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ROUTE



Southern Utah Fuel Company

P.O. Box P
Salina, Utah 84654
(801) 529-7428



Division of
Coastal States
Energy Company

February 6, 1979

ACT/041/002

Tom,
Is your letter done on this yet?
RW
Yes, it is now routing for comment
AS
file SUFCO CONSULTATION CYN MINE. RW

Murray Smith
Federal Lands Coordinator
OSM Room 292 Post Office Building
1823 Stout
Denver, CO 80202

Dear Mr. Smith:

The enclosed Waste Disposal and Drainage/Erosion Control Plan is submitted as an addendum to our 1977 Mining Plan, which was submitted to you in November 1978. This addendum is submitted to fulfill the further mining requirements of the SMCRA regulations as proposed by the Office of Surface Mining on September 18, 1978. In addition, the enclosed 16 x 20 color prints of our mine are provided to aid in your review of our situation.

This addendum is provided in advance of the OSM's formulation of specific criticisms of our U.S.G.S. approved Mining Plan due to the extreme urgency for OSM plan approval. As you know, it is imperative that we receive permission to enter our new adjacent lease from our present underground workings in March to avoid serious production cut backs. It has been Denver OSM's position that acceptable plans to modify the present surface usage is required in order to grant this permission.

Due to limited manpower, your office has not been able to provide a written critique of our mining plan to allow us to correct specifically designated deficiencies. Hopefully, this submittal correctly anticipates the deficiencies so that the plan can be approved this month.

It is my understanding from our conversation on the telephone, that one of the additional problems causing delay in mining plan approval has been in the review of it's hydrological monitoring plan. OSM employs two hydrological consultants for this purpose and they have both been unavailable to OSM recently for various reasons. We believe that there are more than two of these consultants in the Rocky Mountain area which would be acceptable to OSM. This letter reiterates our offer to pay the fees of a hydrologist of your choice if such action is necessary to have our plan reviewed prior to March 1st.

I have truly appreciated your conversations on the telephone regarding review and approval of our mining plan and this addendum. However, we are

Murray Smith
February 6, 1979
Page 2

now desperate to extend our working into our new lease. Your efforts to have our plan reviewed for approval quickly are appreciated. We are more than willing to comply with the law.

Yours very truly,



Kerry A. Frame
Chief Engineer

mll

Enclosures

xc: Donald Crane, Regional OSM Director
Tom Gambill, Vice President Mining, Coastal States Energy
Vernal J. Mortensen, Vice President, Southern Utah Fuel Company
Ronald Daniels, Utah Division of Oil, Gas and Mining
Richard Allred, District Ranger, Fishlake National Forest

SOUTHERN UTAH FUEL COMPANY

Mining Plan Addendum for a
Waste Disposal and Drainage/Erosion Control Plan

February 5, 1979

Southern Utah Fuel Company's mine number one is located in East Spring Canyon which feeds south into Convulsion Canyon. Mud Spring Hollow, an intermittent tributary to East Spring Canyon, and the normally dry East Spring Canyon converge at the mine facilities location. The mine facilities are built upon cut and fill excavations which have been established since mining commenced in 1941. As mining has progressed, waste rock from the mining process has been dumped over the fill-face for disposal. This has gradually extended the mine yard to the south.

In 1976, a 72" drainage culvert was installed to extend upstream from the fill-face to the point where the intermittent stream of East Spring Canyon reaches the disturbed mine area. Mud Spring Hollow drains into a similar, but 48", culvert which ties into the 72" culvert. This culvert system is large enough to permit the upstream run off from a 100 year precipitation event to by-pass the mine site without picking up any sediment from the disturbed mine facilities area. The culvert discharges at the interface between the canyon wall and the fill-face at a location which permits the water to flow over natural canyon terrain rather than the softer fill material.

In 1977, a berm was built along the crest of the fill in order to prevent precipitation run off at the mine facilities from eroding the fill-face. A concrete tank was constructed behind this berm to permit sedimentation of silts picked up by run off in the mine yard. After the settling process, the water must pass through a 5-micron-mesh filtration manifold before being discharged into the above mentioned 72" by-pass culvert.

At this time, therefore, all natural surfaces upstream from the mine site are drained through a by-pass system past the disturbed surfaces. All drainage from disturbed areas upstream from the berm are treated for sediment removal prior to discharge into the by-pass system.

Public law 95-87 was passed in August, 1977 requiring the following additional provisions in order to prevent erosion of the fill-face and for disposal of waste rock from the mine in compacted lifts. The plan is illustrated on the attached drawings numbered 111, 112, 113, 114, and 115. These drawings show the present situation, the proposed measures to correct any potential for erosional damage from the fill, and the waste rock disposal plan.

The bottom of the fill consists of large boulders which have rolled considerably further down the canyon than the finer grained material. This is due to the narrow "V" shape of the canyon bottom and the natural size segregation which has occurred during the waste rock disposal process over the years. The U.S. Forest Service considers that these boulders form a "French Drain" which also locks the fill toe into the cliff niches in the canyon bottom.

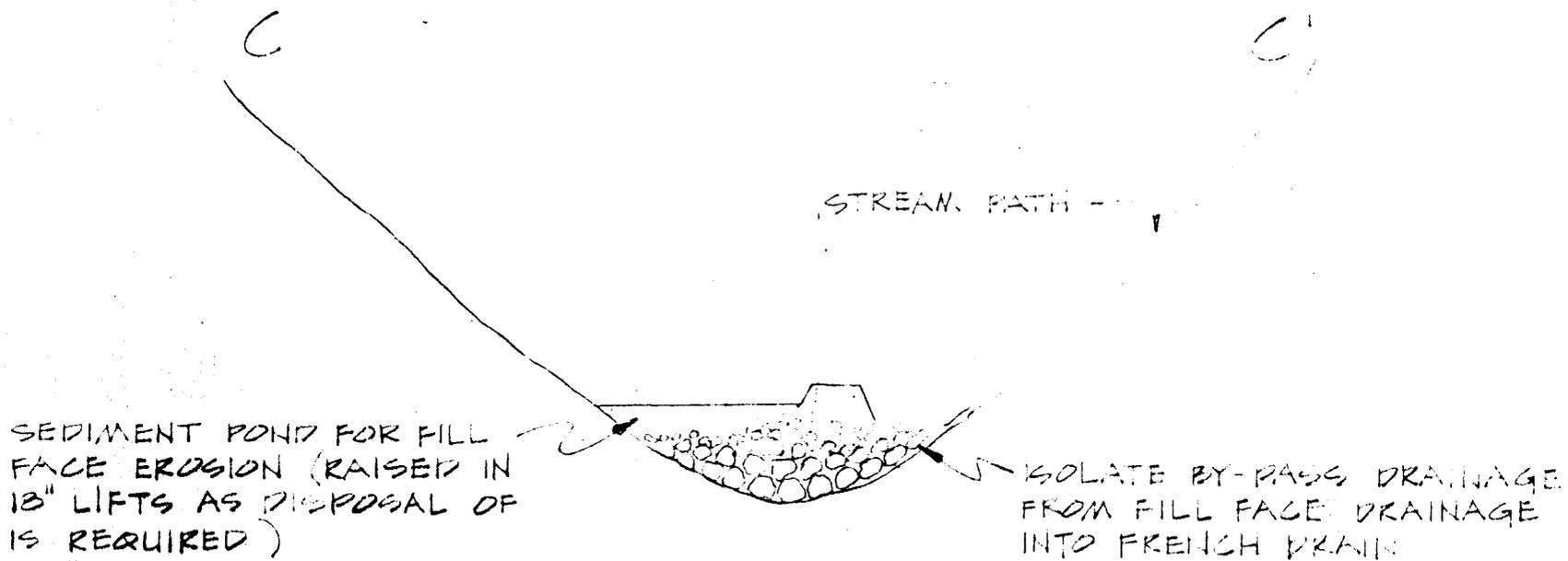
It is proposed to use the east side of this drain as a conduit for the upstream by-pass water and to construct a sedimentation pond on the west side of the top of the boulders. The outer face of the compacted sedimentation dam will be planted with erosion preventing vegetation. The abandoned dozer ramp extending from the guard shack down to the toe of the fill will be re-established to permit dozer access for the construction of the pond site and for waste disposal compaction over the life of the mine. Material for construction will be obtained from the flattened fill toe area. Additional material, which will be dumped down the face in a controlled manner, may be required to complete the construction. The pond will have an initial holding capacity of 0.5 acre feet which is 0.4 acre feet more than required under the law for the 1 acre area of the fill face. Run-off water from the fill-face will collect in the pond, solids will settle onto the waste, and the water will percolate through to the French Drain. Waste rock will be dumped down the fill-face into the normally dry bottom of the pond area and will be spread

111, 112, 113, 114, 115

and compacted with a dozer in 18" lifts. When the available volume is reduced to 0.2 acre feet after 0.3 acre feet of waste material disposal, the dam will be raised in keyed and compacted lifts to increase the available sedimentation and disposal volume to at least 0.5 acre feet again. The outer surface of the dam height extension will also be seeded.

It is estimated that this construction process will provide more than enough waste disposal volume for the life of the mine. It will also permit Southern Utah Fuel Company to avoid damage to the downstream bottoms of the canyons by eliminating the need for a waste disposal haulage road (which would have to come up from Convulsion Canyon) and by minimizing the required sedimentation pond dam size.

In addition to upstream by-pass water, the 72" culvert carries excess mine water discharge which is pumped up into the East Spring Canyon culvert entrance. This point source discharge is monitored for flow rate and chemical analysis. As stated elsewhere in the mining plan, additional hydrologic monitoring stations, designed by WESTEC, will be installed downstream in Convulsion Canyon.



CROSS-SECTION C-C

SOUTHERN UTAH FUEL CO.
 TITLE: CROSS-SEC. FRENCH DRAIN
 SCALE: 1" = 20' DATE: 1-23-79
 DR. NO. 115 DR. BY: ERS.
 SHEET 3 OF 3