PERMIT TRACKING FORM

☐ Permit Amendment ☐ Exploration Permit ☐ NOV Abatement ☐ Division Order ☐ Permit Transfer ☐ Incidental Boundary Change
☐Permit Midterm (MT) ☐ Permit Renewal (PR) ☐ New Permit ☐ Significant Revision ☐Bond Release

Date Received: 6-18	By: Fax	PERMIT NUMBER	PRO/007/039
Title of Proposal: Temp. Waste Rock Storage		PERMIT CHANGE #	98B
Description:		PERMITTEE	Canyon Fuel Company, LLC
# Copies Required: 3	# Copies Received: 1	MINE NAME	Dugout Canyon Mine

☐ **PERMIT CHANGE APPLICATION SENT TO SLC**	Date:	Letter to Permittee:	
☐ **15 DAY INITIAL RESPONSE TO PERMIT CHANGE APPLICATION OR INITIAL COMPLETENESS REVIEW**	Date Due:	Date Done:	Letter to Permittee:
☐ Notice of Affidavit of Publication. (If change is a Significant Revision, New Permit, or Permit Transfer.)	Date Due:	Date Done:	Public Comment Received:

PFO Review Tracking	Round		Round		SLC Review Tracking	Round		Round	
	Due	Done	Due	Done		Due	Done	Due	Done
☐ Lead ☐Generalist					☐ Lead ☐Generalist				
☐Administrative					☐Administrative				
☐Land Use/ AQ					☐Land Use/ AQ				
☐Biology					☐Biology				
☐Engineering					☐Engineering				
☐Geology					☐Geology				
☐Soils					☐Soils				
☐Hydrology					☐Hydrology				

TA Review Due:	Date:	Permittee Response Due: ☐Stipulation ☐Condition ☐No Requirements	Date:	Division Decision Letter: ☐ Approve ☐ Deny
TA Review Done	Date:	Response Received:	Date:	Date:

Coordinated Reviews:	Phone Cont.	Round		Round		Received:	Additional Tracking:	Date:
		Sent	Due	Sent	Due			
☐ OSM- C							Public Hearing	
☐ Water Rights-L							Letter from Comp. Super.	
☐ DEQ- L							AVS Completed	
☐ DWR- L							Approval Effective Date	
☐ SITLA- L							Approved Copy to File	
							Approve copy to Permittee	
							Approve copy to PFO/SLC	
							Approved copy to agencies	
							CHIA Modified	
							Update master TA Y/N	

Comments:

LIST OF APPENDICES

Appendix

5-1 Primary Road Certification

5-2 Approvals for Waste-Rock Disposal

5-3 Carbon County Waste Disposal Agreement

5-4 Slope Stability Analyses

5-5 Cut and Fill Calculations

5-6 Reclamation Bond Estimate

SUPERSEDED
EFFECTIVE:
JUN 24 1998
UTAH DIVISION OIL, GAS AND MINING

INCORPORATED
EFFECTIVE:
MAR 16 1998 97A
UTAH DIVISION OIL, GAS AND MINING

Surface Facilities. Underground development waste which is generated at the Dugout Canyon Mine will be disposed of either:

- At the approved waste-rock disposal facility at the SUFCo Mine (a sister operation of SCM); or
- At the approved waste-rock disposal facility at the Skyline Mine (also a sister operation of SCM).

SUPERSEDED
EFFECTIVE:
JUN 24 1998
UTAH DIVISION OIL, GAS AND MINING

Copies of the Division correspondence approving the SUFCo and Skyline waste-rock disposal facilities for receipt of Dugout Canyon waste rock are provided in Appendix 5-2.

Certified maps and cross sections concerning the disposal of underground development waste at the SUFCo and Skyline Mines are provided in the respective Mining and Reclamation Plans (M&RPs) for those mines. A certified map showing the proposed location of non-coal (non-waste rock) waste storage, coal storage and loading areas, and explosive storage and handling facilities, is provided as Plate 5-2A. Cross sections of the proposed facilities area are provided on Plate 5-2B.

A map of the existing topography prior to disturbance by SCM is provided as Plate 5-2C. Also noted on Plate 5-2C is the area of disturbance which was mapped to exist at the site in 1980. Since mining ceased at the site in 1964 (as noted earlier in this section), this boundary represents the area of pre-SMCRA disturbance. Plate 5-2C also shows areas of non-mining disturbance which occurred after 1980 but prior to 1996. These disturbances were created by logging activities in the area and are not subject to the requirements of R645-301 through R645-302. No areas shown on Plate 5-2C are subject to the requirements of R645-200 through R645-203.

A certified map showing the location of the topsoil stockpile is provided as Plate 2-3.

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513.500 Underground Openings to the Surface

Upon abandonment, each opening to the surface from the underground will be capped, sealed, backfilled, or otherwise properly managed in accordance with 30 CFR 75.1771. Details regarding final abandonment of mine openings are provided in Section 542.700.

513.600 Discharges to Underground Mines

No discharges will occur from the surface to underground mine workings in the permit area.

513.700 Surface Coal Mining and Reclamation Activities

SUPERSEDED
EFFECTIVE:
JUN 24 1998
UTAH DIVISION OIL, GAS AND MINING

No surface coal mining and reclamation activities will occur in the permit area.

513.800 Coal Mine Waste Fires

If any coal mine waste fires occur within the permit area, these will be reported immediately to MSHA and the Division. Immediate remedial action will be taken as deemed necessary by SCM to protect public health and safety as well as the environment. Following initial remedial efforts, a long-term plan will be formulated in discussion with MSHA and the Division to extinguish any existing fires and prevent future fires.

SCM will utilize a program of prevention and suppression to minimize the potential for coal mine waste fires. An ongoing educational program will emphasize the need for attention to fire prevention. Prevention will be further enhanced by the short-term nature of the storage at the Dugout Canyon Mine. Suppression will occur by separating smoldering material and compacting the adjacent material (to minimize oxygen content in the adjacent material). The burning material will then be extinguished using appropriate methods (see Section 528.300

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Mining Sequence and Planned Subsidence. The mine plan for the Dugout Canyon Mine is presented on Plate 5-5. This map shows the boundaries of all areas proposed to be affected over the estimated total life of the coal mining and reclamation operations, including the size, sequence, and timing of mining of subareas to be affected beyond the present permit term. No surface disturbances are currently anticipated within the permit area beyond that presented in this M&RP (i.e., within the disturbed-area boundary noted on Plates 5-2A and 7-5). Planned-subsidence mining methods will be used in all of the underground mine workings shown on Plate 5-5. Maps showing proposed mine details, such as mine entries, pillar locations, etc., will be provided to the Division following their submission to and approval by MSHA.

Plans for mining in areas (leased or unleased) outside of the permit area are dependant upon economic feasibility and obtaining corresponding permits. New areas will be reviewed on a case by case basis.

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Land Surface Configuration. Surface contours of undisturbed areas adjacent to proposed disturbed areas associated with the mine are shown on Plate 5-2A. As stated in Section 521.100 of this M&RP, surface facilities have been in existence on the west side of Dugout Canyon since March 1952. As a result, pre-mining topographic maps do not exist. However, the surface contours in undisturbed areas shown on Plate 5-2A are considered generally indicative of original land slopes in the vicinity of the mine. A map showing topographic conditions prior to disturbance by SCM is provided as Plate 5-2C. This map also shows the area of pre-SMCRA disturbance, as mapped in 1980, together with non-mining areas of disturbance which occurred after 1980 but prior to 1996.

Surface Facilities. Plate 5-2A shows the locations of the following surface facilities:

- Buildings, utility corridors, and facilities to be used, including:
  Water Tanks - two metal tanks on concrete pads,

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528.200 Overburden

No overburden will be removed, handled, stored, or transported within the permit area.

528.300 Spoil, Coal Processing Waste, Non-Coal Waste, and Mine Development Waste

SUPERSEDED
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JUN 24 1998
UTAH DIVISION OIL, GAS AND MINING

Excess Spoil. No spoil will be generated at the Dugout Canyon Mine. Sediment removed from the sedimentation pond will be handled in accordance with Section 732.200 of this M&RP.

Coal Processing Waste. SCM will not process their coal at the Dugout Canyon Mine beyond crushing and screening. Thus, no coal processing waste will be generated in the permit area.

Burning and Burned Waste Utilization. As noted below and in Section 536 of this M&RP, waste rock generated from the Dugout Canyon Mine will be permanently disposed of at permitted facilities located at the SUFCo or Skyline Mines. If coal mine waste fires occur at the SUFCo and Skyline Mines, they will be controlled in the manner outlined in their respective permits.

Waste rock will only be temporarily stored at the surface of the Dugout Canyon Mine prior to ultimate disposal. If spontaneous combustion of this material does occur, the burning section will be removed from the remainder of the pile using a backhoe or other appropriate means. The affected waste rock will then be spread so that the material can cool and mixed with soil to extinguish the fire. The extinguished material will then be returned to the waste pile.

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Non-Coal Mine Waste. Non-coal (non-waste rock) waste generated in the permit area will be temporarily stored in a dumpster to be situated at a convenient location within the disturbed

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

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Salt Lake City, Utah 84114-5801
801-538-5340
801-359-3940 (Fax)
801-538-7223 (TDD)

Michael O. Leavitt
Governor

Lowell P. Braxton
Division Director

June 24, 1998

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

Re: Temporary Waste Rock Storage, Canyon Fuel Company, LLC, Dugout Canyon Mine, ACT/007/039-98B, File #2, Carbon County, Utah

Dear Mr. Olsen:

Thank-you for the opportunity to visit the Dugout project and gain a better understanding of the complexities associated with the mine development. The referenced amendment is hereby approved effective June 24, 1998. A stamped approved incorporated copy of your submittal and the memorandum of understanding are enclosed for insertion into your Mining and Reclamation Plan. Should you decide to pursue the option of using the material as fill for site development I have provided analyses findings and recommendations from Bob Davidson and Wayne Western.

TECHNICAL ANALYSIS:

ENVIRONMENTAL RESOURCE INFORMATION

SOILS RESOURCE INFORMATION

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

Analysis:

The submittal provides analyses results (August 1995) for roof, floor, and coal from the Rock Canyon and Gilson seams. Selenium, Boron and Acid/Base Potential analyses results meet the Division Guidelines for all samples shown. For the Rock Canyon coal sample, the Sodium Absorption Ratio, pH and the Available Water Capacity are rated poor. Both the Rock Canyon and the Gilson Roof coal samples are sodic since there Exchangeable Sodium Percentages both exceed 15% (i.e., 19% and 33%, respectively).

Findings:

The information provided meets the regulatory requirements of this section.

OPERATION PLAN

TOPSOIL AND SUBSOIL

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

Analysis:

Waste rock generated from the Dugout Canyon Mine will be temporarily stored on the mine site surface as shown on Plate 5-2A and on the Appendix 5-7 map. The underground development waste may be used as fill material during site construction if the rock waste is found to be non-toxic and/or non-acid forming. Waste rock not used as fill material will be disposed of after approximately 1500 CY of material accumulates or ever 4 months, whichever is shorter.

Coal Mine Waste is defined as **Underground Development Waste** and includes waste-rock mixtures of coal, shale, claystone, siltstone, sandstone, limestone, or related materials that are excavated, moved, and disposed of from underground workings in connection with underground coal mining and reclamation activities. Use and handling of Coal Mine Waste during operations must adhere to Utah's Coal Mine Permitting, Engineering Regulations, R645-301-528.320. Before the waste can be used as fill material, either during operations or reclamation, the amendment must be specifically address all regulations governing the handling and disposal of Coal Mine Waste.

Findings:

The permittee must provide the following, prior to approval, in accordance with the requirements of:

R645-301-528.320, Before the underground development waste can be used as fill material, either during operations or reclamation, the amendment must be specific concerning all regulations governing the handling and disposal of Coal Mine Waste. For example, issues that must be resolved and included in the amendment discussion include compaction, diverting runoff drainage, diversion channels, quarterly inspections, stability, certified designs, etc.

RECLAMATION PLAN

TOPSOIL AND SUBSOIL

Regulatory Reference: 30 CAR Sec. 817.22; R645-301-240.

Analysis:

Concerning disposal and/or fate of any Coal Mine Waste, the reclamation plan must adhere to Utah's Coal Mine Permitting, Engineering Regulations, R645-301-553.250, R645-301-553.260, and R645-301-553.300. Therefore, the amendment must specifically discuss each of the regulatory issues concerning the ultimate disposal and handling of all coal mine waste stored and used as construction fill.

Findings:

The permittee must provide the following, prior to approval, in accordance with the requirements of:

R645-301-553.250, R645-301-553.260, and R645-301-553.300, The amendment must specifically discuss each of the regulatory issues concerning the ultimate disposal and handling of all coal mine waste stored and used as construction fill.

SPOIL AND WASTE MATERIALS

Analysis:

Coal mine waste.

Coal mine waste is defined as coal processing waste and underground development waste. Since no coal processing will be done on the site the only sources for coal mine waste is underground development waste. The definition of underground development waste is waste-rock mixtures of coal, shale, claystone, siltstone, limestone, or related materials excavated from underground workings. During mine development the large amounts of coal mine waste must be removed.

The only permitted sites where the coal mine waste can be disposed of are at the SUFCO and Skyline mines. In Phase II of the MRP the Permittee proposes to dispose of coal mine waste underground. Until the Permittee develops the mine there is no place underground to dispose of the coal mine waste.

The approved temporary coal mine waste storage facility has not been constructed. The Permittee wants to construct another temporary waste rock storage facility as shown in the amendment submitted to the Division on June 18, 1998.

In the approved temporary waste rock storage facility the Permittee may store waste rock for three months or until a truck load of material has accumulated whichever comes first. In the proposed waste rock site the Permittee wants to store the material on site for 4 months or until 1,500 cubic yards of material have accumulated whichever comes first.

The Division does not have any guidelines for maximum storage time or quantity at a temporary waste rock facility. Some mines have maximum storage times of 30 days with no maximum storage capacity. Other mines have limited storage times and quantities.

One criterion for establishing the maximum storage capacity of the temporary waste rock storage site is the containment capacity of the berm. Runoff from the temporary waste rock site will be controlled by a total containment berm. The calculations for the berm have been reviewed by the Division and been determined to be adequate. The Division will allow the Permittee to storage material in the temporary waste rock site for up to 4 months.

The Permittee states that waste rock that is nontoxic and nonacid-forming could be used for fill material at the mine site. Coal mine waste means coal processing waste and underground development waste. The definition of underground development waste is waste-rock mixture of coal, shale, claystone, siltstone, sandstone, limestone, or related materials excavated, move and disposed of from underground workings.

R645-301-536.400 allows coal mine waste to be used for material in impoundments. While the regulations do not specifically state that coal mine waste can be used for construction of the mine pad the intent is similar. Therefore, the Division has no reason to deny the amendment because the Permittee wants to use coal mine waste for fill material. However the Permittee must address all regulatory requirements for coal mine waste. The R645-301-536 regulations deal with coal mine waste during the operational phase of mining. The R645-301-553 regulations deal with coal mine waste during reclamation. The Permittee did not address how the requirements of R645-301-536 will be met regarding the use of coal mine waste as fill.

(1)	*Minimize adverse effects of leachate and surface-water runoff on surface- and ground-water quality and quantity;*
(2)	*Ensure mass stability and prevent mass movement during and after construction;*
(3)	*Ensure that the final disposal facility is suitable for reclamation and revegetation compatible with the natural surroundings and the approved postmining land use;*
(4)	*Not create a public hazard; and*
(5)	*Prevent combustion.*

Under the requirements of R645-301-512.230 the plans for a coal mine waste facility will be certified by a professional engineer experienced in the design of coal mine waste facilities. The maps and cross section for the temporary storage facility submitted on the June 18, 1998 were not certified.

Findings:

The Permittee did not meet the requirements of R645-301-536 and R645-301-512.230 regarding using waste rock for fill material. Waste rock means coal mine waste. Coal mine waste can only be stored in an approved disposal area. Coal mine waste facilities must meet the requirements of R645-301-536. The plans for the temporary coal mine waste facility were not certified by a professional engineer as required by R645-301-512.230

RECOMMENDATION:

The Division reviewed the designs for the temporary waste rock storage site and found them adequate. Since the designs were not certified, the Division cannot approve them. Once the Permittee submits certified designs, the Division can approve the plan.

Refuse piles.

Analysis:

A refuse pile means a surface deposit of coal mine waste that is not an impoundment. The Permittee wants to use some coal mine waste as backfill for the construction of the pad area. By definition those areas of the pad that contain coal mine waste are refuse piles. The Permittee did not address the requirements of R645-301-536.900. Those requirements include but are not limited to having the designs for the temporary waste rock site certified by a professional engineer (R645-301-512.230) and not having a slope stability analysis (R645-301-535.110)

Findings:

The Permittee did not address the requirements of R645-301-536.900 and related regulations regarding the construction of a refuse pile at the Dugout Canyon mine. The Permittee must supply the Division with certified maps of the temporary waste rock site (R645-301-512.230) and a slope stability analysis of the temporary waste rock site (R645-301-535.110).

RECOMMENDATIONS:

The Division can approve the construction of the temporary waste rock disposal site when they receive certified design copies. The Division would then have to be given a slope stability analysis before the Permittee could be approved to place waste rock in the temporary storage facility.

RECLAMATION PLAN

BACKFILLING AND GRADING

Analysis:

Waste rock means coal mine waste. All coal mine waste must be permanently placed in an approved facility. The Permittee wants to use some coal mine waste as fill material. By definition those areas of the reclaimed site constructed of waste rock are refuse piles. The Permittee must address how the requirements of R645-301-533.250 and R645-301-533.260 will be met.

Findings:

The Permittee did not address the minimum requirements of R645-301-533.350 and R645-301-533.260 regarding the reclamation of refuse piles at the Dugout mine.

BONDING AND INSURANCE REQUIREMENTS

Analysis:

Determination of bond amount.

The special handling of coal mine waste at the Dugout mine could increase the reclamation cost estimate. Until the Permittee submits detailed reclamation plans for the on site refuse piles, the Division cannot calculate the reclamation cost estimate. Therefore, the Permittee has not met the requirements of R645-301-830. The Division considers the reclamation costs for the temporary waste rock site to be minor and therefore not bond adjustment is needed at this time. The Division will require the Permittee to give the Division detailed reclamation cost estimates for the temporary waste rock site when the Division needs to revise the reclamation bond amount.

Findings:

The Permittee has not met the minimum requirements of R645-301-830 regarding the reclamation cost estimate for on site disposal of coal mine waste. The Permittee will not be required to give detailed reclamation costs for the construction of the temporary waste rock storage site at this time. The Permittee will be required to give the Division that information when the reclamation bond is being adjusted.

RECOMMENDATION:

Allow the Permittee to construct and use the temporary waste rock site without submitting detailed reclamation costs. When the Division revises the bond amount, the Permittee must give the Division detailed reclamation cost estimates for the temporary waste rock site.

If you have any questions, please call.

Sincerely,

Joseph C. Helffrich
Permit Supervisor

tam
Enclosure
cc: Ken Payne, Scofield
Chris Hansen, Scofield
Price Field Office
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Michael O. Leavitt
Governor
Ted Stewart
Executive Director
James W. Carter
Division Director

State of Utah

DEPARTMENT OF NATURAL RESOURCES
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1594 West North Temple, Suite 1210
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Salt Lake City, Utah 84114-5801
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June 23, 1998

TO: File

THRU: Joe Helfrich, Permit Supervisor

THRU: Daron Haddock, Permit Supervisor

FROM: Wayne H. Western, Reclamation Specialist

RE: Temporary Waste Rock Storage, Canyon Fuel Company, Dugout Canyon Mine, ACT/007/039-98B, File #2, Carbon County, Utah

OPERATION PLAN

SUMMARY:

On June 18, 1998, the Permittee for the Dugout mine submitted an amendment for the construction of a new temporary waste rock disposal site and for the use of waste rock as backfill material. The Division reviewed the amendment and found several deficiencies. The Division cannot approve the construction of the new temporary waste rock storage area until certified designs and a slope stability analysis are submitted. Before the Division can approve the use of waste rock for backfill material, the Permittee must give the Division plans for the construction of the coal waste disposal facilities.

SPOIL AND WASTE MATERIALS

Analysis:

Coal mine waste.

Coal mine waste is defined as coal processing waste and underground development waste. Since no coal processing will be done on the site the only sources for coal mine waste is underground development waste. The definition of underground development waste is waste-rock mixtures of coal, shale, claystone, siltstone, limestone, or related materials excavated from underground workings. During mine development the large amounts of coal mine waste must be removed.

The only permitted sites where the coal mine waste can be disposed of are at the SUFCO and Skyline mines. In Phase II of the MRP the Permittee proposes to dispose of coal mine waste underground. Until the Permittee develops the mine there is no place underground to dispose of the coal mine waste.

The approved temporary coal mine waste storage facility has not been constructed. The

Permittee wants to construct another temporary waste rock storage facility as shown in the amendment submitted to the Division on June 18, 1998.

In the approved temporary waste rock storage facility the Permittee may store waste rock for three months or until a truck load of material has accumulated whichever comes first. In the proposed waste rock site the Permittee wants to store the material on site for 4 months or until 1,500 cubic yards of material have accumulated whichever comes first.

The Division does not have any guidelines for maximum storage time or quantity at a temporary waste rock facility. Some mines have maximum storage times of 30 days with no maximum storage capacity. Other mines have limited storage times and quantities.

One criterion for establishing the maximum storage capacity of the temporary waste rock storage site is the containment capacity of the berm. Runoff from the temporary waste rock site will be controlled by a total containment berm. The calculations for the berm have been reviewed by the Division and been determined to be adequate. The Division will allow the Permittee to storage material in the temporary waste rock site for up to 4 months.

The Permittee states that waste rock that is nontoxic and nonacid-forming could be used for fill material at the mine site. Coal mine waste means coal processing waste and underground development waste. The definition of underground development waste is waste-rock mixture of coal, shale, claystone, siltstone, sandstone, limestone, or related materials excavated, move and disposed of from underground workings.

R645-301-536.400 allows coal mine waste to be used for material in impoundments. While the regulations do not specifically state that coal mine waste can be used for construction of the mine pad the intent is similar. Therefore, the Division has no reason to deny the amendment because the Permittee wants to use coal mine waste for fill material. However the Permittee must address all regulatory requirements for coal mine waste. The R645-301-536 regulations deal with coal mine waste during the operational phase of mining. The R645-301-553 regulations deal with coal mine waste during reclamation. The Permittee did not address how the requirements of R645-301-536 will be met regarding the use of coal mine waste as fill.

(1) *Minimize adverse effects of leachate and surface-water runoff on surface- and ground-water quality and quantity;*
(2) *Ensure mass stability and prevent mass movement during and after construction;*
(3) *Ensure that the final disposal facility is suitable for reclamation and revegetation compatible with the natural surroundings and the approved postmining land use;*
(4) *Not create a public hazard; and*
(5) *Prevent combustion.*

Under the requirements of R645-301-512.230 the plans for a coal mine waste facility will be certified by a professional engineer experienced in the design of coal mine waste facilities. The maps and cross section for the temporary storage facility submitted on the June 18, 1998 were not

certified.

Findings:

The Permittee did not meet the requirements of R645-301-536 and R645-301-512.230 regarding using waste rock for fill material. Waste rock means coal mine waste. Coal mine waste can only be stored in an approved disposal area. Coal mine waste facilities must meet the requirements of R645-301-536. The plans for the temporary coal mine waste facility were not certified by a professional engineer as required by R645-301-512.230

Recommendations:

The Division reviewed the designs for the temporary waste rock storage site and found them adequate. Since the designs were not certified, the Division cannot approve them. Once the Permittee submits certified designs, the Division can approve the plan.

Refuse piles.

Analysis:

A refuse pile means a surface deposit of coal mine waste that is not an impoundment. The Permittee wants to use some coal mine waste as backfill for the construction of the pad area. By definition those areas of the pad that contain coal mine waste are refuse piles. The Permittee did not address the requirements of R645-301-536.900. Those requirements include but are not limited to having the designs for the temporary waste rock site certified by a professional engineer (R645-301-512.230) and not having a slope stability analysis (R645-301-535.110)

Findings:

The Permittee did not address the requirements of R645-301-536.900 and related regulations regarding the construction of a refuse pile at the Dugout Canyon mine. The Permittee must supply the Division with certified maps of the temporary waste rock site (R645-301-512.230) and a slope stability analysis of the temporary waste rock site (R645-301-535.110).

RECOMMENDATIONS:

The Division can approve the construction of the temporary waste rock disposal site when they receive certified design copies. The Division would then have to be given a slope stability analysis before the Permittee could be approved to place waste rock in the temporary storage facility.

RECLAMATION PLAN

BACKFILLING AND GRADING

Analysis:

Waste rock means coal mine waste. All coal mine waste must be permanently placed in an approved facility. The Permittee wants to use some coal mine waste as fill material. By definition those areas of the reclaimed site constructed of waste rock are refuse piles. The Permittee must address how the requirements of R645-301-533.250 and R645-301-533.260 will be met.

Findings:

The Permittee did not address the minimum requirements of R645-301-533.350 and R645-301-533.260 regarding the reclamation of refuse piles at the Dugout mine.

BONDING AND INSURANCE REQUIREMENTS

Analysis:

Determination of bond amount.

The special handling of coal mine waste at the Dugout mine could increase the reclamation cost estimate. Until the Permittee submits detailed reclamation plans for the on site refuse piles, the Division cannot calculate the reclamation cost estimate. Therefore, the Permittee has not met the requirements of R645-301-830. The Division considers the reclamation costs for the temporary waste rock site to be minor and therefore not bond adjustment is needed at this time. The Division will require the Permittee to give the Division detailed reclamation cost estimates for the temporary waste rock site when the Division needs to revise the reclamation bond amount.

Findings:

The Permittee has not met the minimum requirements of R645-301-830 regarding the reclamation cost estimate for on site disposal of coal mine waste. The Permittee will not be required to give detailed reclamation costs for the construction of the temporary waste rock storage site at this time. The Permittee will be required to give the Division that information when the reclamation bond is being adjusted.

RECOMMENDATIONS:

Allow the Permittee to construct and use the temporary waste rock site without submitting detailed reclamation costs. When the Division revises the bond amount, the Permittee must give the Division detailed reclamation cost estimates for the temporary waste rock site.

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Canyon Fuel Company, LLC
Soldier Canyon Mine
P.O. Box 1029
Wellington, Utah 84542
(801)637-6360 Fax: (801) 637-0108

June 23, 1998

This memorandum of understanding is made between CANYON FUEL COMPANY, LLC, SOLDIER CANYON MINE and the DIVISION OF OIL, GAS AND MINING.

Need for slope stability analysis for the newly proposed temporary storage pile. Canyon Fuel will obtain a sample for size analysis and will perform a slope stability analysis with professional engineer certification. This will be submitted to DOGM. If for any reason the analysis fails, Canyon Fuel agrees to ship all of the material to a DOGM approved and permitted site.

Use of coal mine waste as an engineered fill material. The intent is NOT for the entire disturbed area site. Page 5-14 will be revised to reflect this intent for just the temporary waste rock pile.

CANYON FUEL COMPANY, LLC
SOLDIER CANYON MINE

Ken M. Payne
Project Manager

DIVISION OF OIL, GAS & MINING

Joe Helfrich
Permit Supervisor

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

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Michael O. Leavitt
Governor

Lowell P. Braxton
Division Director

June 22, 1998

TO: File

THRU: Joe Helfrich, Permit Supervisor

FROM: Robert Davidson, Soils Reclamation Specialist RAD

RE: Temporary Waste Rock Storage Area Amendment for Phase I, Canyon Fuel Company, LLC, Dugout Canyon Mine, ACT/007/039-98B, Folder #2, Carbon County, Utah

SUMMARY:

On June 18, 1998, Canyon Fuel Company submitted an amendment for revising the currently approved Phase I MRP that includes modified permit text and appendices for a new temporary waste rock storage area. A major change is also proposed for using temporary stored waste rock as structural fill, if the material is found to be non-toxic and non-acid forming. This technical memo is a technical analysis in response to the soils issues.

TECHNICAL ANALYSIS:

ENVIRONMENTAL RESOURCE INFORMATION

SOILS RESOURCE INFORMATION

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

Analysis:

The submittal provides analyses results (August 1995) for roof, floor, and coal from the Rock Canyon and Gilson seams. Selenium, Boron and Acid/Base Potential analyses results meet the Division Guidelines for all samples shown. For the Rock Canyon coal sample, the Sodium Absorption Ratio, pH and the Available Water Capacity are rated poor. Both the Rock Canyon and the Gilson Roof coal samples are sodic since there Exchangeable Sodium Percentages both exceed 15% (i.e., 19% and 33%, respectively).

Findings:

The information provided meets the regulatory requirements of this section.

OPERATION PLAN

TOPSOIL AND SUBSOIL

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

Analysis:

Waste rock generated from the Dugout Canyon Mine will be temporarily stored on the mine site surface as shown on Plate 5-2A and on the Appendix 5-7 map. The underground development waste may be used as fill material during site construction if the rock waste is found to be non-toxic and/or non-acid forming. Waste rock not used as fill material will be disposed of after approximately 1500 CY of material accumulates or ever 4 months, whichever is shorter.

Coal Mine Waste is defined as **Underground Development Waste** and includes waste-rock mixtures of coal, shale, claystone, siltstone, sandstone, limestone, or related materials that are excavated, moved, and disposed of from underground workings in connection with underground coal mining and reclamation activities. Use and handling of Coal Mine Waste during operations must adhere to Utah's Coal Mine Permitting, Engineering Regulations, R645-301-528.320. Before the waste can be used as fill material, either during operations or reclamation, the amendment must be specifically address all regulations governing the handling and disposal of Coal Mine Waste.

Findings:

The permittee must provide the following, prior to approval, in accordance with the requirements of:

R645-301-528.320, Before the underground development waste can be used as fill material, either during operations or reclamation, the amendment must be specific concerning all regulations governing the handling and disposal of Coal Mine Waste. For example, issues that must be resolved and included in the amendment discussion include compaction, diverting runoff drainage, diversion channels, quarterly inspections, stability, certified designs, etc.

RECLAMATION PLAN

TOPSOIL AND SUBSOIL

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

Analysis:

Concerning disposal and/or fate of any Coal Mine Waste, the reclamation plan must adhere to Utah's Coal Mine Permitting, Engineering Regulations, R645-301-553.250, R645-301-553.260, and R645-301-553.300. Therefore, the amendment must specifically discuss each of the regulatory issues concerning the ultimate disposal and handling of all coal mine waste stored and used as construction fill.

Findings:

The permittee must provide the following, prior to approval, in accordance with the requirements of:

R645-301-553.250, R645-301-553.260, and R645-301-553.300, The amendment must specifically discuss each of the regulatory issues concerning the ultimate disposal and handling of all coal mine waste stored and used as construction fill.

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

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)

Michael O. Leavitt
Governor

Lowell P. Braxton
Division Director

June 19, 1998

TO: File

THRU: Joseph C. Helfrich, Permit Supervisor

THRU: Daron R. Haddock

FROM: Michael J. Suflita, Reclamation Hydrologist

RE: Temporary Waste Rock Storage Area, Canyon Fuel Company, LLC, Dugout Canyon Mine, ACT/007/039-98-1, Folder #2, Carbon County, Utah

SYNOPSIS

The Mine Operator returned the signed mining permit to the Division on April 14, 1998. On June 18 the Operator submitted a revision to the approved MRP and this technical memo is a response to the hydrologic aspects ONLY of that submittal.

TECHNICAL ANALYSIS

OPERATION PLAN

Regulatory Reference R645-301-742, Sediment Control Measures

Analysis:

The revision is basically to add a temporary storage area for materials taken out of the mine during the startup and during mine operation. The storage area is located below the road leading up to the mine portals. Storage times were changed from three to four months and the storage volume was increased from one truckload to 1500 cubic yards.

The base of the storage pile is shaped to provide a self-contained berm that will store the 100-year, 6-hour storm. In addition, there is a channel outside the berm that directs flows to a series of three silt fences which treat the flows before they enter Dugout Creek. These are believed to be adequate to protect the creek from additional sediment loads that could be generated by the storage pile.

Findings:

This amendment meets the minimum requirements of the referenced regulations.

Canyon Fuel Company, LLC
Skyline Mines
P.O. Box 719
Helper, Utah 84526
435/448-6463 Fax: 435/448-2632

June 18, 1998

ACT/007/039 #2

Coal Regulatory Program
Attn: Daron Haddock
Utah Division of Oil, Gas and Mining
1594 West North Temple, Suite 1210
P.O. Box 145801
Salt Lake City, Utah 84114

RE: Permit revision that includes modified permit text and appendices for a new temporary waste rock storage area, Dugout Canyon Mine M&RP, ACT/007/039

Dear Daron:

Please find attached to this letter a copy of modified M&RP text and new appendices that address the location and design of a new temporary waste rock storage area for the Dugout Mine. The appendices include a total containment berm design for the storage area and runoff control structures. The modified M&RP text has strike-through markings while added text is shown as italicized. When the submitted text has been reviewed and approved, the strike-through and italics will be removed and the pages reformatted with correct pagination.

As requested, we are faxing this copy to you with original copies to follow in the mail. We appreciate your help with this matter and effort you have made to work through the situation. If you have any questions regarding this submittal, please call me at (435) 448-2669.

Sincerely,

Chris D. Hansen
Environmental Coordinator
Canyon Fuel Company, LLC

enclosures

Form DOGM - C1 (Last Revised June 18, 1998)

File Folder # 3

APPLICATION FOR PERMIT PROCESSING

Permit Change X	New Permit ☐	Renewal ☐	Transfer ☐	Exploration ☐	Bond Release ☐	Permit Number: ACT/007/039
Title of Proposal: New temporary Waste Rock Storage Area Location Amendment.						Mine: Dugout Canyon
						Permittee: CANYON FUEL CO., LLC

Description, include reason for application and timing required to implement:

New text and appendices that include descriptions and calculations related to a new temporary waste rock storage area.

Instructions: *If you answer yes to any of the first 8 questions (gray), submit the application to the Salt Lake Office. Otherwise, you may submit it to your reclamation specialist.*

☐ Yes	X No	1. Change in the size of the Permit Area? _____ acres Disturbed Area? _____ acres ☐ increase ☐ decrease.
☐ Yes	X No	2. Is the application submitted as a result of a Division Order? DO #
☐ Yes	X No	3. Does application include operations outside a previously identified Cumulative Hydrologic Impact Area?
☐ Yes	X No	4. Does application include operations in hydrologic basins other than as currently approved?
☐ Yes	X No	5. Does application result from cancellation, reduction or increase of insurance or reclamation bond?
☐ Yes	X No	6. Does the application require or include public notice/publication?
☐ Yes	X No	7. Does the application require or include ownership, control, right-of-entry, or compliance information?
☐ Yes	X☐	8. Is proposed activity within 100 feet of a public road or cemetery or 300 feet of an occupied dwelling?
☐ Yes	X No	9. Is the application submitted as a result of a Violation? NOV #
☐ Yes	X No	10. Is the application submitted as a result of other laws or regulations or policies? Explain:
☐ Yes	X No	11. Does the application affect the surface landowner or change the post mining land use?
☐ Yes	X No	12. Does the application require or include underground design or mine sequence and timing? (Modification of R2P2?)
☐ Yes	X No	13. Does the application require or include collection and reporting of any baseline information?
☐ Yes	X No	14. Could the application have any effect on wildlife or vegetation outside the current disturbed area?
☐ Yes	X No	15. Does application require or include soil removal, storage or placement?
☐ Yes	X No	16. Does the application require or include vegetation monitoring, removal or revegetation activities?
☐ Yes	X No	17. Does the application require or include construction, modification, or removal of surface facilities?
X Yes	☐ No	18. Does the application require or include water monitoring, sediment or drainage control measures?
X Yes	☐ No	19. Does the application require or include certified designs, maps, or calculations?
☐ Yes	X No	20. Does the application require or include subsidence control or monitoring?
☐ Yes	X No	21. Have reclamation costs for bonding been provided for?
☐ Yes	X No	22. Does application involve a perennial stream, a stream buffer zone or discharges to a stream?
☐ Yes	X No	23. Does the application affect permits issued by other agencies or permits issued to other entities?

☐ **Attach 5 complete copies of the application.**

I hereby certify that I am a responsible official of the applicant and that the information contained in this application is true and correct to the best of my information and belief in all respects with the laws of Utah in reference to commitments, undertakings, and obligations, herein. (R645-301-123)

Signed - Name - Position - Date: Pres. Mgr 6/18/98

Subscribed and sworn to before me this 18 day of June, 19 98

Notary Public

My Commission Expires:
Attest: STATE OF
COUNTY OF

DIONNE M. OMAN
NOTARY PUBLIC • STATE of UTAH
53 EAST SMITH CIRCLE
PRICE, UT 84501
COMM. EXP. 12-15-98

Received by Oil, Gas & Mining

ASSIGNED TRACKING NUMBER

Form DOGM - C2 (Last Revised 6/93)

File Folder # 3

Application for Permit Processing
Detailed Schedule of Changes to the MRP

Title of Application: New temporary Waste Rock Storage Area Location Amendment

Permit Number: ACT/007/039

Mine: Dugout Canyon

Permittee: CANYON FUEL CO., LLC

Provide a detailed listing of all changes to the mining and reclamation plan which will be required as a result of this proposed permit application. Individually list all maps and drawings which are to be added, replaced, or removed from the plan. Include changes of the table of contents, section of the plan, pages, or other information as needed to specifically locate, identify and revise the existing mining and reclamation plan. **Include page, section and drawing numbers as part of the description.**

			DESCRIPTION OF MAP, TEXT, OR MATERIALS TO BE CHANGED
X ADD	☐ REPLACE	☐ REMOVE	Appendix 5-7 New Temporary Waste Rock Storage Location Information
X ADD	☐ REPLACE	☐ REMOVE	Appendix 7-12 New Temporary Waste Rock Storage Area Diversion Structures
☐ ADD	X REPLACE	☐ REMOVE	Replace pages 5-x, 2, 6, 14, 41, and 51
☐ ADD	X REPLACE	☐ REMOVE	Replace page 7-ix
☐ ADD	☐ REPLACE	☐ REMOVE	
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Any other specific or special instructions required for insertion of this proposal into the Mining and Reclamation Plan?