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DEC 09 2014

DIV. OF OIL, GAS & MINING

December 8, 2014

Permit Supervisor, Utah Coal Regulatory Program
Utah Division of Oil, Gas and Mining
1594 West North Temple, Suite 1210
PO Box 145801
Salt Lake City, UT 84114-5801

Re: Revisions to Waste Rock Soil Storage Pile Quantities, Sufco Mine, Canyon Fuel Company, LLC
Permit Number C/041/0002, Task ID#4702

Dear Sirs:

Please find enclosed with this letter an amendment to the Sufco Mine Permit to address the revised soil storage pile quantities stored at the Waste Rock site. We have included two redline/strikeout copies of the text and of the map associated with this amendment. Revisions have been made to Chapter 2 of the M&RP, and Sections 2, 3 and 4 of the Waste Rock Site Text. Map 2 has been revised as has Figure 2A (combined pile cross sections and dimensions).

A copy of tag for the seed mix believed to be used most recently at the waste rock site has been attached to this letter, tags from past seeding were not available.

If you have questions or need addition information please contact Vicky Miller at (435)286-4481.

CANYON FUEL COMPANY, SUFCO Mine



John Byars
Technical Services Manager

Encl.

cc: DOGM Correspondence File

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DEC 17 2014

DIV. OF OIL, GAS & MINING

APPLICATION FOR COAL PERMIT PROCESSING

Permit Change New Permit Renewal Exploration Bond Release Transfer

Permittee: Canyon Fuel Company, LLC

Mine: Sufco Mine

Permit Number: C/041/0002

Title: Amendment to Revise Waste Rock Soil Storage Pile Quantities, Task ID#4702

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

Instructions: If you answer yes to any of the first eight (gray) questions, this application may require Public Notice publication.

- Yes No 1. Change in the size of the Permit Area? Acres: _____ Disturbed Area: _____ increase decrease.
- Yes No 2. Is the application submitted as a result of a Division Order? DO# _____
- Yes No 3. Does the application include operations outside a previously identified Cumulative Hydrologic Impact Area?
- Yes No 4. Does the application include operations in hydrologic basins other than as currently approved?
- Yes No 5. Does the application result from cancellation, reduction or increase of insurance or reclamation bond?
- Yes No 6. Does the application require or include public notice publication?
- Yes No 7. Does the application require or include ownership, control, right-of-entry, or compliance information?
- Yes No 8. Is proposed activity within 100 feet of a public road or cemetery or 300 feet of an occupied dwelling?
- Yes No 9. Is the application submitted as a result of a Violation? NOV # _____
- Yes No 10. Is the application submitted as a result of other laws or regulations or policies?

Explain: _____

- Yes No 11. Does the application affect the surface landowner or change the post mining land use?
- Yes No 12. Does the application require or include underground design or mine sequence and timing? (Modification of R2P2)
- Yes No 13. Does the application require or include collection and reporting of any baseline information?
- Yes No 14. Could the application have any effect on wildlife or vegetation outside the current disturbed area?
- Yes No 15. Does the application require or include soil removal, storage or placement?
- Yes No 16. Does the application require or include vegetation monitoring, removal or revegetation activities?
- Yes No 17. Does the application require or include construction, modification, or removal of surface facilities?
- Yes No 18. Does the application require or include water monitoring, sediment or drainage control measures?
- Yes No 19. Does the application require or include certified designs, maps or calculation?
- Yes No 20. Does the application require or include subsidence control or monitoring?
- Yes No 21. Have reclamation costs for bonding been provided?
- Yes No 22. Does the application involve a perennial stream, a stream buffer zone or discharges to a stream?
- Yes No 23. Does the application affect permits issued by other agencies or permits issued to other entities?

Please attach one (1) review copy 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.

John D. Byars
Print Name

John D. Byars, Mgr. Tech serv. 12-8-14
Sign Name, Position, Date

Subscribed and sworn to before me this 8 day of December, 2014

Jacquelyn Nebeker
Notary Public

My commission Expires: _____, 20____ }
Attest: State of _____ } ss.
County of _____



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Purity	Mixture Contents	Origin	Germ/Hard
15.09%	Mountain Bromegrass, VNS	NZ	91%
14.55%	Western Wheatgrass, Recovery	WA	91%
14.46%	Basin Wildrye, Tri-head	WA	91%
14.04%	Bluebunch Wheatgrass, Anatone	WA	94%
11.32%	Indian Ricegrass, Nezpar	WA	94%
10.97%	Slender Wheatgrass, Revenue	MT	87%
7.51%	Lewis Blue Flax, Moor	WA	91%
3.72%	Palmer Penstemon, VNS	UT	83%
3.67%	Utah Northern Sweetvetch, Timp	CO	90%
1.88%	Western Yarrow, VNS	WA	95%

0.56% Crop
2.00% Inert
0.23% Weed,
No Noxious Found
Oldest Test Date: 9/27/2013

Canyon Fuel Company, LLC
Sufco Mine
Salina, UT 84654

PO #313168
Lot #27704
Net Weight 15 Lbs.

CHAPTER 2

SOILS

runoff and erosion. This soil will not be moved or disturbed until it is required for redistribution during final reclamation. A figure of the surveyed topsoil stockpile and estimated quantity of soil stored in the pile is included in Appendix 2-2. Plate 5-2B shows the as-built features associated with the overflow pond.

Topsoil from the Link Canyon Substation No. 1 will be placed and stored on the outslope of the pad. This storage area will be protected with berms and/or silt fences, a three-strand barbwire fence, and revegetated to control erosion. This soil will not be moved or disturbed until it is required for redistribution during final reclamation.

Soil from the Link Canyon Substation No. 2 will be placed in a soil stock pile located at the south end of the pad area. The storage area will be protected with berms and/or silt fences, a three strand barbwire fence, and revegetated to control erosion. This soil will not be moved or disturbed until it is required for redistribution during final reclamation.

Soil from the Link Canyon Mine Portal area will be placed in a topsoil pile located south of the disturbed portal pad area out of the floodplain (Plate 5-2F). The storage area will be protected by installing a topsoil storage sign at the base of the pile, berms and/or silt fences, a three strand barbwire fence, and protected from wind and water erosion by surface pitting the stockpile to retain moisture and reduce erosion and by being revegetated with a quick growing vegetative cover (standard seed mix in section 3.4.1.2 minus the shrubs and trees) to control erosion. This soil will not be moved or disturbed until it is required for redistribution during final reclamation. The surface of the topsoil pile will be pitted to reduce runoff and erosion. Vegetation removed during site construction, such as sage brush and other woody plants, will be placed on top of the pile.

Excess subsoil associated with construction of a run of mine coal stockpile and the West Lease portal tunnel development is stored at SUFCO Mine's waste rock disposal site. At the mine site the substation binwall has approximately 2,160 cubic yards of subsoil material and 5,300 cubic yards of road base, with the additional 11,341,747 cubic yards of subsoil material (Soil Nail Wall/West Lease/run of mine stockpile) being stored at the waste rock site there is a total of 19,207,460 cubic yards (approximate) that will be available for use as subsoil material during final reclamation of the mine site facilities. Reference Appendix 2-3 for the analyses of the subsoil being stored at the waste rock site to be used during reclamation of the mine site.

Approximately 487,841 cyds of subsoil was removed during the stabilization construction of a soil nail wall located behind the Warehouse Annex Building.

Canyon Fuel Company, LLC
SUFCO Mine

Mining and Reclamation Plan
December 20, 1991 (R Dec 8, 2014)

VOLUME 3
WASTE ROCK DISPOSAL SITE

2.12 Soils

Soils surveys were done for different purposes by both the engineering consultant and by a soils specialist. Seven exploratory borings were drilled with truck-mounted equipment to depths of 25 to 51 feet below existing grades at the site. The borings were performed using 6 1/2 inch O.D. hollow stem augers. Standard penetration testing and open-end drive sampling were performed at selected intervals in the borings.

In five of the borings, PVC observation wells were installed for the purpose of long term monitoring of the ground water conditions at the site.

In addition, five backhoe test pits were performed at the site to supplement the soil boring program. The results of the field investigation are presented in Appendix A of the SHB report, which includes a brief description of drilling and sampling equipment and procedures, logs of the test borings, logs of the test pits, and records of the observation well construction details. A site plan showing the boring, test pit, and observation well locations is included in a pocket at the back of the report.

The field investigation was supervised by Paul Kaplan and Donald Curran, engineers with SHB.

Moisture content determinations were made on selected tube samples recovered, and dry densities were determined for selected 2.42 inch diameter open-end drive samples. The results of these tests are shown on the boring logs.

Grain-size analysis, Atterberg limits, and direct shear tests were performed on selected soil samples. The results of these tests are presented in Appendix B of the SHB report along with a brief description of testing procedures.

A soil survey report dated December 22, 1987 is included as Appendix V. A facilities map overlay is provided that shows the outline of the sagebrush-grass vegetative type. Essentially all of the permitted waste rock disposal site is within that vegetative type. A very small proportion was mapped previously as mountain brush, and about two acres of the site was modified historically as a source of fill materials.

Four soil test pits were dug at the site, within the undisturbed area on December 10, 1987, and five more were dug on 16 December 1987 (to ascertain the adequacy of the first four pits). It was ascertained that the soils in the sagebrush-grass vegetative type are all sufficiently similar as to not be further divisible into mappable units. There are no rock outcrops within the undisturbed area. Rock outcrops were exposed in the borrow area, prior to using the area for waste rock disposal.

The contemporary study of soils at the waste rock disposal site indicate "that this small area is predominated by a single soil type which is classified as Typic Torrfluvents and in land capability class V with limitations due to climate and slope. Surrounding soils have been previously classified as Typic Argixerolls and the soil on the proposed soil site is small enough to have been considered an inclusion on previous soil maps." See the appended soil analysis report for additional details.

A discussion of the soil taxonomic classification availability of topsoil and other related soils discussion may be found in the report prepared by Dr. Sheldon D. Nelson located in Appendix V.

Lift #5 Expansion - Growth medium will be removed to a minimum depth of 18 inches in the approximately 0.54 acre area of the expansion. The growth medium will either be used immediately to reclaim a portion of the #5 lift or will be stockpiled on Topsoil Storage No. 2 to be used for reclamation in the future. Growth medium to be removed is estimated to be 1,300 yds. The logs (Appendix II) from boring number B-1 located within the expansion area shows the topsoil to be 12 inches deep, however the area has been part of an undisturbed ditch and additional sediment has the potential of having been deposited in the area. Boring B-1 is located on the west side of the waste rock pile between the pile and undisturbed ditch. Boring B-1 will be covered with waste as part of the expansion planned for Lift # 5 in approximately 2014 (depending upon the quantity of waste produced and hauled).

When removal of the growth medium began a qualified individual observed the recoverable growth medium to be deeper than the original estimate of 18 inches. The soil report in Appendix V, identifies a prominent buried A horizon, with stratified alluvial material above with a band of organic matter. The report does not identify the depth of the buried A horizon, but states "the buried A

horizon has excellent chemical and physical properties for plant growth, this material could be mixed with the top 18 inches of soil and would make a better plant growth medium than the surficial material alone". The identified buried horizon was excavated during the construction of the expanded Lift #5. Pits were dug with a backhoe to determine if the depth of material was consistent over the 0.54 acres. In the pit on the southwest corner/edge of the area the recoverable material was 12 to 18 inches, in the center of the area the recoverable material was approximately 4 feet deep and on the eastern edge the material was 5 to 6 feet deep. Therefore, the growth medium was excavated at varying depths within the cell. A composite sample was taken of the growth medium excavated during the construction of the Lift #5 expansion, the analysis will be incorporated into Appendix V.

3.1.5 Acid and Toxic Forming Materials

Based on analyses of material that has been placed in the waste rock disposal site to date, no acid forming problems are anticipated. There is a potential for borderline toxicity problems from boron. Samples of the waste material will be collected ~~quarterly for every 10,000 tons deposited at the waste rock site~~ and will be analyzed for acid or toxic forming potential. All Identified potential acid or toxic forming materials will be buried or otherwise treated.

Copies of laboratory reports on toxicity/acid-base accountability from representative waste samples are included in Volume 8 of the M&RP prior to 2005 and starting in 2005 will be included in the annual report.

3.1.6 Subsoil Stockpile

Excess subsoil material and a small amount of topsoil from the minesite is stockpiled at the Waste Rock Disposal Site for possible use during final reclamation of SUFACO minesite facilities. The location of the subsoil and topsoil material is shown on Map 2. Total acreage of the subsoil stockpile and associated topsoil piles 1A and 1B is 1.19 acres. Approximately 11,344,747 cubic yards of subsoil material and approximately 8.2 cubic yards of minesite topsoil material are stockpiled at the site. The associated original topsoil pile 1B and new topsoil piles 2 and 3 removed from the subsoil stockpile area contains about 756.4 cubic yards. The top 24 inches of soil material was removed from the subsoil stockpile area as described in Section 3.1.2, Site Preparation. This topsoil was stored along the westerly boundary and east of the subsoil stockpile as shown on Map 2. Topsoil handling procedures complied with those described in Section 3.2.3, Topsoil Handling. These topsoil stockpiles will be stored and seeded using the grasses and forbes of the standard seed mix, Table 4.6.1-1. When the subsoil and minesite topsoil are removed the topsoil will be redistributed and the area reclaimed and seeded in accordance with sections 4.5 and 4.6.

Subsoil material was placed in 2-3 ft. lifts using dump trucks and a D-7 Cat dozer. Exterior slopes of the subsoil stockpile are approximately 1v:1.25h. At this slope the material will be stable as placed. The subsoil stockpile was seeded using the grasses and forbes of the standard seed mix, Table 4.6.1-1. This subsoil may be taken to the minesite and used for fill material during final reclamation of the mine site.

Run off from the subsoil and associated topsoil stockpiles is collected and routed through a silt fence treatment located as shown on Map 2. The total acreage of the five stockpiles is 1.24 acres. Alternate sediment control measures are in place as described above. This area is classified as an approved Alternate Sediment Control Area (ASCA).

Topsoil and Subsoil Storage Piles at Waste Rock Disposal Site

TOPSOIL			
Description	Volume (cy) ^(a)	Area (acres)	Distribution Location
1A	8.2	1.19*	Mine Site
1B	456.9	0*	Waste Rock
Topsoil Storage Combined Pile (2, 3 & Lift 5 Exp.)***	4,114	0.24	Waste Rock
2	461.4	0.03	Waste Rock
3	438	0.02	Waste Rock
Sediment Pond	634.9	0.293	Waste Rock
Lift # 4 Area**	1847	0.34	Waste Rock
TOTAL	3246.2 7061	NA	NA
SUBSOIL			
Subsoil	11,260	0*	Mine Site
Soil Nail Wall	81 487	0*	Mine Site

(a) Estimated Quantity

* The acreages for Piles 1A,1B and Subsoil are combined. ~~Soil Nail Wall quantity of subsoil removed will be submitted in as-builet amendment by June 30, 2014.~~

** Topsoil stored in piles on top of Lift #4, estimated depth of stored topsoil - 3.5 feet

*** **Topsoil excavated for the Lift 5 Expansion was combined into a single pile with piles 2 and 3, Figure 2A shows dimensions and cross sections of this pile.**

3.2 Components of Operation

3.2.1 Sedimentation Pond

A sedimentation pond was constructed down gradient from the rock fill area to control sediment removed from the disturbed areas by surface runoff. The pond was constructed prior to disturbing

3.3 Timing of Operation

Since the waste rock disposal area is relatively small and relatively small volumes of fill are placed annually, the fill will be constructed in segments. The original fill volume was estimated at 10,000 tons or 8,200 cubic yards per year. The average fill volume from 1996 through 2012 was 5,180 tons per year and ranged from 156 to 27,135 tons per year. At this projected rate, once the fill bench-slope configuration is established about 1.5 acres should be filled and reclaimed every six to nine years. The fill is expected to be completed in 2016. The waste rock disposal pile was surveyed in August 2005 and contains an estimated 163,748 tons of waste rock, at the end of 2012 there is estimated to be 199,700 tons of waste stored at the site. In 2013 the estimated available capacity remaining at the waste rock pile is 5,000 tons, the proposed expansion of Lift #5 will provide an estimated additional capacity of 40,000 tons. The maximum height of Lift #5 is estimated at 20 feet and will be adjusted lower if necessary for road visibility.

It should be noted that the active fill area will extend beyond the area shown for each year. This is best seen in cross-section G-G' of Figure 2 which shows the active fill areas in relation to the reclaimed area, topsoil removal area, and undisturbed area. Map 4 has been revised to illustrate the current status of the reclaimed, active and undisturbed areas of the waste rock disposal area as of April 2013.

Following the completion of the construction on the Lift 5 expansion, the base (ground level) will be surveyed prior to the placement of waste. Beginning in the Fall of 2014 the volume of waste stored at the wasterock site will be estimated using the surveyed base. The volume will be presented in the annual report in 2015 and in the following years until the lift is full.

The following information is retained for historical record (prior to 2013 Site Expansion): { The 200 feet wide strips of waste will be placed beginning along the southern boundary and extend between the drainage diversion ditches. The eastern half of the disposal area will be completed first. The original Map 4 showed the areas that would be completed based on a waste rock volume of 10,000 tons per year. The average fill volume from 1996 through 2003 was 3,200 tons per year and ranged from 1,400 to 6,800 tons per year. }

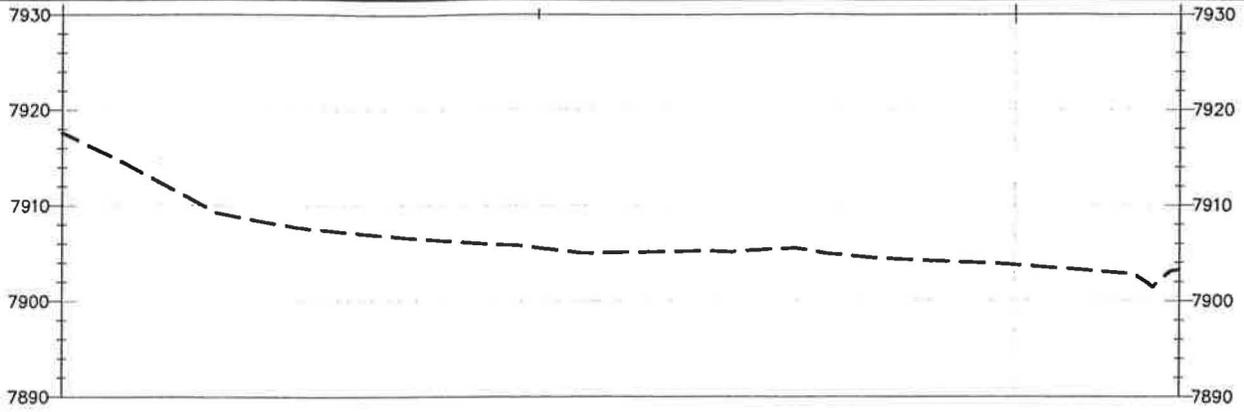
4.6.2 Seeding, Tillage and Mulching

The soil will be roughened prior to planting by scarifying to a suitable depth with appropriate equipment. The seed will be drilled, broadcast or hydroseeded and treated with mulch on flat areas. On slopes appropriate broadcast or hydroseeding methods will be used. Hydroseeding methods will use a small amount of mulch during seed applications for a buffer and as an indicator of the area that has been treated. Mulch will be held in place with a tackifier or well anchored matting may be used as an alternative. Mulch will be applied at the rate of 2,000 lbs. per acre.

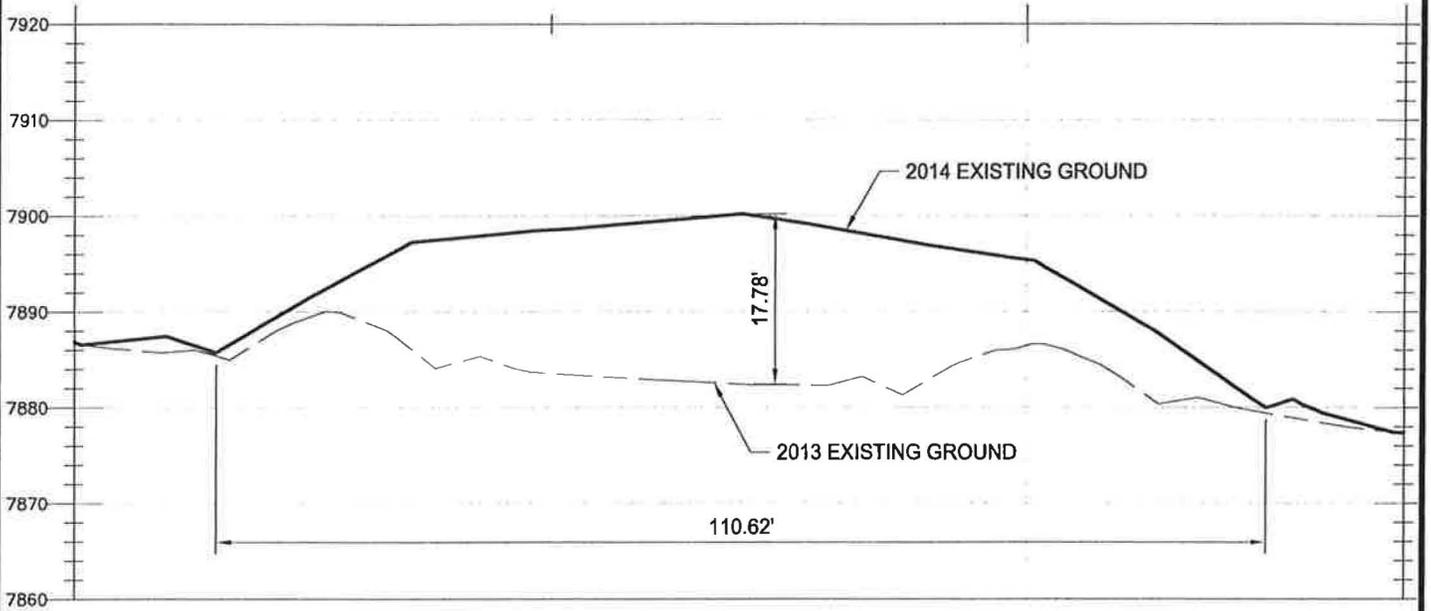
Irrigation is not considered to be necessary for revegetation of this site. Pest/disease control is not anticipated as a problem in this area. However, if serious weedy species such as Carduus nutans or Onopordum acanthium (thistle) are noted following reclamation they will be removed mechanically.

Contemporaneous/Interim Reclamation would include the roughening and seeding of topsoil/subsoil piles, reclaimed areas to be disturbed again prior to final reclamation and areas of small disturbance, an example of interim reclamation would be an area in which erosion control is needed for the interim period before redisturbance. A combination of the available grass and forbs seeds from the mix in Table 4.6.1-1 (species from 3.4.1.2 Pinyon Juniper Seed Mix will be substituted when seed species in Table 4.6.1-1 are unavailable) will be broadcast, at a seeding rate similar to or greater than that designated on table. The soil will be roughened prior to planting by scarifying to a suitable depth with appropriate equipment.

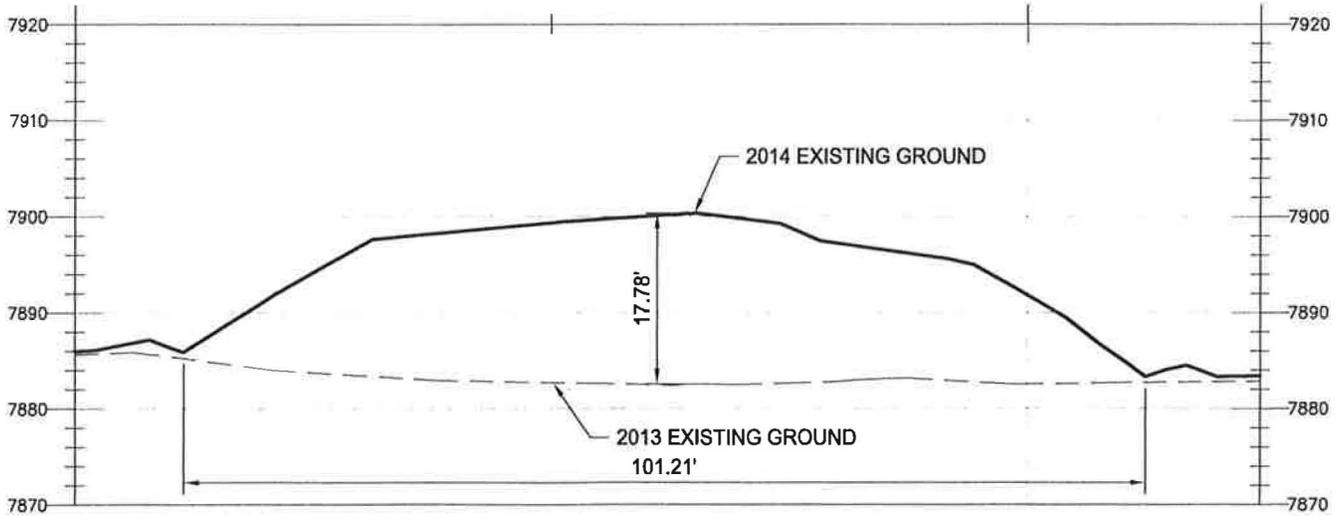
Contemporaneous/Interim reclamation will not be done in areas the Mine Health and Safety Regulations require to be kept barren of vegetation (such as areas around mine ventilation openings).



SECTION L-L



SECTION M-M



SECTION N-N



Canyon Fuel Company, LLC
SUFCO Mine
 597 South SR 24 - Salina, UT 84654
 (435) 286-4880 Phone
 (435) 286-4499 Fax

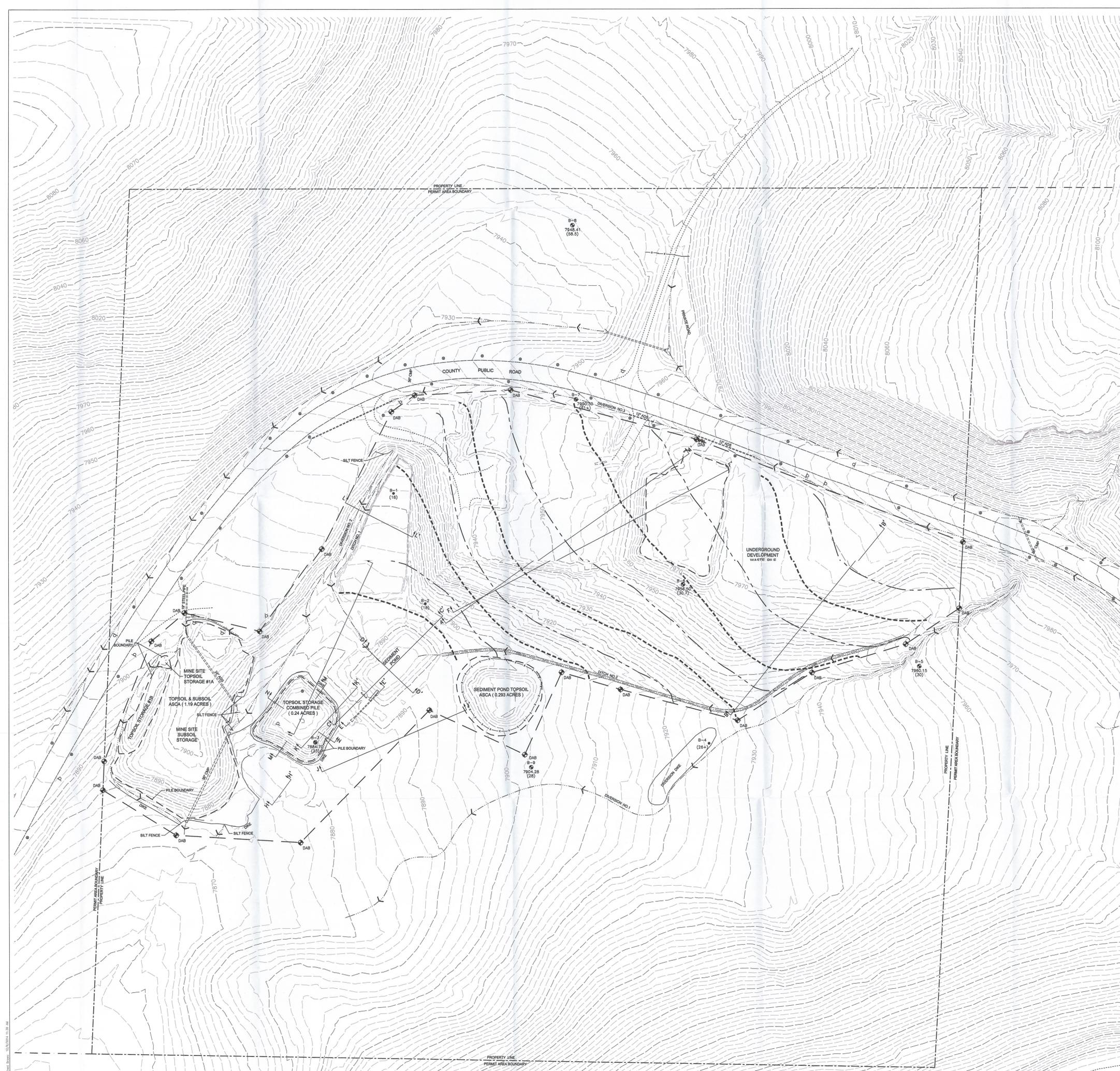
WASTE DISPOSAL SITE

CROSS SECTIONS

SCALE: 1" = 20'	DATE: 11/12/2014	DRAWN BY: T.R.B.
ENGINEER:	CHECKED BY: V.L.M.	PROJ: ###
FILE NAME: H:\DRAWINGS\MRP\PLATES\WRDS Map2v7.dwg		

SHEET NO.

FIGURE
2A



- EXPLANATION**
- DISTURBED AREA BOUNDARY
 - - - - - PERMIT AREA BOUNDARY/PROPERTY LINE
 - DIKE BOUNDARY
 - - - - - STORAGE PILE BOUNDARY
 - - - - - FINAL CONTOUR WITH 10' - 15' TERRACE AND DITCH
 - - - - - FINAL CONTOUR WITH NO TERRACE
 - - - - - SILT FENCE
 - WATER MONITORING WELL WITH CAP ELEVATION (DEPTH TO CONSOLIDATED FORMATION)
 - TEST BORE HOLE (DEPTH TO CONSOLIDATED FORMATION)
 - ← DIVERSION DITCH



I CERTIFY THE ITEMS SHOWN ON THIS DRAWING ARE ACCURATE TO THE BEST OF MY KNOWLEDGE

NOTE:
PERMIT/PROPERTY BOUNDARY IS NW1/4 NE1/4 SECTION 18, T22S, R4E, SLB&M



NO.	DATE	REQ. BY	DWG. BY	REMARKS
4	4/16/2013	M.L.D.	K.R.B.	
5	8/9/2013	VM	T.A.B.	
6	11/25/2014	VM	T.A.B.	
7	9/16/2014	VM	T.A.B.	
8	12/8/2014	VM	T.A.B.	Add See Lines W & N, changed thence

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DIV. OF OIL, GAS & MINING

Canyon Fuel Company, LLC
SUFCA Mine
 597 South SR 24 - 30th St. UT 84654
 (435) 395-4850 Phone
 (435) 286-4499 Fax

UNDERGROUND DEVELOPMENT WASTE DISPOSAL SITE PLAN

PER TITLE Plate Map 7.ctb	SCALE 1" = 50'	DATE 12/8/2014	DRAWN BY S.K.S./T.R.B.	OWNER VM.	DRAWN BY VM.	SHEET NO. MAP 2v8
DWT SEC ###	PROJECT NUMBER ###	FILE NAME H:\DRAWINGS\WRR\PLATES\WRRS Map2v8.dwg				