil, provided that trials and tests are certified by an approved laboratory. These data may be obtained from any one or a combination of the following sources: U.S. Department of Agriculture Soil Conservation Service published data based on established soil series; U.S. Department of Agriculture Soil Conservation Service Technical Guides; State agricultural agency, university, Tennessee Valley Authority, Bureau of Land Management or U.S. Department of Agriculture Forest Service published data based on soil series properties and behavior; or, results of physical and chemical analyses, field site trials, or greenhouse tests of the topsoil and overburden materials (soil series) from the permit area. If the permittee demonstrates through soil survey or other data that the topsoil and unconsolidated material are insufficient and substitute materials will be used, only the substitute materials must be analyzed.

Analysis:

The well disturbance is 450 below the water tanks along the water tank access road as shown in Drawings G-346 and GE4B001. The concrete pad for the well site will cover undisturbed soil and a rock outcrop. The plan states that the well site will cover 2000 sq. ft. of undisturbed soil that "lies in a stranded flood plain bench above the stream at the toe of a colluvium covered slope (App 2-8, p ii)." The disturbance will be approximately 30 feet from the realigned stream (see Drawing GE 4 B001).

Chris Hansen, Canyon Fuels, gathered the soil resource information on July 30, 1999. A qualification statement for performing the Dugout Canyon soil survey and a personal résumé are provided in Appendix 2-3, Soil Test Pit Logs.

One soil pit was dug to a depth of five feet. The results of soil analysis for test pit 17 are shown in Table 2-1. The submittal also contains Attachment A, "Technical Field Visit Report"; Attachment B, Exhibit A of Appendix 2-8, "Soils Map – Gilson Water Well Site"; and Attachment C, "Soils Log for Test Pit TP-17"; and Attachment D, "TP-17 Soil Samples" Laboratory Data Sheets from Inter-Mountain Laboratories in Sheridan, Wyoming.

Soils of the site are represented by test pit 17 which is shown on Exhibit A of Appendix 2.8 and described in Table 2-1. The soils are sandy loam with 19% coarse fragments in the surface 1.7 inches. The coarse fragments drop to less than 1% for the next 44 inches and then rise to 4.7%. A buried "Bb1" horizon is found at 29.5 inches. The texture of the 29.5 to 31.0 inch buried "Bb1" horizon is loam. The buried "Bb1" horizon has better properties than the surface topsoil horizon i.e. 9.3 Available Water-Holding Capacity (AWC) compared with less than 5 AWH and saturation percentage of 43.6% compared with less than 33.2%. Below this

narrow band of loam is sandy clay loam to a depth of 60 inches.

The Third Order Carbon Co. Survey (SCS, 1988) places the soil in the Rock Outcrop Rubbleland-Travessilla Complex. Mr. Hansen identifies the soil after sampling as TS soil which is described on Plate 2-2 as "native or surficially disturbed soil" and on page 2-5 of the MRP as "loamy mixed Typic Haploboroll." As described, the TS soil appears to have approximately 30% gravel size rock fragments throughout the profile. Cobbles and sand increase in the "C" horizon (from 28 inches downward).

From what has been presented in the plan, the soil in test pit 17 is similar to the TS soil in that it has a neutral pH and low EC and SAR values. However, it has a much finer texture than the TS soil and does not possess the characteristic coarse fragments of the TS soil.

Perhaps the best description of the TS soil is found in the Dugout Mine TA:

The undisturbed soils were identified by the Order-I survey as part of the SCS listed soil unit Datino Variant complex, and were given the distinction "Soil Type TS." According to the SCS Carbon County soils survey, the Datino Variant soil complex is characterized as very deep, well drained, moderate permeable soils on mountain slopes being formed in colluvium derived dominantly from sandstone and shale. The SCS survey defines Datino Variant soils as loamy-skeletal, mixed Typic Haploborolls. The typic subgroup of Haploborolls[1] is defined as freely drained soils with a moderately thick brownish mollic epipedon. Typic Haploborolls were formed in alluvium during the late-Pleistocene or Holocene ages, do not have a shallow lithic (stone) contact, and do not have deep wide cracks in most years. The USDA handbook further states that where slopes are suitable, Haploborolls are mostly under cultivation.

Undisturbed TS soils, as represented by soil test pits TP-1, 4, 5, 6, 7, 8, 9, 14, and 14A, are found on both sides of Dugout Creek in the northeastern portion and in the southwestern portion of the facilities area. The TS soils are found in flat lying areas and on slopes with grades up to 40 percent or more. The soil supports vegetation consisting of sage, cottonwood, gambel oak, grass, pinyon, and fir. Information condensed from soil test pit TP-4, TP-6 and lower sections of pit TP-1 show soil horizons O1 (1 inch), A1 (1 to 5 inches), B2 (5 to 14 inches), B3 (14 to 28 inches), and C (28 inches to 9 feet). Portions of TP-5 and TP-8 soil profiles appear to have been reworked by Dugout Creek; the upper four feet of TP-1 soil profile appear disturbed. Undisturbed Type TS soils have acceptable physical and chemical characteristic results consistent with requirements outlined by DOGM's soil and overburden guidelines as recorded in Table 2-1.

Other undisturbed soils located within the Disturbed Area Boundary and described by the SCS

[1] Soil Conservation Service, U.S. Department of Agriculture, Agriculture Handbook No.436, pp 288-289.

soils Order-III survey include Croydon loam, Comodore-Datino Variant complex, and Rock Outcrop-Rubbleland-Travessilla complex soils.

Findings:

The information provided is adequate for the purposes of the Environmental Soils Resource requirements of the Regulations.

LAND-USE RESOURCE INFORMATION

Regulatory Reference: 30 CFR 783.22; R645-301-411.

Analysis:

The applicant has not proposed to change this portion of the mining and reclamation plan. The land uses in the area to be disturbed are the same as those in the area of the existing mine, which is wildlife habitat. The permittee has met the minimum requirements of this section.

Findings

Information provided in the application is adequate to meet the requirements of this section of the regulations.

PRIME FARMLAND

Regulatory Reference: 30 CFR 785.16, 823; R645-301-221, -302-270.

Analysis:

The application includes an approval letter dated September 14, 1999 from the State Engineer to change the point of diversion of 2.3 cfs of water from a point located in Section 3 of T14S, R12E (downstream from the mine and leachfield) to the Gilson well site (App. 7-1). Apparently, the Dugout Mine diverted the water for supplemental irrigation of 605.7 acres and for stock watering of 810 cattle from April 1 to September 30. This former use of water was not divulged in the Mining and Reclamation Plan Application.

The prime farmland determination letter is found in Vol. 2 of the Permit in Appendix 2-1. It refers specifically to Field 1 that is in Section 1 T14S, R12E that the access road bisects. Page 2-2 of the MRP indicates that during the permitting process for the SagePoint Dugout mine areas of potential prime farmland were identified outside of the Dugout Canyon permit area, near the mouth of Soldier Creek Canyon. No prime farmland was identified in Dugout Canyon.

Findings:

The information provided is adequate to make a determination that Prime Farmland is not affected by the mining operation as required by the Regulations.

OPERATION PLAN

PROTECTION OF PUBLIC PARKS AND HISTORIC PLACES

Regulatory Reference: 30 CFR 784.17; R645-301-411.

Minimum Regulatory Requirements:

For any publicly owned parks or any places listed on the National Register of Historic Places that may be adversely affected by the proposed operation, each plan shall describe the measures to be used to prevent adverse impacts, or if valid existing rights exist or joint agency approval is to be obtained, to minimize impacts.

The Division may require the applicant to protect historic and archeological properties listed on or eligible for listing on the National Register of Historic Places through appropriate mitigation and treatment measures. Appropriate mitigation and treatment measures may be required to be taken after permit issuance provided that the required measures are completed before the properties are affected by any mining operation.

Analysis:

There are no known cultural resources in the area to be disturbed, so no protection measures are needed.

Findings:

Information provided in the application is adequate to meet the requirements of this section of the regulations.

AIR POLLUTION CONTROL PLAN

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

Analysis:

The existing mining and reclamation plan contains a description of the coordination and compliance efforts that have been undertaken by the applicant with the Division of Air Quality. The Division does not expect the well to be a source of fugitive dust or other air pollutants, so no modifications to the plan are needed.

Findings:

Information provided in the application is adequate to meet the requirements of this section of the regulations.

FISH AND WILDLIFE INFORMATION

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

Minimum Regulatory Requirements:

Protection and enhancement plan

Each application shall include a description of how, to the extent possible using the best technology currently available, the operator will minimize disturbances and adverse impacts on fish and wildlife and related environmental values, including compliance with the Endangered Species Act, during the surface coal mining and reclamation operations and how enhancement of these resources will be achieved where practicable. This description shall apply, at a minimum, to species and habitats identified. The description shall include: protective measures that will be used during the active mining phase of operation. Such measures may include the establishment of buffer zones, the selective location and special design of haul roads and powerlines, and the monitoring of surface water quality and quantity; and, enhancement measures that will be used during the reclamation and postmining phase of operation to develop aquatic and terrestrial habitat. Such measures may include restoration of streams and other wetlands, retention of ponds and impoundments, establishment of vegetation for wildlife food and cover, and the placement of perches and nest boxes. Where the plan does not include enhancement measures, a statement shall be given explaining why enhancement is not practicable.

Each operator shall, to the extent possible using the best technology currently available: ensure that electric powerlines and other transmission facilities used for, or incidental to, underground mining activities on the permit area are designed and constructed to minimize electrocution hazards to raptors, except where the Division determines that such requirements are unnecessary; locate and operate haul and access roads so as to avoid or minimize impacts on important fish and wildlife species or other species protected by State or Federal law; design fences, overland conveyors, and other potential barriers to permit passage for large mammals except where the Division determines that such requirements are unnecessary; and, fence, cover, or use other appropriate methods to exclude wildlife from ponds which contain hazardous concentrations of toxic-forming materials.

Endangered and threatened species

No underground mining activity shall be conducted which is likely to jeopardize the continued existence of endangered or threatened species listed by the Secretary or which is likely to result in the destruction or adverse modification of designated critical habitats of such species in violation of the Endangered Species Act of 1973, as amended (16 U.S.C. 1531 et seq.). The operator shall promptly report to the Division any State- or federally-listed endangered or threatened species within the permit area of which the operator becomes aware. Upon notification, the Division shall consult with appropriate State and Federal fish and wildlife agencies and, after consultation, shall identify whether, and under what conditions, the operator may proceed.

Bald and golden eagles

No underground mining activity shall be conducted in a manner which would result in the unlawful taking of a bald or golden eagle, its nest, or any of its eggs. The operator shall promptly report to the Division any golden or bald eagle nest within the permit area of which the operator becomes aware. Upon notification, the Division shall consult with the U.S. Fish and Wildlife Service and also, where appropriate, the State fish and wildlife agency and, after consultation, shall identify whether, and under what conditions, the operator may proceed.

Nothing in these regulatory requirements shall authorize the taking of an endangered or threatened species or a bald or golden eagle, its nest, or any of its eggs in violation of the Endangered Species Act of 1973, as amended, 16 U.S.C. 1531 et seq., or the Bald Eagle Protection Act, as amended, 16 U.S.C. 668 et seq.

Wetlands and habitats of unusually high value for fish and wildlife

The operator conducting underground mining activities shall avoid disturbances to, enhance where practicable, restore, or replace, wetlands and riparian vegetation along rivers and streams and bordering ponds and lakes. Underground mining activities shall avoid disturbances to, enhance where practicable, or restore habitats of unusually high value for fish and wildlife.

Analysis:

Endangered and Threatened Species

With the possible exception of the Mexican spotted owl, there are no threatened or

endangered species known to be in the area. Because the proposed disturbance is small (0.23 acres) and immediately adjacent to existing disturbance, the Division does not expect any effects on this species.

Water depletions are considered to potentially adversely affect four threatened and endangered fish species of the upper Colorado River basin, and a mitigation fee is required if the amount of depletion is over 100 acre-feet annually. The current mining and reclamation plan indicates about 15,000,000 gallons, or about 44 acre-feet, of water is consumed in the mine annually. In addition, the applicant has provided the Division information that an additional 1,470,000 gallons or about 4.3 acre-feet are consumed as culinary water. However, since the culinary water is not produced at the mine but is trucked in from another source, this water does not count toward the depletion amount.

Since the total water consumption is less than 100 acre-feet, no fee is required. The newly calculated figure is close to the amount calculated for the original permit, 46.5 acre-feet. The Division already consulted with the Fish and Wildlife Service about effects on threatened and endangered species when issuing the permit in 1999, so no additional consultation is needed. If the amount of water consumption increases, the Division would have to consult with the Fish and Wildlife Service again.

The existing mining and reclamation plan contains adequate protection measures for other wildlife species.

Findings:

Information provided in the application is adequate to meet the requirements of this section of the regulations.

TOPSOIL AND SUBSOIL

Regulatory Reference: 30 CFR 817.22; R645-301-230.

Minimum Regulatory Requirements:

Topsoil removal and storage

All topsoil shall be removed as a separate layer from the area to be disturbed, and segregated. Where the topsoil is of insufficient quantity or of poor quality for sustaining vegetation, the selected overburden materials approved by the Division for use as a substitute or supplement to topsoil shall be removed as a separate layer from the area to be disturbed, and segregated. If topsoil is less than 6 inches thick, the operator may remove the topsoil and the unconsolidated materials immediately below the topsoil and treat the mixture as topsoil.

The Division may choose not to require the removal of topsoil for minor disturbances which occur at the site of small structures, such as power poles, signs, or fence lines; or, will not destroy the existing vegetation and will not cause erosion.

All materials shall be removed after the vegetative cover that would interfere with its salvage is cleared from the area to be

disturbed, but before any drilling, blasting, mining, or other surface disturbance takes place.

Selected overburden materials may be substituted for, or used as a supplement to, topsoil if the operator demonstrates to the Division that the resulting soil medium is equal to, or more suitable for sustaining vegetation than, the existing topsoil, and the resulting soil medium is the best available in the permit area to support revegetation.

Materials removed shall be segregated and stockpiled when it is impractical to redistribute such materials promptly on regraded areas. Stockpiled materials shall: be selectively placed on a stable site within the permit area; be protected from contaminants and unnecessary compaction that would interfere with revegetation; be protected from wind and water erosion through prompt establishment and maintenance of an effective, quick growing vegetative cover or through other measures approved by the Division; and, not be moved until required for redistribution unless approved by the Division.

Where long-term surface disturbances will result from facilities such as support facilities and preparation plants and where stockpiling of materials would be detrimental to the quality or quantity of those materials, the Division may approve the temporary distribution of the soil materials so removed to an approved site within the permit area to enhance the current use of that site until needed for later reclamation, provided that: such action will not permanently diminish the capability of the topsoil of the host site; and, the material will be retained in a condition more suitable for redistribution than if stockpiled.

The Division may require that the B horizon, C horizon, or other underlying strata, or portions thereof, be removed and segregated, stockpiled, and redistributed as subsoil in accordance with the above requirements if it finds that such subsoil layers are necessary to comply with the revegetation.

Analysis:

Removal and Storage

Soil will be salvaged to a depth of thirty-one inches at the Gilson Well site. The "O","A", "B", and "C" horizons will be combined. The buried Bb1 horizon will be salvaged. An estimated 191 CY will be salvaged and transported to the soil storage yard at the Soldier Canyon Mine (Table 2-2 and Appendix 2-8, Gilson Well Site Soils Study and Soil Volume Calculations). The soil will be stabilized with the interim seed mix described in Section 341.200 of the MRP. The mix includes Indian ricegrass, western wheatgrass, slender wheatgrass, thickspike wheat grass and alfalfa.

Approximately 1568 cu yds of topsoil was removed from the main channel during initial culvert installation (page 2-33 Section 233.200). This channel soil was separately handled to preserve it for use during reclamation in the channel. Area 5 soils (shown on Plate 2-2) were mentioned in Section 231.100 as being the source of the channel soils, but Area 5 soils are not represented in Table 2-2.

Procedures for soil handling in the vicinity and the altered stream channel are described in Appendix 2-8, Gilson Well Site Soils Study and Soil Volume Calculations. The "O","A", "B", and "C" horizons will be removed to an average depth of 31 inches, following procedures described in the following sections of the MRP for stream channel soils: topsoil removal and segregation (section 231.100, except that the Gilson seam soil A horizon will not be segregated) and storage (Section 232.100) and protection (section 234) and redistribution (section 242.100 and 242.200). All horizons will be removed and stored together at the Dugout Canyon Mine soil stockpile located at the Soldier Canyon Mine. The salvaged soil from the well disturbance will be stored separately from other soils at the Soldier Canyon Mine topsoil stockpile area.

Findings:

The information provided is adequate to meet the Operational topsoil and subsoil requirements of the Regulations.

VEGETATION

Regulatory Reference: R645-301-330, -301-331, -301-332.

Minimum Regulatory Requirements:

Each application will contain a plan for protection of vegetation, fish, and wildlife resources throughout the life of the mine. The plan will provide a description of the measures taken to disturb the smallest practicable area at any one time and through prompt establishment and maintenance of vegetation for interim stabilization of disturbed areas to minimize surface erosion. This may include part or all of the plan for final revegetation as described in reclamation plan for revegetation.

For UNDERGROUND COAL MINING AND RECLAMATION ACTIVITIES a description of the anticipated impacts of subsidence on renewable resource lands and how such impact will be mitigated needs to be presented.

A description of how, to the extent possible, using the best technology currently available, the operator will minimize disturbances and adverse impacts. This description will include protective measures that will be used during the active mining phase of operation. Such measures may include the establishment of buffer zones, the selective location and special design of haul roads and powerlines, the monitoring of surface water quality and quantity, and through prompt establishment and maintenance of vegetation for interim stabilization of disturbed areas to minimize surface erosion.

Analysis:

At the Division's verbal suggestion, the applicant has modified the interim revegetation plan to exclude alfalfa and add Kentucky bluegrass. This has been included in the amendment as of January 23, 2001. Other aspects of this plan have not changed, and the proposal is acceptable.

Findings:

Information provided in the application is adequate to meet the requirements of this section of the regulations.

HYDROLOGIC INFORMATION

Regulatory Reference: 30 CFR 773.17, 774.13, 784.14, 784.16, 784.29, 817.41, 817.42, 817.43, 817.45, 817.49, 817.56, 817.57; R645-300-140, -300-141, -300-142, -300-143, -300-144, -300-145, -300-146, -300-147, -300-147, -300-148, -301-512, -301-514, -301-521, -301-531, -301-532, -301-533, -301-536, -301-542, -301-720, -301-731, -301-732, -301-733, -301-742, -301-743, -301-750, -301-761, -301-764.

Minimum Regulatory Requirements:

General

All underground mining and reclamation activities shall be conducted to minimize disturbance of the hydrologic balance within the permit and adjacent areas, to prevent material damage to the hydrologic balance outside the permit area, and to support approved postmining land uses in accordance with the terms and conditions of the approved permit and the performance standards

of this part. The Division may require additional preventative, remedial, or monitoring measures to assure that material damage to the hydrologic balance outside the permit area is prevented. Mining and reclamation practices that minimize water pollution and changes in flow shall be used in preference to water treatment.

Groundwater Monitoring

In order to protect the hydrologic balance underground mining activities shall be conducted according to the hydrologic reclamation plan. Ground-water quality shall be protected by handling earth materials and runoff in a manner that minimizes acidic, toxic, or other harmful infiltration to ground-water systems and by managing excavations and other disturbances to prevent or control the discharge of pollutants into the ground water.

Ground-water monitoring shall be conducted according to the ground-water monitoring plan. The Division may require additional monitoring when necessary. Ground-water monitoring data shall be submitted every 3 months to the Division or more frequently as prescribed by the Division. Monitoring reports shall include analytical results from each sample taken during the reporting period. When the analysis of any ground-water sample indicates noncompliance with the permit conditions, the operator shall promptly notify the Division and immediately provide for any accelerated or additional monitoring necessary to determine the nature and extent of noncompliance and the results of the noncompliance. Plans and hydrologic information to evaluate and mitigate the noncompliance situation and information relevant to the PHC shall be submitted to the Division as required.

Ground-water monitoring shall proceed through mining and continue during reclamation until bond release. The Division may modify the monitoring requirements including the parameters covered and the sampling frequency if the operator demonstrates, using the monitoring data obtained, that: the operation has minimized disturbance to the prevailing hydrologic balance in the permit and adjacent areas and prevented material damage to the hydrologic balance outside the permit area; water quantity and quality are suitable to support approved postmining land uses; or, monitoring is no longer necessary to achieve the purposes set forth in the monitoring plan.

Equipment, structures, and other devices used in conjunction with monitoring the quality and quantity of ground water onsite and offsite shall be properly installed, maintained, and operated and shall be removed by the operator when no longer needed.

Diversions: General

With the approval of the Division, any flow from mined areas abandoned before May 3, 1978, and any flow from undisturbed areas or reclaimed areas, after meeting the criteria for siltation structure removal, may be diverted from disturbed areas by means of temporary or permanent diversions. All diversions shall be designed to minimize adverse impacts to the hydrologic balance within the permit and adjacent areas, to prevent material damage outside the permit area and to assure the safety of the public. Diversions shall not be used to divert water into underground mines without approval of the Division.

The diversion and its appurtenant structures shall be designed, located, constructed, and maintained to: be stable; provide protection against flooding and resultant damage to life and property; prevent, to the extent possible using the best technology currently available, additional contributions of suspended solids to streamflow outside the permit area; and, comply with all applicable local, State, and Federal laws and regulations.

Temporary diversions shall be removed when no longer needed to achieve the purpose for which they were authorized. The land disturbed by the removal process shall be restored. Before diversions are removed, downstream water-treatment facilities previously protected by the diversion shall be modified or removed, as necessary, to prevent overtopping or failure of the facilities. This requirement shall not relieve the operator from maintaining water-treatment facilities as otherwise required.

A permanent diversion or a stream channel reclaimed after the removal of a temporary diversion shall be designed and constructed so as to restore or approximate the premining characteristics of the original stream channel including the natural riparian vegetation to promote the recovery and the enhancement of the aquatic habitat. The Division may specify additional design criteria for diversions.

Stream buffer zones

No land within 100 feet of a perennial stream or an intermittent stream shall be disturbed by underground mining activities, unless the Division specifically authorizes underground mining activities closer to, or through, such a stream. The Division may authorize such activities only upon finding that: underground mining activities will not cause or contribute to the violation of applicable State or Federal water quality standards and will not adversely affect the water quantity and quality or other environmental resources of the stream; and, if there will be a temporary or permanent steam-channel diversion, it will comply with the regulatory requirements for diversions.

The area not to be disturbed shall be designated as a buffer zone, and the operator shall mark it accordingly with buffer zone markers.

Sediment control measures

Appropriate sediment control measures shall be designed, constructed, and maintained using the best technology currently available to: prevent, to the extent possible, additional contributions of sediment to stream flow or to runoff outside the permit area; meet the more stringent of applicable State or Federal effluent limitations; and, minimize erosion to the extent possible.

Sediment control measures include practices carried out within and adjacent to the disturbed area. The sedimentation storage capacity of practices in and downstream from the disturbed areas shall reflect the degree to which successful mining and reclamation techniques are applied to reduce erosion and control sediment. Sediment control measures consist of the utilization of proper mining and reclamation methods and sediment control practices, singly or in combination. Sediment control methods include but are not limited to: disturbing the smallest practicable area at any one time during the mining operation through progressive backfilling, grading, and prompt revegetation; stabilizing the backfilled material to promote a reduction of the rate and volume of runoff; retaining sediment within disturbed areas; diverting runoff away from disturbed areas; diverting runoff using protected channels or pipes through disturbed areas so as not to cause additional erosion; using straw dikes, riprap, check dams, mulches, vegetative sediment filters, dugout ponds, and other measures that reduce overland flow velocity, reduce runoff volume, or trap sediment; treating with chemicals; and, treating mine drainage in underground sumps.

Analysis:

Ground-Water Monitoring

Since the proposed water well is for culinary and other water uses, and is covered by a valid Water Right, it is not a monitoring well. The approved Water Right is included in the submittal. Therefore, no monitoring is required.

Diversions

The water well pad is located between the road and Dugout Creek with the pad being constructed with a bin wall. The creek will need to be shortened slightly to accommodate the construction and will not use a culvert as shown on Dwg. GE4B001. Cross sections of the pad are shown on drawing B-346. Drainage ditch DD-15 is shown across the road from the new pump house.

The ditch design for DD-14 and DD-15, near the pad, used the 10-year, 24-hour design that is consistent with the Division's position paper regarding ditches and culverts draining to a sediment pond and exceeds regulation requirements. In this case, the ditches drain to the creek that conforms to regulatory recommendations by diverting runoff away from disturbed areas. Where the slope is less, 6.7%, the ditches are unlined and all other, steeper, sections are concrete lined. The watershed areas, runoff numbers, and Manning roughness coefficients were all checked and found to be appropriate. The ditches are adequately designed.

Stream Buffer Zones

Construction will occur within 100 feet of Dugout Creek. Otherwise, stream buffer zones will not be affected by the proposed work.

Sediment Control Measures

Sediment control measures used during construction will be straw bales and silt fences in the stream below the construction site. These are typical measures and, when properly installed, will prevent additional sediment from entering the stream.

Casing and Sealing of Wells

Original commitments in the approved MRP cover the temporary and permanent sealing of the Gilson Well. See sections 748 and 765 of the MRP.

Findings:

The application meets minimum requirements.

MAPS, PLANS, AND CROSS SECTIONS OF MINING OPERATIONS

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

Minimum Regulatory Requirements:

Each application shall contain maps, plans, and cross sections which show the mining activities to be conducted, the lands to be affected throughout the operation, and any change in a facility or feature to be caused by the proposed operations, if the facility or feature was shown and described as an existing structure.

The following shall be shown for the proposed permit area:

Affected area maps

The boundaries of all areas proposed to be affected over the estimated total life of all mining activities and reclamation activities, with a description of size, sequence, and timing of phased reclamation activities and treatments. All maps and cross sections used for mining design and mining operations shall clearly show the affected and permit area boundaries in reference to the reclamation work being accomplished.

Mining facilities maps

Location of each facility used in conjunction with mining operations. Such structures and facilities shall include, but not be limited to: buildings, utility corridors, roads, and facilities to be used in mining and reclamation operations or by others within the permit area; each coal storage, cleaning, and loading area; each topsoil, spoil, coal preparation waste, underground development waste, and noncoal waste storage area; each water diversion, collection, conveyance, treatment, storage and discharge facility; each source of waste and each waste disposal facility relating to coal processing or pollution control; each facility to be used to protect and enhance fish and wildlife related environmental values; each explosives storage and handling facility; location of each sedimentation pond, permanent water impoundment, coal processing waste bank, and coal processing water dam and embankment, and disposal areas for underground development waste and excess spoil; and, each plan or profile, at cross sections specified by the Division, of the anticipated surface configuration to be achieved for the affected areas during mining operations.

Analysis:

Affected Area Maps

Plates 7-1, 7-2, 7-5, 5-2, and 5-3(6) have all been updated to show the new well location.

Mining Facilities Maps

The permittee updated the surface facility map Plate 5-2 to show the new surface disturbance is within the disturbed area.

Findings:

The application meets minimum requirements of this section.

RECLAMATION PLAN

GENERAL REQUIREMENTS

Regulatory Reference: PL 95-87 Sec. 515 and 516; 30 CFR 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.

Minimum Regulatory Requirements:

Provide a plan for the reclamation of the lands within the proposed permit area, showing how the applicant will comply with the regulatory program and the environmental protection performance standards. The plan shall include, at a minimum, contain the following information for the proposed permit area: a detailed timetable for the completion of each major step in the reclamation plan; a detailed estimate of the cost of the reclamation of the proposed operations required to be covered by a performance bond, with supporting calculations for the estimates; a plan for backfilling, soil stabilization, compacting, and grading, with contour maps or cross sections that show the anticipated final surface configuration of the proposed permit area; a plan for redistribution of topsoil, subsoil, and other material along with a demonstration of the suitability of topsoil substitutes or supplements shall be based upon analysis of the thickness of soil horizons, total depth, texture, percent coarse fragments, pH, and areal extent of the different kinds of soils; other chemical and physical analyses, field-site trials, or greenhouse tests if determined to be necessary or desirable to demonstrate the suitability of the topsoil substitutes or supplements may also be required; a plan for revegetation including, but not limited to, descriptions of the schedule of revegetation, species and amounts per acre of seeds and seedlings to be used, methods to be used in planting and seeding, mulching techniques, irrigation, if appropriate, and pest and disease control measures, if any, measures proposed to be used to determine the success of revegetation, and, a soil testing plan for evaluation of the results of topsoil handling and reclamation procedures related to revegetation; a description of the measures to be used to maximize the use and conservation of the coal resource; a description of measures to be employed to ensure that all debris, acid-forming and toxic-forming materials, and materials constituting a fire hazard are disposed of accordingly and a description of the contingency plans which have been developed to preclude sustained combustion of such materials; a description, including appropriate cross sections and maps, of the measures to be used to seal or manage mine openings, and to plug, case, or manage exploration holes, other bore holes, wells, and other openings within the proposed permit area; and, a description of steps to be taken to comply with the requirements of the Clean Air Act, the Clean Water Act, and other applicable air and water quality laws and regulations and health and safety standards.

Analysis:

The report from the technical site visit dated June 22, 1999 indicates that the area is riparian in nature. The amendment stated on page 7-82 that the relocation of the stream channel would return the channel to its former course. The stream channel will not be returned to its existing location during final reclamation. Therefore, construction of the new channel location will be the final location of the stream channel and will follow reclamation procedures and receive reclamation treatments described in Section 341 for riparian areas during construction.[2]

Seed mix no. 2 will be used in the riparian areas that are shown on Plate 3-1A. Plate 3-1A has been updated to show the Gilson well as a riparian area and therefore receiving riparian area reclamation treatments. Page 3-48, Section 352 indicates that the area will receive riparian treatments.

Findings:

[2] Personal communication between Priscilla Burton and Vickie Miller, Environmental Engineer for the Dugout Mine on 01/08/2002.

The information provided is adequate for the Reclamation Plan Protection of Fish, Wildlife and Related Environmental Values section of the Regulations.

POSTMINING LAND USES

Regulatory Reference: 30 CFR 784.15, 784.200, 785.16, 817.133; R645-301-412, -301-413, -301-414, -302-270, -302-271, -302-272, -302-273, -302-274, -302-275.

Analysis:

The postmining land use for the Dugout property is wildlife habitat. The applicant will not change to the postmining land use.

Findings:

Information provided in the application is adequate to meet the requirements of this section of the regulations.

APPROXIMATE ORIGINAL CONTOUR RESTORATION

Regulatory Reference: 30 CFR 784.15, 785.16, 817.102, 817.107, 817.133; R645-301-234, -301-270, -301-271, -301-412, -301-413, -301-512, -301-531, -301-533, -301-553, -301-536, -301-542, -301-731, -301-732, -301-733, -301-764.

Minimum Regulatory Requirements:

Note: The following requirements have been suspended insofar as they authorize any variance from approximate original contour for surface coal mining operations in any area which is not a steep slope area.

Criteria for permits incorporating variances from approximate original contour restoration requirements.

The Division may issue a permit for nonmountaintop removal mining which includes a variance from the backfilling and grading requirements to restore the disturbed areas to their approximate original contour. The permit may contain such a variance only if the Division finds, in writing, that the applicant has demonstrated, on the basis of a complete application, that the following requirements are met:

1.) After reclamation, the lands to be affected by the variance within the permit area will be suitable for an industrial, commercial, residential, or public postmining land use (including recreational facilities).
2.) The criteria for the proposed post mining land use will be met.
3.) The watershed of lands within the proposed permit and adjacent areas will be improved by the operations when compared with the condition of the watershed before mining or with its condition if the approximate original contour were to be restored. The watershed will be deemed improved only if: the amount of total suspended solids or other pollutants discharged to ground or surface water from the permit area will be reduced, so as to improve the public or private uses or the ecology of such water, or flood hazards within the watershed containing the permit area will be reduced by reduction of the peak flow discharge from precipitation events or thaws; the total volume of flow from the proposed permit area, during every season of the year, will not vary in a way that adversely affects the ecology of any surface water or any existing or planned use of surface or ground water; and, the appropriate State environmental agency approves the plan.
4.) The owner of the surface of the lands within the permit area has knowingly requested, in writing, as part of the application, that a variance be granted. The request shall be made separately from any surface owner consent given for right-of-entry and shall show an understanding that the variance could not be granted without the surface owner's request.

If a variance is granted, the requirements of the post mining land use criteria shall be included as a specific condition of the permit, and, the permit shall be specifically marked as containing a variance from approximate original contour.

A permit incorporating a variance shall be reviewed by the Division at least every 30 months following the issuance of the permit to evaluate the progress and development of the surface coal mining and reclamation operations to establish that the operator is proceeding in accordance with the terms of the variance. If the permittee demonstrates to the Division that the operations have been, and continue to be, conducted in compliance with the terms and conditions of the permit, the review specified need not be held. The terms and conditions of a permit incorporating a variance may be modified at any time by the Division, if it determines that more stringent measures are necessary to ensure that the operations involved are conducted in compliance with the requirements of the regulatory program. The Division may grant variances only if it has promulgated specific rules to govern the granting of variances in accordance with the provisions of this section and any necessary, more stringent requirements.

Analysis:

The permittee has a cross-section YY-YY' on Plate 5-3, showing the cuts and fills for the Gilson well. The permittee has also provided final reclamation cross-section YY-YY' on Plate 5-6. This plate shows the final cuts and fill for reclamation of this area. The pre-disturbance contours are on Plate 5-2 (prior to construction on the Gilson well) and Plate 5-5 (Reclamation Topography) are the final reclamation contours. Comparing the pre-disturbance and final contours show that the permittee will be reclaiming this area to the approximate original contour. These contours are nearly identical.

Findings:

Information (map) was provided in the submittal; therefore, the proposed amendment is considered adequate to meet the requirements of this section.

TOPSOIL AND SUBSOIL

Regulatory Reference: 30 CFR 817.22; R645-301-240.
Minimum Regulatory Requirements:

Redistribution

Topsoil materials shall be redistributed in a manner that: achieves an approximately uniform, stable thickness consistent with the approved postmining land use, contours, and surface-water drainage systems; prevents excess compaction of the materials: and, protects the materials from wind and water erosion before and after seeding and planting.

Before redistribution of the material, the regarded land shall be treated if necessary to reduce potential slippage of the redistribution material and to promote root penetration. If no harm will be caused to the redistributed material and reestablished vegetation, such treatment may be conducted after such material is replaced.

The Division may choose not to require the redistribution of topsoil or topsoil substitutes on the approved postmining embankments of permanent impoundments or of roads if it determines that placement of topsoil or topsoil substitutes on such embankments is inconsistent with the requirement to use the best technology currently available to prevent sedimentation, and, such embankments will be otherwise stabilized.

Nutrients and soil amendments shall be applied to the initially redistributed material when necessary to establish the vegetative cover.

The Division may require that the B horizon, C horizon, or other underlying strata, or portions thereof, removed and segregated, stockpiled, be redistributed as subsoil in accordance with the requirements of the above if it finds that such subsoil layers are necessary to comply with the revegetation requirements.

Analysis:

Redistribution

Page 2-40 indicates that 18-inches of topsoil will be returned to the well site at reclamation. Volume calculations are found in Appendix 2-8.

Findings:

The information provided is adequate for Reclamation topsoil and subsoil requirements of the Regulations.

REVEGETATION

Regulatory Reference: 30 CFR 785.18, 817.111, 817.113, 817.114, 817.116; R645-301-244, -301-353, -301-354, -301-355, -301-356, -302-280, -302-281, -302-282, -302-283, -302-284.

Minimum Regulatory Requirements:

Revegetation: General requirements

The permittee shall establish on regraded areas and on all other disturbed areas except water areas and surface areas of roads that are approved as part of the postmining land use, a vegetative cover that is in accordance with the approved permit and reclamation plan and that is: diverse, effective, and permanent; comprised of species native to the area, or of introduced species where desirable and necessary to achieve the approved postmining land use and approved by the Division; at least equal in extent of cover to the natural vegetation of the area; and, capable of stabilizing the soil surface from erosion.

The reestablished plant species shall: be compatible with the approved postmining land use; have the same seasonal characteristics of growth as the original vegetation; be capable of self-regeneration and plant succession; be compatible with the plant and animal species of the area; and, meet the requirements of applicable State and Federal seed, poisonous and noxious plant, and introduced species laws or regulations.

The Division may grant exception to these requirements when the species are necessary to achieve a quick-growing, temporary, stabilizing cover, and measures to establish permanent vegetation are included in the approved permit and reclamation plan.

When the Division approves a cropland postmining land use, the Division may grant exceptions to the requirements related to the original and native species of the area. Areas identified as prime farmlands must also meet those specific requirements as specified under that section.

Analysis:

General Requirements

The existing mining and reclamation plan contains a revegetation plan for Dugout Creek through the mine area. This plan was reviewed extensively before the Division issued the original permit, and the plan is applicable to the proposed stream relocation.

The stream alteration permit issued by the Division of Water Rights contains very few requirements relating to the revegetation plan, and although these requirements do not conflict with the existing plan, there are a few additional conditions relating to protection of established vegetation from animals. It is not necessary to include additional commitments in the plan.

Findings:

Information provided in the application is adequate to meet the requirements of this section of the regulations

STABILIZATION OF SURFACE AREAS

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

Minimum Regulatory Requirements:

All exposed surface areas shall be protected and stabilized to effectively control erosion and air pollution attendant to erosion. Rills and gullies which form in areas that have been regraded and topsoiled and which either disrupt the approved postmining land use or the reestablishment of the vegetative cover, or, cause or contribute to a violation of water quality standards for receiving streams, shall be filled, regraded, or otherwise stabilized; topsoil shall be replaced; and the areas shall be reseeded or replanted.

Analysis:

No specific information was supplied with this application. The Permittee is required to follow the Mining and Reclamation Section 244 for soil stabilization.

Findings:

The information provided is adequate for Reclamation Stabilization of Surface Areas requirements of the Regulations.

BONDING AND INSURANCE REQUIREMENTS

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

Minimum Regulatory Requirements:

General

After a permit application has been approved, but before a permit is issued, the applicant shall file with the Division, on a form prescribed and furnished by the Division, a bond or bonds for performance made payable to the Division and conditioned upon the faithful performance of all the requirements of the Act, the regulatory program, the permit, and the reclamation plan.

The bond or bonds shall cover the entire permit area, or an identified increment of land within the permit area upon which the operator will initiate and conduct surface coal mining and reclamation operations during the initial term of the permit. As surface coal mining and reclamation operations on succeeding increments are initiated and conducted within the permit area, the permittee shall file with the Division an additional bond or bonds to cover such increments.

The operator shall identify the initial and successive areas or increments for bonding on the permit application map and shall specify the bond amount to be provided for each area or increment. Independent increments shall be of sufficient size and configuration to provide for efficient reclamation operations should reclamation by the Division become necessary.

An operator shall not disturb any surface areas, succeeding increments, or extend any underground shafts, tunnels, or operations prior to acceptance by the Division of the required performance bond.

The applicant shall file, with the approval of the Division, a bond or bonds under one of the following schemes to cover the bond amounts for the permit area as determined: a performance bond or bonds for the entire permit area; a cumulative bond

schedule and the performance bond required for full reclamation of the initial area to be disturbed; or, an incremental-bond schedule and the performance bond required for the first increment in the schedule.

Form of bond

The Division shall prescribe the form of the performance bond. The Division may allow for: a surety bond; a collateral bond; a self-bond; or a combination of any of these bonding methods.

Performance bond liability shall be for the duration of the surface coal mining and reclamation operation and for a period which is coincident with the operator's period of extended responsibility for successful revegetation or until achievement of the reclamation requirements of the Act, regulatory programs, and permit, whichever is later.

With the approval of the Division, a bond may be posted and approved to guarantee specific phases of reclamation within the permit area provided the sum of phase bonds posted equals or exceeds the total amount required. The scope of work to be guaranteed and the liability assumed under each phase bond shall be specified in detail.

Isolated and clearly defined portions of the permit area requiring extended liability may be separated from the original area and bonded separately with the approval of the Division. Such areas shall be limited in extent and not constitute a scattered, intermittent, or checkerboard pattern of failure. Access to the separated areas for remedial work may be included in the area under extended liability if deemed necessary by the Division.

The bond liability of the permittee shall include only those actions which he or she is obligated to take under the permit, including completion of the reclamation plan, so that the land will be capable of supporting the postmining land use approved. Implementation of an alternative postmining land use which is beyond the control of the permittee, need not be covered by the bond. Bond liability for prime farmland shall be specific to include productivity requirements.

Determination of bond amount

The amount of the bond required for each bonded area shall: be determined by the Division; depend upon the requirements of the approved permit and reclamation plan; reflect the probable difficulty of reclamation, giving consideration to such factors as topography, geology, hydrology, and revegetation potential; and, be based on, but not limited to, the estimated cost submitted by the permit applicant.

The amount of the bond shall be sufficient to assure the completion of the reclamation plan if the work has to be performed by the Division in the event of forfeiture, and in no case shall the total bond initially posted for the entire area under 1 permit be less than $10,000.

An operator's financial responsibility for repairing material damage resulting from subsidence may be satisfied by the liability insurance policy required in this section.

Terms and conditions for liability insurance

The Division shall require the applicant to submit as part of its permit application a certificate issued by an insurance company authorized to do business in the United States certifying that the applicant has a public liability insurance policy in force for the surface coal mining and reclamation operations for which the permit is sought. Such policy shall provide for personal injury and property damage protection in an amount adequate to compensate any persons injured or property damaged as a result of the surface coal mining and reclamation operations, including the use of explosives, and who are entitled to compensation under the applicable provisions of State law. Minimum insurance coverage for bodily injury and property damage shall be $300,000 for each occurrence and $500,000 aggregate.

The policy shall be maintained in full force during the life of the permit or any renewal thereof and the liability period necessary to complete all reclamation operations under this Chapter.

The policy shall include a rider requiring that the insurer notify the Division whenever substantive changes are made in the policy including any termination or failure to renew.

The Division may accept from the applicant, in lieu of a certificate for a public liability insurance policy, satisfactory evidence from the applicant that it satisfies applicable State self-insurance requirements approved as part of the regulatory program and the requirements of this section.

Analysis:

General

The bonding cost for the removal of the water tank and reclamation of the water well site is approximately $7,649. The Dugout mine is bonded for an amount of $3,682,000. The Gilson Well and other projects such as the facility move, and leach field combine are below the 5 percent of the total bond. The current bond is sufficient to cover this amount and changes to the bond will be required. The permittee has given reclamation cost on appendix 5-6.

Findings:

The permittee has met the minimum requirements for this section of the R645 Coal Rules.

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