

VALLEY CAMP OF UTAH, INC.
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Mr. Daron R. Haddock, Permit Supervisor
 Utah Division of Oil, Gas & Mining
 355 West North Temple
 3 Triad Center - Suite 350
 Salt Lake City, Utah 84001

February 11, 1993

RE: Mid-Term Permit Review completed by:

	Daron Haddock
Section 100	Sharon Falvey/Rick Summers
Section 200	Priscilla Burton
Section 300	Paul Baker
Section 400	Paul Baker
Section 500	Wayne Western
Section 600	James D. Smith
Section 700	Sharon Falvey/Rick Summers
Section 800	Randy Harden

RECEIVED

FEB 11 1993

DIVISION OF
 OIL, GAS & MINING

Dear Daron:

Included within this letter report are our responses to questions raised by the Division of Oil, Gas and Mining with respect to the previously submitted Mine Permit Renewal Application (PAP). Specifically, responses have been provided for letters prepared by the project review team as outlined within Table 1. When the question posed by the UDOGM team can be answered directly, a direct response is given herein without additional modification to the permit. When the response warrants permit modification, the discussion given herein summarizes the contents of the modification after which it provides a reference to the modified permit section.

When reviewing the information provided herein please note the following revisions, facts and assumptions upon which this submittal is based:

- Walt Wright has left Valley Camp and therefore his name has been removed from all appropriate places within the permit. At the time of publication a new officer will be listed in the appropriate places within the MRP.
- Attempts have been made to redline and strikeout all text changes as prompted by the deficiency comments. In addition to these changes, further clarifications have been made to the permit which were not requested by the Division. These have also been redlined or struckout.

- Formatting modifications which have occurred throughout the text have not been redlined or struckout.
- Upon approval of this submittal, Valley Camp with the assistance of the Division will extract from the PAP all pertinent information affected by operational and reclamation commitments.

TABLE 1. Comment Letters Received for Which Responses are Provided.

LETTER DATE	SUBMITTED BY	TITLE
June 8, 1992	Wayne H. Western	Reclamation Engineer
July 8, 1992	James D. Smith	Hydrogeologist
July 21, 1992	Priscilla Burton	Soils Reclamation Specialist
August 3, 1992	Paul Baker	Reclamation Biologist
August 4, 1992	Sharon Falvey	Reclamation Specialist

It is important for the reviewer to note that page numbers between the currently submitted permit and the modified draft midterm permit submittal do not match. Because of the voluminous and or sporadic nature of some of the modifications it was not practical to keep page numbers consistent between the two submittals. As a result the entire permit has been recopied and submitted as part of this response letter. Text which has been added to the permit can be readily identified through "redlining" or shading. Text which has been deleted has been "struckout". The reviewer should have no problem in identifying these modified sections of the permit.

The text that follows has been divided into sections which relate directly to the letter submitted by the individual review team member. Comments made by that review team member are answered before continuing with a response to concerns raised by other team members. It should also be noted that some additional unsolicited changes have been made to the text which were not requested in the August 5, 1992 Completion of Mid-Term Review letter submitted by Mr. Daron Haddock. All changes made to the text are identified with redline and strikeout for easy identification.

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**RESPONSE TO RECLAMATION ENGINEERING CONCERNS
WAYNE H. WESTERN letter of June 8, 1992**

R645-301-512.100. Maps and Cross Sections.

Please find the following certified maps in their appropriate pocket: R614-301-521.140 Belina #2 Mine Progress Map, R614-301-555 R-5 to R614-301-555 R-7.

Map R614-301-521.111 Pleasant Valley Mining District, is not intended to be certified, as only the larger mines are depicted to show general reference to the District.

R645-301-512.200. Plans and Engineering Design.

The statement "See Hydrology R614-301-700...." has been changed to "See Hydrology R614-301-742.."

R645-301-513. Compliance MSHA Regulation and Approvals.

Response not required.

R645-301-514.100 to R645-301-514.140. Inspection of Excess Spoil Structures.

Response not required.

R645-301-514.200 to R645-301-514.250. Refuse Pile Inspection.

Response not required.

R645-301-514.300. Impoundments.

Response not required.

R645-301-515.100. Reporting a Slide.

Response not required.

R645-301-515.200. Reporting and Impoundment Hazard.

Response not required.

R645-301-515.300 to R645-301-515.521. Reporting Temporary Cessation.

The statement "Should a temporary cessation of coal mining and reclamation operations of 90 days or more occur,..." has been changed to "Should a temporary cessation of coal mining and reclamation operations of 30 days or more occur,...".

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R645-301-521.100. Cross Sections and Maps.

The names of the major mines depicted on R614-301-521.111. Pleasant Valley Mining District Map has been added. Maps titled R614-301-521.141 A & B was an error and are R614-301-728.100a & R614-301-728.100b.

R645-301-521.200. Signs and Markers Specifications.

Response not required.

R645-301-522. Coal Recovery.

The statement "The Valley Camp operation originated under the Coal Exploration and Mining Operations Rules, 30 CFR 211, which governed operations for the exploration, development, and production of coal from Federal lands in accordance with the requirements of the Mineral Leasing Act of 1920 and its amendments. In 1983 Valley Camp provided Minerals Management Service with a cross-reference index from the State regulations to the 30 CFR 211 regulations to aid in their review of the MRP. The BLM office for the Price River Resource Area approves all Valley Camp mining plans and modifications, as well as inspects the mine(s) to assure there are no detrimental effects on recoverable reserves and that Valley Camp satisfies the requirements of maximum economic recovery of the federal coal resource.", has been added to second paragraph after "Also see R614-301-523."

The Division should refer to the 1984 OSM Technical Analysis, Chronology of Events, Date; February 10, 1977, Event; USGS issues 211 permit for Belina #1 mine covering the existing Belina #1 (Upper O'Connor Seam).

R645-301-523. Mining Method(s).

The Division should refer to (a. Main Entry System-South) of the existing permit for clarification of Deficiency 1.

A copy of the most recent "Approved" Roof Control Plan is submitted in the Annual Summary Report and is not required or necessary to clutter the MRP.

R645-301-524. Blasting and Explosives.

Response not required.

R645-301-525. Subsidence.

Please refer to Page 19?? through page 23?? of the 500 Section, which have been revised using redline/strikeout.

R645-301-526. Mine Facilities.

Those Pre-1977 existing structures which are currently being utilized by Valley Camp have been modified to meet the regulations. Valley Camp is of the opinion UP&L power lines, Questar Pipeline Company gas pipe lines, and the D&RGW railroad tracks present condition meet the Public Service Commission standards. Valley Camp does not believe this permit needs to be cluttered with the finite details of existing structures, some of which were designed and built over 100 years ago and are not relevant.

R645-301-527. Transportation Facilities.

Response not required.

R645-301-528.100. Handling and Disposal of Coal, Overburden, Excess Spoil and Coal Mine Waste.

Considering the amount of backfill material required for reclamation, the area utilized for coal storage, and the responsibility towards the Natural Recourse, the Operator feels his previous commitment is more than adequate.

R645-301-528.200. Overburden.

Response not required.

R645-301-528.300. Spoil, Coal Processing Waste, Mine Development Waste, and Noncoal Waste Removal, Handling, Storage, Transportation, and Disposal Areas and Structures.

The statement "Excess Spoil. There are no Excess Spoil disposal areas within the Mine Permit Area. However, should it become necessary to create a waste disposal area, it will be accomplished in accordance with the requirements of the regulations, and other federal, state and local regulations." has been changed to "Excess Spoil. There is no Excess Spoil at the mined sites as per UDOGM definition."

The statement "Refuse Piles. There is no large quantities of refuse materials generated within the Mine Permit Area as the only sources of refuse or coal waste materials are associated with the loadout and transportation facilities. This "refuse or waste" for the most part is fines which are returned to the raw coal pile at the Belina Mine Site or the coal pile at the Valcam Loadout Facility." has been changed to "Refuse Piles. There are no Refuse Piles as per UDOGM definition."

R645-301-529.100. Exposed Underground Openings.

The statement "When approaching a suspected or known old workings (abandoned mine), MSHA has specific mandatory regulations which this operator is obligated to follow." has

been changed to "When approaching a suspected or known old workings (abandoned mine), MSHA Statutory Provisions of the 30 CFR Chapter 1, Subpart R-Miscellaneous, 75.1701 Abandoned areas, adjacent mines; drilling of boreholes, will be followed."

R645-301-532. Sediment Control.

The statements "See Hydrology R614-301-700.." which were made in section 500 of the permit have been changed to refer to specific sections within the hydrology section as requested. Sections in which these changes have been made include R614-301-512.200, R614-301-531, R614-301-532.

R645-301-533 to R645-301-533.700. Impoundments, Stability, Foundations, Slope and Embankment Protection, Highwall Location, MSHA and Non-MSHA Impoundments.

The statement "See Hydrology R614-301-700. for details." as was stated in Section R614-301-533 has been changed to "For details see the following references in the permit: Impoundments - R614-301-733; Stability, Foundations, Slope and Embankment Protection, and Highway Location - R614-301-742.221; and MSHA and Non-MSHA Impoundments - R614-301-742.222."

R645-301-534.100. Road Location, Design, Construction, Maintenance and Reclamation.

1. Slope stability studies for the roads in the Valcam Loadout area are not applicable.
2. The Belina Haul Road has only an administration "Variance", Final Approval Letter, March 14, 1989, originator Ms. Susan C. Linner, UDOGM, Reclamation Biologist/Permit Supervisor.
3. N/A

The statement "The culverts were designed using ASTM standards, installed in accordance with UDOT Standard Specifications by General Coal Contractor, Helper, Utah, and the placement was monitored by Centennial Engineering Inc., SLC, Utah. Since no failures have occurred, the operator believes the culverts were designed and installed correctly.", has been inserted as the first paragraph.

R645-301-535. Spoil.

The Operator believes the present commitment stated in the permit meets the requests of the deficiencies.

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R645-301-536. Coal Mine Waste.

The statement "There is no coal mine waste disposal site(s) within the Mine Permit Area to...", has been changed to "No coal mine waste (as defined in R645-100-200) have been generated to necessitate a disposal site for coal mine waste. Should it become necessary to construct such a disposal site during the operation phase, it will be accomplished through the approval process."

The Operator is unable to predict whether or not there will be any underground development waste.

For deficiency No. 2, please refer to the Operators Response to R645-301-536. Coal Mine Waste.

R645-301-537. Regraded Slopes.

As indicated previously in response to Section 728.300, there is no spoil located within the Valley Camp permit area. Furthermore, it is believed that the materials located within the permit area are not acid-toxic forming, nor will underground development waste be brought to the surface and used in the reclamation process. Under these conditions it is believed that the intent of Sections 537.210 and 537.250 have been met.

R645-301-541. Reclamation.

Response not required.

R645-301-542.100. Reclamation Schedule.

As soon as possible after the operation plan and the land configuration for post mining land-use have been approved, the Operator will submit a "Detailed Reclamation Schedule".

R645-301-542.200. Backfilling and Grading.

Response not required.

R645-301-542.300 to R645-301-542.500. Final Surface Configuration.

N/A

R645-301-542.600. Road Reclamation.

The statement "See R614-301-700., for the specifications..." has been changed to "See R614-301-760., for the specifications..."

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R645-301-542.700. Final Abandonment of Mine Openings and Disposal Areas.

Response not required.

R645-301-542.800. Reclamation Cost Estimate.

As soon as possible after the operation plan and the land configuration for post mining land-use have been approved, the Operator will submit a "Detailed Reclamation Cost Estimate" and the supporting data to allow the Division to make a "Determination of Bond Amount".

R645-301-551. Casing and Sealing of Underground Openings.

Response not required.

R645-301-552. Permanent Features.

Response not required.

R645-301-553. Backfilling and Grading.

Response not required.

R645-301-553.200. Spoil and Waste.

The Operator believes the present commitment stated in the permit meets the requirements, as the Operator reads the Regulation R645-301-553.200 since there are no spoil or waste materials to be used during mining operation nor during reclamation.

R645-301-553.250. Refuse Piles.

As the Operator has stated previously in the MRP, Valley Camp does not have coal processing waste, underground development waste, nor is it envisioned, therefore it is this requirement is N/A.

R645-301-553.300. Exposed Coal Seams, Acid-and Toxic-Forming Materials.

N/A

R645-301-553.400. Cut-and-Fill Terraces.

Response not required.

R645-301-553.500. Previously Mined Areas.

Response not required.

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R645-301-553.600. Approximate Original Contour.

The statement "Areas which Valley Camp is requesting UDOGM "Variance...maps:" (including associated maps) has been changed to "Prior to approval of the Final Reclamation Plan, Valley Camp will seek approval of an alternative postmining land use as afforded by R645-303-220 and will meet the requirements R645-301-412 through 414.300."

R645-301-553.900. Settled and Revegetated Fills.

Please refer to: R645-301-537.200. Regrading of Settled and Revegetated fills to Achieve Approximate Original Contour.

R645-301-560. Performance Standards.

Response not required.

**RESPONSE TO HYDROLOGY CONCERNS
JAMES D. SMITH letter of July 8, 1992**

R645-301-622.100. Geology.

The drill logs in question are geophysical logs. As the name implies it is the physical characteristics of the coal seams and other strata which allow geophysical logs to differentiate strata and to provide information which is useful in the exploration for coal and other resources, so information concerning the physical properties of the coal seams is inherent in the logs. According to R645-300-124 information on the physical properties of the coal is allowed to be held confidential, therefore, Valley Camp of Utah respectfully requests that the confidentiality statements regarding bore hole logs remain in the permit.

R645-301-623 and R645-301-624. Geologic Information.

Deficiency 1

The material excavated at the Belina Mines during the facing-up of the coal seams was used to construct a pad for mine facilities. The pad material, therefore, consists of earth excavated from above, below, and between the coal seams. In 1983 two sets of samples were taken; one set of samples of in-place material from above, below, and between the coal seams, and one set of samples from the pad area. It is expected that the results from these two sets of tests would be very similar.

The first set of samples was taken from bore holes BP-1 and BP-2 and were analyzed by MIDEKO in early 1983. The results of these analyses are contained in Appendix R614-301-623.100 and show high concentrations of boron and copper. The second set of samples was taken from test holes No. 1, No. 2, and No. B-5. These samples were analyzed by Ford Chemical

Laboratory in late 1983. The results of these analyses are also contained in Appendix R614-301-623.100 and show concentrations of less than 1 ppm for both boron and copper.

Since these samples were taken nine years ago and the people who took these samples are no longer at Valley Camp there is no information available regarding the methodologies used to collect and analyze the samples. While the actual reason for the high reported concentrations in the first set of samples is unknown and can probably not be determined, it is interesting to note that the values reported for the first set of samples are on the order of 100 times higher than the values reported for the second set of samples. It is possible that MIDECO simply reported the results with incorrect units (ie. milligrams/kilogram instead of micrograms/kilogram) and/or a misplaced decimal. Such an error could bring the MIDECO results more in line with those reported by Ford. To further explore this possibility an attempt was made to contact MIDECO, however, it was found that they are no longer in business.

A summary statement which echoes these conditions has been added to the MRP within Section 623.100.

Deficiency 2

The thickness of the coal seams and the equipment used by Valley Camp to mine these seams are such that unmined coal is left on the floor and roof of the mine openings. As a result the strata above and below the coal seams are not normally encountered during mining. One benefit of this is that since roof and floor rock is not exposed, little to none of the material gets mixed into the mined coal thereby resulting in unusually low ash and high quality. A second benefit of leaving coal on the roof and floor is that coal generally forms a more competent roof than the material above the coal seam.

Since the rocks above and below the coal seams are not exposed during mining, Valley Camp has not generally been in a position to sample these strata. Because material from these strata remain in place within the mine and are not brought to the surface, it is Valley Camp's position that the acid and toxic forming characteristics of this material are irrelevant to the protection of the environment of the mine area. Any influence these strata may have on ground water quality will be detected by the ground water and UPDES sampling programs. The acid-toxic forming potential of the coal extracted from the mine is discussed below in response to deficiency 4.

Deficiency 3

No additional data is available in response to this deficiency than is already provided in the MRP. Information related to coal strength and subsidence failure potential was previously provided the Division in the report entitled "Thick Seam Retreat Mining with Narrow Pillars" prepared by Kenneth C. Ko & Associates.

Deficiency 4

A composite sample of coal was taken during the month of October, 1992, and was analyzed. The results of the analyses are shown in Appendix 623.100b. The following table summarizes the results and compares them to the Division Guidelines (Guidelines for Management of Topsoil and Overburden for Underground and Surface Coal Mining, April, 1988). When mining continues at the Belina mine coal samples will be collected semi-annually as stated in the permit.

SUMMARY OF ANALYSES OF COAL

PARAMETER	ANALYZED IN VALLEY CAMP COAL	DOGM GUIDELINE CLASSIFICATION
pH	7.84	Good
Selenium	0.008	Good
Boron	0.93	Good
SAR	0.167	Good
ABP	19.11	Good

The coal mined at Valley Camp is classified as "good" according to Division Guidelines for topsoil and overburden.

Deficiency 5

Inconsistencies within Section R614-301-624.100 of the permit text and mapping have been resolved. Specific changes made include:

- The reference for Map R614-301-622.200f was incorrectly stated and has been changed. The correct reference should have been to Map R614-301-622.200g.
- The statement "Drill hole 75-24-4 is located in the SW quarter of the SW corner of Section 24,..." has been changed to "Drill hole 75-24-4 is located in the SE quarter of the SE quarter of Section 24,..."
- The statement "The lowest unit of the Blackhawk Formation in the vicinity of the Mine Permit Area is the Flat Canyon coal seam which rests upon the Star Point Formation." has been changed to "The lowest coal seam of the Blackhawk Formation in the vicinity of the Mine Permit Area is the Flat Canyon coal seam which lies approximately 50 feet above the Star Point Sandstone Formation".

R645-301-632. Subsidence Monitoring.

It is unlikely that features "O", "P", and "24" on Map R614-301-728.100a, Subsidence Base Map, are related to subsidence. As described in the notes on this map, feature "O" is an existing weathered depression. Feature "P" is described as a "small crack, may be natural" and feature "24" may be related to drilling as stated on the map. The mapped subsidence features which are located over 2nd East Mains and over 1st and 2nd Left, 3rd East Mains, are probably related to subsidence. The elevation of the coal seam at 1st Left, 3rd East, is 8980 feet and the surface elevation at this point is approximately 9600 feet so the overburden thickness is approximately 620 feet. Assuming approximately the same coal seam elevation in 2nd East Mains and allowing for about an 80 foot increase in surface elevation results in an overburden thickness of around 700 feet. The statements made within the Geology and Hydrology sections of the permit have been changed to state that no subsidence effects are noted where the overburden thickness is greater than 700 feet. Specifically the last sentence of the first paragraph in section R614-301-632 now reads "No surface effects of subsidence have been found above areas where pillars have not been pulled, nor have they been found above areas where the overburden above the mined coal seam is greater than approximately 700 feet."

R645-301-722.100. Location and extent of Subsurface water.

- 1) A 1986 report by the USGS (Water-Supply Paper 2246) identifies the Blackhawk Formation and Starpoint Sandstone as the exposed strata in the VALCAM Loadout Facility area, with the Starpoint Sandstone exposed west of the Pleasant Valley fault and the Blackhawk Formation exposed east of the Pleasant Valley fault. The general significance of these layers as water bearing strata is discussed in Section R614-301-624 of the MRP.

Additional information related to the local aquifer which has been located is presented in Section 722.100 of the permit. Based upon the additional information presented in this section, ground water contours for the VALCAM Loadout area have been added to Map R616-301-722.100c.

A survey of the seeps and springs in the VALCAM Loadout Facility area will be completed at the same time the seep and spring survey is updated for the Belina Mine Area. At this point in time, no new monitoring wells or piezometers are planned in the area of the VALCAM Loadout Facility.

- 2) The ground water contours Map (R616-301-722.100c) was updated for areas where information was available. Data were obtained for five monitoring wells in the Skyline Mine area adjacent to the permit area. The available information indicates a small general decline in groundwater levels in this area. Data were insufficient to determine any seasonal trends or variations.

Although there are no recent data available from monitoring wells in the Belina Mine permit area, mining impacts on groundwater can be inferred from annual spring flow

data. The spring flow data and a discussion of the flow variations is found in the annual Spring Depletion Report completed by HA&L dated December 1, 1992. This report states that most of the variations in spring flows appear to be due to natural flow factors and below average precipitation for the area. The only spring which shows evidence of significant mining impact is located along the northwestern mine permit boundary in the South Fork of Eccles Creek. It is possible that groundwater levels in this area are being impacted by mining on the west side of the fault.

R645-301-722.400. Location and depth, if available, of water wells.

- 1) The text in Sections 722.100 and 722.400 of the permit application has been updated based on additional well information from Valley Camp, the State Engineers Office, and UDOGM files. Information related to the hydrogeologic environment has been addressed within other sections of this permit response.

R645-301-724. Baseline Information.

Deficiency 1

The text, maps and tables within Section R614-301-724.100 have been reviewed and corrected to the best of our knowledge to eliminate any discrepancies which might have existed. Changes made to the text include a correction to the reference for the reported high TDS value found within the discussion on springs. Table R614-301-724.100b was changed to include the fourth quarter data for station S31-13, and Map R614-301-722.100a was changed to show the correct TDS values for VC-10 and VC-11.

Deficiency 2

The discharge from abandoned mine workings at the Belina mine are combined with waters discharging from Filtration Pond 005A before entering Whisky Creek. Approval to discharge waters directly from these abandoned mine workings was granted in a letter dated October 14, 1986, a copy of which is inserted along with the UPDES discharge permit within Appendix 750. According to the letter, the Utah Water Pollution Control Committee "...determined that the proposed alteration basically conforms with the State Wastewater Disposal Regulations." Approval was thereby granted to complete the then proposed discharge modification. As defined in the letter, "Water from the first East sump is conveyed to the outlet of Filter Pond 005 where it is combined with treated water from Filter Pond 005 and discharged into Whiskey Creek."

According to phone conversations held February 7, 1993 with Mr. Mike Herkimer of the State Department of Environmental Quality (DEQ), Valley Camp was able to confirm the fact that the discharge from in-mine waters originating from the 1st East Sump mine area are of such quality that they do not require a UPDES point source discharge permit. Although no discharge has occurred over the past few years, Valley Camp agreed with DEQ during the aforementioned phone conversation to monitor any flow from this area at the time of future discharge startup

to confirm that the water quality still meets discharge regulations for compatible Filter Pond 005A. Appropriate modifications have been made to the text within Section 724.100 to clarify this issue.

As stated within Section 731.221 of the MRP, no biomonitoring requirements are set forth within the current UPDES permit dated August 19, 1992. Statements within the UPDES permit related to this issue state that "Since Valley Camp of Utah has been conducting Whole Effluent Toxicity (WET) testing since 1988 with no indication of toxicity ... Valley Camp of Utah will not be required to conduct Whole Effluent Toxicity (WET) at this time."

Deficiency 3

An appropriate number of copies of the current UPDES permit have been forwarded to the regulatory agencies as required.

R645-301-724.400. Climatological Information.

Section R614-301-724.411 has been revised to include monthly, annual and period of record average precipitation values for the state, the USGS station at Nephi, the Forest Service station at Utah Fuel Company, and the private station at Cyprus Plateau Mining Company, from 1981 through 1991.

The "Seeps and Springs" discussion found within Section R614-301-72.100 states that there has been a spring flow decrease of approximately 33 percent from 1979 to 1990. Data shown in Table R614-301-724.411 shows precipitation decreases of 38, 46, 36, and 33 percent for the state as a whole, the station at Nephi, the station at Utah Fuel, and the Cyprus Plateau station respectively for the period of record. All of these stations show a decrease in precipitation of roughly the same magnitude as the decrease in spring flows which have been measured within the Valley Camp permit area. The appropriate text has been modified within Sections R614-301-722.100, R614-301-724.411, and R614-301-728.100 to reflect this information.

R645-301-728. Probable Hydrologic Consequences (PHC).

- 1) Information and references have been added to Section 728 of the permit text to address deficiencies defined in other sections which relate to the PHC. A summary of changes made to the text are discussed below according to the deficiency subject.

Toxic and Acid Forming and Coal Analysis

The following statement was added to the end of the 5th paragraph in the Operational Effects Section of the PHC.

Analysis results for a composite sample of coal taken during the month of October, 1992, support the conclusion that no acid or toxic forming material are

present in coal being mined at the Belina mines. The results of the analyses are shown in Appendix 623.100b.

Subsidence

The statements in the 1st paragraph of section 632 entitled "Subsidence Monitoring" and in Section 728 within the discussions related to "Subsidence Effects" and "Impact on Water Rights" have been changed to state that no subsidence effects are noted where the overburden thickness is greater than about 700 feet.

Precipitation

The following statement has been added to the 6th paragraph of the "Hydrologic Impact of Mining Activities" portion of permit Section 728.

Precipitation records which help document local and regional drought conditions were presented earlier in Table R614-301-724.400a.

- 2) The following text has been added to the 2nd paragraph in the "Subsidence Effects" section of the PHC:

During the 1992 seep and spring survey, a field technician noted that flow from spring S25-11 was beginning to pond in the bottom of the sinkhole below the spring. It was the opinion of the field technician that the sinkhole was beginning to seal. It is expected that the sinkhole will continue to seal as the bentonitic clays in the underlying shale layers swell and seal the flow path through the sinkhole.

- 3) A seep and spring survey of the VALCAM Loadout Facility area will be completed at the same time the annual seep and spring survey is updated for the Belina Mine Area.
- 4) The only reason TDS data for VC-5 was evaluated without samples taken on June 27, 1986 and April 22, 1988 was to show general seasonal TDS variations. Eliminating these two high TDS values in order to point out the general seasonal trend is justified because the high TDS values on these dates are believed to be the result of a sporadic event rather than a general trend. If TDS results for these dates were included in the determination of seasonal TDS variations, the data base would have been skewed, leading to erroneous conclusions. Considering the data base without the samples taken on June 27, 1986, and on April 22, 1988, was not intended to minimize the significance of these two TDS measurements.

The high TDS values are likely due to road salting operations, although more frequent data would be required to determine the cause for certain. Salt is applied to roads as needed during the winter season to reduce and eliminate snow and ice accumulations.

When and how much salt to apply is a function of weather conditions, so application of salt tends to be sporadic throughout the winter season. It is expected that local streams will also sporadically experience higher TDS levels in the winter and spring due to road salting operations.

**RESPONSE TO SOILS RECLAMATION CONCERNS
PRISCILLA BURTON letter of July 21, 1992**

R645-301-223. Soils Resource Information.

The following statement has been inserted to assist the person(s) reviewing the MRP, to clarify inconsistencies within the Section, and to respond to Deficiencies 1 through 4. "In 1980 Endangered Plant Studies, Inc., did the Vegetation and Soils study for Vaughn Hansen Associates, Inc., Waterbury Plaza-Suite A, 5620 South 1475 East, SLC, Utah dba Hansen, Allen & Luce, Inc., SLC, Utah, authored by Mr. Stanley Welsh, Leah Juarros, Joseph R. Murdock, and Elizabeth Neese. The purpose of the studies were to gather data for the "Report of Vegetation, Threatened and Endangered Plant Species, Soils, and Reclamation Plans for Valley Camp of Utah Inc., and Lease Area, Carbon--Emery counties, Utah."

These investigations were designed to provide Surface Mining regulations (783.19, 783.21, 784.13, 784.21), U.S. Forest Service requirements, and requirements of the Utah Division of Oil, Gas, and Mining. Included in R614-301-300 Biology section is a description of the plant communities, a list of plant species by vegetative type, estimates based on random sampling of cover and productivity for areas that could be disturbed and for comparable areas which will not be disturbed, and maps showing vegetative and soil types and sample locations. Soils are described and reclamation potential is also discussed."

The statement "Valley Camp of Utah, Inc. lease area.....were collected as follows:", has been changed to "Valley Camp of Utah, Inc. lease area soils are developed in vegetation types and topographic features similar in all major respects to the adjacent Skyline lease area soils. Corresponding soils data presented here for the Valley Camp lease area are based in part on previous extensive studies of the adjacent Skyline lease area. Data for thos studies were collected as follows:"

NOTE:

It is apparent some confusion was caused when the Proposed Conveyor Corridor has withdrawn from the permit, the terminology "Proposed Conveyor Corridor" was removed from the text along with the nomenclature and proposed conveyor route from the Soils and Vegetation maps. The site locations in Whisky Canyon were however, retained on the said maps, and results of that study are found in this section and the Biology section.

R645-301-233. Topsoil Substitutes and Supplements.

Sections 231, 232, 233, 234, 242, and 243 of the PAP have been modified to respond to the concerns of this section. Some of these sections have been revised to clarify Valley Camp commitments regarding the harvesting, testing, and handling of the soil used for reclamation revegetation.

R645-301-240. Reclamation Plan.

Deficiency 1

Map 820.110 was not completed and is not available for submission. The performance bond covers the entire permit area as defined by numerous maps within the PAP. No bond releases have been achieved to date since the mine is not in reclamation.

Deficiency 2

The MK report is in error related to the acres of roadway which will not be topsoiled. All reclamation will be accomplished with in-place material at the toe of slopes as stated in the PAP.

Deficiency 3

The VSM used as cover material over the regraded areas will be quantified along with appropriate cost estimates in the reclamation plan.

Deficiency 4

Section 242.100 has been modified to state that slope angles constructed during reclamation will not exceed those of the surrounding hillsides, that reclamation contours will match those found naturally at the point of contact, and where possible, reclaimed contours will be constructed at slope angles less than those found naturally.

Deficiency 5

Due to the steep slope angles involved with the Belina mine site, subsoil ripping prior to application of VSM may result in slope failure and therefore cannot be specified prior to reclamation, but will be determined at that time. A similar statement has been added to Section 242.100.

Deficiency 6

See the added text to Section 231.100.

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R645-301-242. Soil Redistribution.

Deficiency 1

What is described in the "Test Plot Program - 1987" was agreed upon by OSM, UDOGM and Valley Camp. See permit Section 341.300.

Deficiency 2

See Map 231.300 entitled "Topsoil Substitutes & Supplements - (Vegetation Supporting Materials)".

Deficiency 3

This information will be provided in the new MRP under reclamation.

Deficiency 4

Section 231.200 has been modified to contain the specific statement requested.

Deficiency 5

As discussed with Prescilla Burton, VSM will be derived from existing fills. No differentiation is possible as described in Section 231.100.

Deficiency 6

The planned excavation depth is 3" below the root zone as discussed within Section 231.200.

Deficiency 7

A volume or depth of topsoil is not applicable with these pre-law conditions. Valley Camp has committed to test these materials prior to revegetation.

Deficiency 8

Text has been modified as appropriate in Section 231.100.

R645-301-244. Soil Stabilization.

Deficiency 1

Rills and gully's will be repaired as required and as stated within modified Section 244.300.

Deficiency 2

This is covered within Section 300.

R645-301-321. Alluvial Valley Floor Determination.

Corrections have been made to the permit within Section 724.700 which help document the fact that neither the Belina Mine area nor the VALCAM Loadout facility are located within Alluvial Valley Floor zones. Specific comments made by OSM in their 1984 "Recommendation for Approval" include "The alluvial valley floor that was identified in the vicinity of the Belina mines (i.e., in Pleasant Valley below the Utah No. 2 loadout) is not within the proposed permit area and no farming will be interrupted, discontinued, or precluded. In addition no material damage to the water supplied to the alluvial valley floor will occur as a result of mining."

Further comments made as part of the Original "Technical Analysis" conclude that "...the narrow valleys of Whisky Canyon, Eccles Canyon, and Pleasant Valley above the Utah No. 2 mine facilities are not AVF's."

In order to help facilitate a more complete understanding of the ground water conditions in the VALCAM area additional research was conducted based on existing reports from governmental agencies as well as from the "Skyline" permit on file with the Division. Responses to each request made by the Division are provided below.

- 1) The additional groundwater information requested is provided and discussed in the response for sections R645-301-722.100 and R645-301-722.400.
- 2) An irrigation water diversion was constructed near the north end of the VALCAM Loadout Facility within the last few years. The structure diverts water from Mud Creek into a corrugated metal pipe for use as irrigation on pasture land just north of the VALCAM Loadout Facility. This diversion is described in Section R614-301-731.710 of the permit. There is another irrigation water diversion point on Mud Creek about 3,000 feet north of the VALCAM Loadout Facility. Aerial photographs taken in 1973 and 1977 show water from Mud Creek being diverted at the lower diversion point. Although there is no evidence that the entire area has been irrigated, it is possible that some sections of Pleasant Valley below the outlet of the upper diversion has been historically flood irrigated. Most of lower Pleasant Valley (below the VALCAM Loadout Facility) appears to have been historically used as pasture or improved pasture based on the 1973 and 1977 aerial photographs and the irrigation diversion locations (See Map 411.100). Upper Pleasant Valley and the surrounding mountains are undeveloped rangeland.
- 3) The OSM technical analysis for Valley Camp states:

"Eccles Creek within Eccles Canyon has been determined to not be an alluvial valley floor (AVF). This issue was addressed in the OSM technical analysis for the Skyline Mine. In addition, the Whisky Canyon and Pleasant Valley above the Utah No. 2 facilities were

- observed by OSM (August 1983) to be too narrow for flood irrigation or subirrigation agricultural activities.

Valley Camp's response (Volume V Apparent Completeness Review) mentions that the upper part of Pleasant Valley has historically not been flood irrigated. The PAP indicates that the lower part of Pleasant Valley (i.e, below the proposed Belina permit area) has historically been flood irrigated and may also be subirrigated near the stream channel. OSM staff evaluated the AVF characteristics of Pleasant Valley during a field trip in early August 1983. The field investigation confirmed the statements in the PAP, that the upper part of Pleasant Valley (near the Utah No. 2 Mine) is narrow and is generally not suitable for flood irrigation development. The lower part of the valley was observed to be flood irrigated. In addition, it appeared that grasses on the valley bottom may be subirrigated.

On the basis of the information presented in Volume V of the PAP and information gained during the field investigation, it is concluded that the surface topography, soils, water quality, and water quantity of lower Pleasant Valley (i.e., below the Utah No. 2 mine) are all suitable for flood irrigation agricultural activities. It is also likely that portions of Pleasant Valley are subirrigated for agriculturally useful species of plants. It is concluded that the lower Pleasant Valley is an AVF with the essential hydrologic functions of flood irrigation and possibly subirrigation. Conversely, it is concluded that the narrow valleys of Whisky Canyon, Eccles Canyon, and Pleasant Valley above the Utah No. 2 mine facilities are not AVFs."

It is also determined through a review of existing reports including a Soil Conservation Service report for the region that no soil moisture data or vegetation mottling characteristics are available.

- 4) Areas shown as being disturbed on Map R614-301-521.150 were compared with aerial photographs dated October 20, 1973, areal photographs with an oblique view taken between 1973 and 1977, and aerial photographs dated October 25, 1977 in order to determine Pre-SMCRA disturbance areas for the permit area. Although no dates appeared on the oblique photographs, it is known that they were taken between 1973 and 1977 through the identification of structures which show on the oblique photographs and on the 1977 photographs, but do not show on those taken in 1973. Based on the comparison of photographs and mapping, no Pre-SMCRA disturbance areas were identified outside the current disturbance areas with the exception of drill hole access roads located west of the Loadout area.

No ground water surface contours prior to mining activities are available for the VALCAM Loadout area.

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**RESPONSE TO RECLAMATION & BIOLOGY CONCERNS
PAUL BAKER letter of August 3, 1992**

R645-301-321. Vegetation Information.

Response not required.

R645-301-322. Wildlife Information.

See the wildlife protection plan located within Section 330.

R645-301-330. Operation Plan.

Deficiency 1

This comment was previously responded to in Valley Camps response to Sharon Falvey's Section 120 deficiency. Appropriate text has also been added to permit Section 332.

Deficiency 2

Text has been corrected as appropriate within Section 332.

Deficiency 3

The subsidence control and mitigation plans are found within Appendix 724.600 and MRP Section 525 respectively.

Deficiency 4

Whisky Creek is an ephemeral stream and has been dry for a number of months therefore ongoing biological monitoring is not applicable.

Deficiency 5

For a response to this comment the Division is referred to the Wildlife Protection Plan within Section 330.

R645-301-341.100. Revegetation Timing.

The statement found within Section 242.100 has been clarified to indicate that planting will occur in the fall.

R645-301-341.210. Species and Quantities of Seeds and Seedlings.

Deficiency 1

Valley Camp's committal for the planting of shrubs is found within Section 341.250.

Deficiency 2

Riparian area planting is discussed within Section 341.250.

Deficiency 3

Adapted exotypes and varieties is discussed within Section 341.250.

R645-301-341.220. Planting and Seeding Techniques.

Deficiency 1

Appropriate corrections to the text has been made to Section 341.250.

Deficiency 2

Best technology currently available will be used for seed bed preparation at the time of reclamation. Modifications to the text have been made within the discussion related to planting procedures found in Section 340.

R645-301-341.230. Mulching Techniques.

Deficiency 1

The statement in Section 341.250 has been modified to state that the hydroseeding and mulching techniques will be used where appropriate.

Deficiency 2

The appropriate text has been modified as requested within Section 341.250.

R645-301-341.240. Irrigation and Pest Control.

Response not required.

R645-301-341.250. Revegetation Success Determination.

Response not required.

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R645-301-341.300. Revegetation Feasibility Demonstration.

Response not required.

R645-301-342. Fish and Wildlife.

A response to this deficiency has been made within Section 341.250.

R645-301-411. Land Use Environmental Description.

Deficiency 1

Premining wildlife habitat within both the Belina and VALCAM areas consisted of natural local species as well as species introduced by the Division of Wildlife Resources which were not native to the Permit area. Sheep and cattle grazing have been conducted for many years in the adjacent areas to both the mine and the loadout facilities as evidenced by the many local livestock watering rights.

Town sites are known to have existed in the area adjacent to the VALCAM loadout, however, no specific information is available as to locations nor extent of the historic facilities. The Utah No. 1 mine location is shown on the Pleasant Valley Mining District Map (Map 521.111).

Deficiency 2

To the knowledge of Valley Camp, no zoning changes have been made to date by the County Commission.

R645-301-412. Reclamation Plan.

Deficiency 1

The office facilities west of the VALCAM loadout will be retained by Kanawha & Hocking Coal and Coke Company and used as a field office, and not for recreational and/or educational purposes as originally stated in the MRP.

Deficiency 2

All requirements of R645-302-270 will be met should a variance be required for any proposed reclamation which deviates significantly from the original contour. Under such conditions, the permit will be specifically marked as containing a variance as required by R645-302-272.200.

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Deficiency 3

See MRP section 412 through 412.140.

R645-301-420. Air Quality.

No response required.

RESPONSE TO RECLAMATION CONCERNS SHARON FALVEY letter of August 4, 1992

R645-301-112.500. Boundaries.

The map R645-301-112.500 depicts the Forest Boundary correctly, however ownership of Section 26, T13S, R6E was incorrect due to an error in the card file at the county courthouse. Those properties within Sections 6 & 7, T14S, R7E are in fact inside the Forest Boundary and owned by Rescu-Med Inc. and L & L Agri-Business. Ownership of Section 26, T13S, R6E has been corrected on map R645-301-112.500.

R645-301-120. Permit Application Format and Contents.

Deficiency 1

The statement regarding food and fiber within Section 300 has been taken from the presubsidence survey report prepared by EPS, Inc. in 1980. This report was approved in the 1984 TA by OSM.

Deficiency 2

As requested by the Division, logical dividers have been placed in the hydrologic calculations appendix of the permit (Appendix R614-301-742.310). These divider pages separate calculations into "Disturbed Area Ditches", "Unidisturbed Area Ditches", "Culverts", and "ASCA's". Page numbers have not been added to the appendix due to the confusion that it would potentially create given the changing nature of runoff calculations during the permit term.

As further clarification, logical dividers are also provided for Appendix R614-301-760. Separated sections include "VALCAM Loadout Area Channels", "Belina Mine Area Channels", "Haul Road Area Channels", and "Eccles Canyon Channel".

Deficiency 3

The first sentence under the heading "Water Quality" found within Section R614-301-721 has been changed to read "In general, the chemical quality of water in the headwaters of the Price and San Rafael river basins is excellent", eliminating the reference to downstream users.

Uses of water in the vicinity of the permit area and downstream are discussed in Section R614-301-724.100 of the permit and in Appendix R614-301-722.100c. The statement found within Section R614-301-624.100 that the primary use of hydrologic resources around the permit area is for watering stock and wildlife is correct.

R645-301-713. Inspections.

The statement "All sediment ponds will be inspected annually by a certified professional engineer and a certified report of such inspection will be provided to the Division and a copy will be retained at the mine office." has been inserted into Section R614-301-713 of the permit.

R645-301-742. General.

- 1) As described in the PHC section of the permit, mine dewatering in the permit area has the potential for transferring ground water from the Huntington Creek drainage into the Mud Creek drainage. Any significant quantity of water transferred from the Huntington Creek drainage will be discharged through the Belina mine portal into Whisky Creek in the Mud Creek drainage. The water discharged through the Belina portal is developed within the mines from various locations and includes water which would have naturally flowed through time into both Huntington and Mud Creeks. Water diverted in this manner from Huntington Creek is not recovered downstream within the same drainage basin from which it was taken, but it is rather discharged into the Mud Creek drainage. The percentage of water discharged at the Belina portal that may have originated in the Huntington Creek drainage is difficult to quantify due to the high variability of mine inflows. However, the percentage of mine inflow originating from the Huntington Creek drainage could be roughly estimated based on the percentages of coal production on either side of the groundwater divide. A comparison of the mine inflow rates with coal production rates at the Skyline Mine, adjacent to the permit area, has shown that the mine inflow is roughly proportional to the coal production.

Thus, the predicted trans-basin impact is an increased flow in the Mud Creek Drainage as mine dewatering occurs and a decrease of flow in the Huntington Creek drainage. Because of the lag time effect of routing in the aquifer, the effects in the Huntington Creek drainage will be spread out over a long period of time lessening the impact of any flow reduction in Huntington Creek.

At present there is no groundwater discharge from the Belina Mine so there are no trans-basin impacts. The applicant will continue to monitor the Belina Mine discharges.

- 2) The text of the permit within Section 525 has been updated to state that the operator will restore to the extent physically and economically feasible the original stream channels of intermittent and perennial streams within the permit area that may be disturbed by underground coal mining activities, including surface subsidence effects.

- 3) The letter from the BLM Moab District dated October 26, 1991, indicates that a 250 ft buffer zone is required on both sides of Boardinghouse Creek. This buffer zone is provided for Boardinghouse Creek as shown on Map R614-301-728.100a. Overburden thickness in the Belina No. 2 Mine at Boardinghouse Creek is approximately 250 feet thick. With 250 feet of overburden and a 35 degree angle of draw, a buffer zone about 175 feet wide on both sides of Boardinghouse Creek is needed for protection of the stream bed. The 250 foot wide zone that is presently designated in the permit provides an 75 feet of additional buffer to the stream bed than is required base on a 35 degree angle of draw.

Map R614-301-728.100a has been updated to clarify the potential fault influenced angle of draw over Boardinghouse Creek in the Belina No. 2 Mine area. This clarification has been made by indicating that the area beneath Boardinghouse Creek will be "Room and Pillar" mined only without pillar recovery.

- 4) The text of permit Appendix 724.600 has been updated to state that only room and pillar mining with no pillar recovery will be used in the buffer zones beneath perennial streams as defined on Map R614-301-728.100a. The pillars that will be left in the buffer zones beneath perennial streams will measure approximately 60 feet by 60 feet with a span between pillars of about 20 feet.
- 5) Only one of the three springs (S31-13) was chosen for inclusion in the water monitoring plan because of the proximity of all three springs. Including all three springs in the monitoring program would have resulted in unnecessary effort because it appears that all three springs are associated with the same groundwater source and have the general same recharge area. It is believed that the potential for any individual spring to be affected differently by subsidence is insignificant. As a result, a representative spring has been chosen from the group for inclusion in the monitoring program. This method of sampling station selection is consistent with the approach used to select other springs for the monitoring program.

R645-301-724.320. Climatology.

Response to this comment was made previously in Section R645-301-724.400 above.

R645-301-750. Performance Standards.

Retaining the 9 inch criterion is important because it provides an objective measurement for determining excessive erosion. The lack of an objective criterion opens the way for disagreements, inconsistencies, and abuses by the regulator and/or the operator. If an objective criterion is established then there is no argument or disagreement between the inspector and the operator. Inspection becomes an objective matter of measurement not a matter of opinion which may be argued and taken to conference wasting valuable resources of both the Division and the operator.

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There may be concern by the Division that establishing an objective criterion for erosion would not allow administration of the regulations, however it is not believed that adopting an objective criterion will render any of the regulations unenforceable. The benefits of maintaining an objective criterion within the permit appear to far outweigh any reasons for removing it from the permit. Valley Camp would welcome any alternative reasonable criteria which the Division feels might be more appropriate.

R645-301-722.300. Monitoring Stations.

The explanation for no longer sampling station W19-1 has been added to Table R614-301-722.300b.

R645-301-731.521. Gravity Discharges.

There are no gravity discharges from the Belina Mines. Water flowing from the 6 inch bypass line has been pumped from abandoned sections of the mine. However, to address concern expressed regarding the bypass discharge see the response to R645-301-724, Deficiency 2, above.

R645-301-742.240. Exemptions.

Deficiency 1

The discussion related to ASCA's has been moved from Section R614-301-742.240 to Section R614-301-751 as requested.

Deficiency 2

The statement related to the collection of water quality samples for Alternate Sediment Control Areas has been modified slightly to reiterate the applicants position. If the Division feels differently, the applicant welcomes the Division to demonstrate how "accurate", "on site" seasonal sampling can be accomplished within the Mine Permit Area sufficient to meet the monitoring request. In response to deficiency 1, this modification is now found at the end of Section R614-301-751.

Deficiency 3

Table R614-301-742.240d (now Table R614-301-750d) has been corrected to clarify the locations of the sediment control devices identified. Major sediment control structures are shown on the map as appropriate, however, some of the other facilities such as straw bales and straw pits are not shown on the map. These devices are not shown on mapping because of the continued modifications to permit mapping that would be required whenever ditch maintenance improved performance by moving a device. Table R614-301-750d provides a verbal representation of the location of all facilities which will clarify many of the concerns raised in the midterm response. See Section R614-301-750 thru 301-755 for further discussion.

Deficiency 4

The design of Ditch 44B was completed during the period of time when SAE's were allowed under the regulations. Since the regulations have changed, SAE 7 has been incorporated into ASCA 6. Calculation details for Ditch 44B have been corrected to show that the tributary drainage includes a portion of ASCA 6 instead of SAE 7.

R645-301-724.240. Diversions.

Comment was made in the analysis portion of this deficiency regarding culvert C-20B-24 which could not be found within the permit or its appendices. Culvert C-20B-24 was installed by, and is maintained by the railroad and therefore is not the responsibility of Valley Camp of Utah. The location of Culvert C-20B-24 is shown on Map 731.720a.

Deficiency 1

Minimum ditch design criteria have been provided as requested in Appendix 742.310 for convenience ditches and those defined as using a general design. As was indicated by the general design, all convenience ditches and general design ditches require less than a 1.0 foot channel depth with freeboard. The text found within Section R614-301-742.310 has also been changed to indicate that depth and velocity calculations are provided as required.

Deficiency 2

Many of the calculations which show or indicate that the channel or culvert outlet should be monitored and repaired as necessary do not require riprap according to one of two methods for which they were evaluated. The first method used involved the use of the "Urban Storm Drainage Criteria Manual" developed by the Denver Regional Council of Governments. Using their methodology, it was found that lining is not required for velocities in erosion resistant soils less than 7.7 feet per second. Many of the culverts for which previous calculations showed that a lining should technically be provided, but yet did not experience significant erosion without a lining, were found to have velocities less than the 7.7 fps limit. These calculations were changed to show that lining is not required based on the referenced manual.

The second method used was the EPA method for the design of discharge pads from culverts (shown as Figure I-15 in the calculations). In many instances the flow rates determined for a culvert were too small to show on the figure thereby indicating that lining protection is not applicable to the installation.

The application of these two design criteria has clarified and simplified the calculations shown in the appendices. For example, some culverts which showed a previous need for outlet protection when no erosion has historically been noted now show that lining is not required. These textbook evaluations now show more consistency between field conditions and previous design evaluations.

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When neither of the two limiting conditions apply, riprap was sized for the culvert installation. Information and calculations related to the 10 year, 6 hour runoff event for culverts C-19-48 and C-20-48 are found within Appendix R614-301-742.310. Information related to these culverts for the 100 year, 6 hour runoff event which applies to reclamation is included within Appendix R614-301-760.

R645-301-760 to R645-301-764. Reclamation.

Deficiency 1

As requested, Section 760 of the permit has been modified to reflect the fact that culverts will be removed unless approval for their retention is given by the regulatory agency. The culverts recommended for retention are commensurate with post mining land use as required under Section 410 in that 1) the VALCAM culverts are required for continued use of the railway by the railroad company, 2) the culverts used by the office facilities will continue to be needed to control surface runoff and 3) the Eccles canyon culvert is currently used by UDOT for a highway turnaround point.

Comment was made by UDOGM related to culvert C-25-36 located at the "bowl" in that it "must be removed or properly backstowed". Culvert C-25-36 is to be removed and replaced with Reclaimed Channel R-4 upon reclamation as shown on Map 760b and as discussed in the text.

Deficiency 2

All culverts to remain through reclamation are shown on the appropriate maps by using a bolded, not a screened culvert number. For example, Culvert C-18-21 identified on Map R614-301-760a is screened thereby indicating removal upon reclamation. Culvert C-15-24 on the other hand is bolded indicating that the culvert will remain through reclamation. A slight change to the text has been made within the first paragraph of Section 760 in response to this comment.

Deficiency 3

It is currently proposed by Kanawha and Hawking Coal and Coke Company to continue to utilize the office and associated facilities west of the VALCAM Loadout as their intermountain office. Upon reclamation therefore the post mining land use will be formally declared as continued office facilities. Given this declaration, culverts C-19-48 and C-20-48 have been designed to pass the 10 year, 6 hour runoff event as required. This correction resolves any inconsistency in the calculations which might have been noted.

Thank you for the opportunity of working with you on this important project. Should you have any questions, please call.

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NEW SECTIONS

R614-301-112.100.

The list of officers and directors for the companies shown below have been revised using redline/strikeout.

Quaker State Corporation

Valley Camp Coal Company

Valley Camp of Utah, Inc.

Kanawha & Hocking Coal & Coke Company

R614-301-113.300. through 301-113.350.

To update R614-301-113 Violation Information., page 18?? of this section, these additional violations were added.

35. NOV No. N89-28-9-1 1 of 2 and 2 of 2
36. NOV No. N89-28-6-1 1 of 1
37. NOV No. N89-12-1-1 1 of 1
38. NOV No. N90-13-2-1 1 of 1
39. NOV No. N90-28-4-1 1 of 1
40. NOV No. N91-15-1-1 1 of 1
41. NOV No. N91-38-1-1 1 of 2 and 2 of 2
42. NOV No. N91-39-6-1 1 of 1
43. NOV No. N92-39-4-1 1 of 1

This update necessitates adding an additional pages, please note that fact while reviewing this section.

R614-301-220. Environmental Description.

The statement "The Valley Camp of Utah, Inc., Mine Permit Area consists of about six and one-half square miles of land situated in the Wasatch Plateau of Utah astride the Carbon-Emery county line. The property straddles the divide between the headwaters of Huntington Creek on the west and Pleasant Valley on the east. Elevations vary from a low of about 8000 feet in the Pleasant Valley drainage to a high of near 9800 feet on the divide crests. Canyon slopes are steep with rounded summits, and are vegetated." has been added.

R614-301-231.100.

This part of the section was inadvertently entered out of order in the last submittal and has been reinserted in its correct order, it should have occurred on the previous page of the Section. Please note during your review.

Portions of the statement concerning the proposed on site field trial have been stricken and inserts have been made relative to said subject. Also inserted is a statement of Post Mining Land use for the office area.

R614-301-231.200.

The statements in this part "There are no plans at.....have been identified as:" has been revised and now states "There are no plans to obtain topsoil or substitute topsoil from an off-site source. The existing disturbed slopes vacant of topsoil or substitute topsoil, which have been previously revegetated, do reflect the growing properties of the exposed subsoil strata and conversely indicates no incompatible soil characteristics. Additionally, natural revegetation is occurring on all disturb area slope planes. It is Valley Camp's position, since this phenomena has taken place and continues to transpire, the disturbed area fill materials clearly meet standards set forth for a Vegetation-Supporting Material. During reclamation the excavated materials will theoretically return the soils to the cut areas in the reverse sequence of the original excavation sequence. Harvesting the materials under this concept would place them last or at least intermingle those soils (pre-law top or upper soils) with the previously downcast materials, improving the soil characteristics of the vegetation-supporting material."

NOTE:

Since the inception OSM/UDOGM, reclamation criteria for soil and vegetation suitability requirements continually deviated and at this time OSM has yet to determine an admissible reclamation suitability criteria. The uncertainty of OSM/UDOGM has compelled Valley Camp to submit four separate reports (EPS, Inc., Cedar Creek Associates, Morrison Knudsen Co., Mt. Nebo Scientific), to meet the regulatory requirements and has in the past apparently collectively these efforts undertaken previously, now fail to meet certain Divisional criteria.

In that light, Valley Camp will retain the EPS, Inc. and the Cedar Creek information in the text, but has removed the Morrison-Knudsen Company and Mt. Nebo Scientific Studies from the text and will only preserve the study in the appendices to demonstrate an ongoing endeavor to comply. At the Divisions request, when weather permits, in early 1993, Valley Camp has solicited the Carbon County SCS office and they have so agreed, to evaluate site specific conditions and make a determination if a soil survey would be needed at this point in time to determine suitability of the disturbed area soils. If the SCS deems a survey is necessary, Valley Camp will furnish the SCS office with a mylar positive of map R614-301-233, Sheets 1 through 4, Titled: SCS Disturbed Area Soil Survey, (scale 1"=100') to depict and describe their survey and results thereof. Upon SCS completing the project, results will be submitted for inclusion in the Reclamation Plan and appendices, with an additional copy in the "Annual Summary."

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R645-301-529.200. Temporary Sealing of Mine Openings.

The statement "Any mine opening which is temporarily inactive will be properly guarded so as to prevent access into the opening and posted to identify the hazardous nature of the opening. The devices will be periodically inspected and maintained in good operating condition by Valley Camp." has been changed to "Any mine opening which is temporarily inactive will be properly guarded as per MSHA Statutory Provisions of the 30 CFR Chapter 1, Subpart R-Miscellaneous, 75.1701 Abandoned areas, adjacent mines; drilling of boreholes Sealing of mines."

R614-301-531. General.

The statement "see Hydrology R614-301-700." has been changed to "See Hydrology R614-301-733.130 and 742.221."

R614-301-536.100. Disposal Facilities.

The statement "Should a disposal facility be needed..., stability of existing foundations and or abutments, no weak zones, or groundwater effects upon the facility." has been changed to "Should a disposal facility be needed..., stability of existing foundations and or abutments, weak zones, or groundwater."

R645-301-537.200. Regrading of Settled and Revegetated fills to Achieve Approximate Original Contour.

Inadvertently, Map R614-301-820.110 was never completed, but is included in this review as Map 521.150 Sheets 1 and 4. The sole purpose of these maps is to exhibit categorically, areas which are revegetating naturally.

Sincerely,

VALLEY CAMP OF UTAH, INC.

by:



Steven K. Tanner
Environmental Coordinator

HANSEN, ALLEN & LUCE, INC.

by:



David. E. Hansen, Ph.D., P.E.
Principal