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United States
Department of
Agriculture

Forest
Service

Manti- La Sal
National Forest

Supervisor's Office
599 West Price River Drive
Price UT 84501
Phone # (435) 637-2817
Fax # (435) 637-4940

WATER

File Code: 2820-4

Date: June 11, 1999

Ms. Mary Ann Wright
Utah Division of Oil, Gas and Mining
1594 West North Temple
Salt Lake City, Utah 84114

Dear Mary Ann:

This letter is a request for mine permit action by the Utah Division of Oil, Gas and Mining (UDOGM) at the Canyon Fuel Company, LLC SUFCO Mine and to ensure coordination between our agencies regarding water replacement/mitigation.

Mining in the Quitchupah Lease (UTU-63214) by Canyon Fuel (SUFCO Mine) has subsided a number of stock ponds. Two of these ponds will not hold water consistently due to cracking caused by mining-induced subsidence. An attempt was diligently made by Canyon Fuel to seal Rock Pond (summer 1995) and Johnson Pond (summer 1997) using bentonite clay during the summer immediately following the damage; bentonite was also placed in the cracks directly uphill of the Rock Pond, where they were visible through the thin soil mantle, in an attempt to repair the catchment area for Rock Pond. Water was hauled during 1995 and 1997 but because of the rotation of the cattle out of the unit, was not required in 1996 or 1998. Water hauling and water replacement occurred only in Johnson Pond in 1997 but was not effective. The amount of water hauled was not sufficient to offset seepage into the ground and overuse because one of the other major historic water sources in this grazing unit (Rock Pond) was dry.

During the last couple of years, range permittees and Forest Service employees have been monitoring the effectiveness of this repair. Unfortunately these ponds no longer hold water consistently. Other ponds in the area have been observed to be full or near full even during low precipitation years, such as this past winter, whereas the Johnson and Rock Ponds have been found to be dry. Canyon Fuel will need to propose another plan to UDOGM and Forest Service for more comprehensive repair in the long-term, in order to meet the requirements of the water replacement stipulation on their lease and Mining and Reclamation Plan.

The affected area has a number of ponds which are required to maintain proper distribution of cattle across the range allotment units. Johnson and Rock Ponds are very important ponds for one of those grazing units. Until such time as the repair has been deemed successful, the mine will need to install stock troughs in areas identified by the Forest Service (range specialists) and haul water to meet the needs of the range permittees and to maintain proper distribution of the cattle in the unit.



Ms. Mary Ann Wright

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A report which describes the impacts to the ponds and measures which have been taken for mitigation is enclosed for information. If you have any questions, please contact Jeff DeFreest or Carter Reed at the Forest Supervisor's Office in Price.

Sincerely,



DONALD G. FULLMER
Acting Forest Supervisor

Enclosure

cc:

Jeff DeFreest, Ferron-Price Ranger District, Minerals
Sandy Kaminski, Ferron-Price Ranger District, Range
BLM, Price Field Office
Ken May, SUFCO Mine



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Ferron/Price Ranger District
Ferron Work Center
115 West Canyon Road
P O Box 310
Ferron UT 84523
Phone # (435) 384-2372
Fax # (435) 384-3296

File Code: 2820
Route To:

Date: 14 December 1998

Subject: Ponds & Mitigation: Quitchupau Lease Tract

To: Liane Mattson, IDT Leader

The subject lease tract, adjacent to the Pines Tract, has had numerous subsidence related problems, all of which have been mitigable to date.

Rock Pond:

In the spring of 1995 undermining and subsidence of what became known as "Rock Pond" caused surface cracks which apparently allowed the water to drain from the pond, and possibly its (snow) catchment area. Cracks in the bedrock, uphill of the pond may have been hidden from view under the thin soil mantle there, and yet prevented melt-water from reaching the pond.

The SUFCo Mine was contacted and "replaced" water for livestock needs for a couple of weeks in late June/early July of 1995, until the cattle rotated out of the Wildcat Unit around the 4th of July weekend. According to the Range Specialist at the time, Larry Mickelsen, the mine hauled water for a couple of weeks to two different ponds. When Larry contacted the cowboys and their herder about it, they were "satisfied with the effort".

In April 1996, the ponds were found to be dry once more. The Wildcat Unit was in a rest-rotation for the season, so livestock watering was not a critical issue. The mine was contacted and a plan devised to seal the pond and visible cracks with bentonite clay. In June 18 & 20, 1996, 2.6 tons of Bentonite was placed in Rock Pond, and about 400 pounds poured onto the cracks visible in the bedrock uphill of the pond.

Mr. Staley of the Emery Stock Growers Assn. commented at a public meeting that neither the Forest Service nor the Mine had done anything at the Rock Pond in the Wildcat Unit. I publicly stated that the sealing work had been done.

Later in the year (1996) Mr. Staley again stated at a public meeting that nothing had been done, and as I recall, I again stated the bentonite had been placed, and I think I presented him with photographs from the June placement (as witnessed by Angela Coleman, seasonal FS employee).

On January 21st 1997, we met with the cattleman at the Forest Service Office in Ferron, and Mr. Staley apologized, and verbally conceded that the benonite placement had been done.



In the spring of 1997, the pond was again found to be dry, as witnessed by Rusty Lee, in his report dated April 30th.

On May 19th 1998 Rock Pond was found to be low, and its likely the bentonite treatment has not been completely successful, though the "healing" process should continue. Later in the 1998 field season, with abnormally high rainfall during the summer, the pond was found to be holding some water during September and October.

Johnson Pond:

On April 30th 1997, Johnson Pond was also found to have an abnormally low water level, and a joint in the rock opened to about 1 inch. In a letter dated May 16th 1997, SUFCo committed to performing a benonite treatment on that pond as well. (SUFCo referred to it as Jensen Pond in the letter; the current Range Specialist, Sandra Kaminski informed me there is no Jensen Pond)

On June 12th 1997, Bob Thompson reported that he'd seen the mine hauling water to Johnson pond in preparation for the livestock to be moved into the area, and he also stated there was evidence of the bentonite having been placed.

Johnson Pond was found to be holding water during 1998, although the level was somewhat low throughout the year.

Box Pond:

Box Pond is a large pond serving three grazing units; Wildcat, The Pines, and Greens/Cowboy. The catchment area to this pond was undermined during the last few years and two "sag ponds" developed up hill of the Box Pond. There was a concern over the water being impounded before reaching the Box Pond where it was needed to support the 3 grazing units on rotation. During the summer of 1997, the lower of the two artificial ponds covered the Forest Development Road, and as the subsidence wave continued into 1998, the road prism eventually was raised above the water level of the sag pond.

The catchment area and flow toward Box Pond was not interrupted, and there was sufficient water reaching the pond to support the livestock throughout this sequence.

Box Pond was undermined/subsided during the summer of 1998, and the SUFCo Mine has been monitoring it closely. Initially they were to mitigate the potential for leakage, by placing bentonite in the pond. There was discussion of draining the pond, in order to dig it deeper and to disk in the bentonite, to better seal any potential cracks.

Mining commenced, and the pond held water throughout the year. A crack developed along the access road, but there is no noticeable water loss from the ponds bottom. The dam itself was lowered in the subsidence, and was built up by SUFCo in late November (1998), at the request of the Forest Service and the range permittees. It was decided not to drain the pond to dig it deeper and treat the bottom because it is apparently not leaking, and the disturbance may cause it to leak. The mine has agreed to make any repairs if a problem does develop.

One concern has come up relative to the depth of the Box Pond. The dam seems to have been lowered, perhaps more than the bottom of the pond, thereby reducing its capacity (volume). There may be a need to haul water next year if the volume of water is not sufficient to support the livestock. In the long term, if the subsidence wave doesn't lower the center of the pond proportionally, there still may be a need to have the mine dig it deeper.

Please let me know if you need greater detail in any of the above listed accounts. I will keep you posted on further developments.

Sincerely,

J. Wade DeFreest
Ferron-Price District Geologist



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File Code: 2210 Emery C&H /2800

Date: May 17, 1999

Subject: Water Needs in Wildcat Knolls Unit

To: Jeff Defreest, Geologist

The Wildcat Knolls unit of the Emery Cattle Allotment is scheduled for use this spring. Both Johnson and Rock Ponds were dry on April 27 when inspected by John Healy, Sandra Kaminski and Stan Anderson. Based on the amount of precipitation we have received and water levels of some of the other ponds in the area, Rock Pond and Johnson Pond should have water in them. Verduses Pond was approximately half full indicating there was adequate precipitation to put water into the ponds. Other ponds in the area are low but do have water in them. The SNOWTEL report for the Dills Camp station has been within 60 to 70 percent of average until May when it was up to average for snow water equivalent and total precipitation.

Cattle are scheduled to be in the Wildcat unit from June 18 through May 5. In order to achieve proper livestock distribution water will need to be hauled to a location mid way between Johnson Pond and Rock Pond in section 28 T21S R5E (see attached map). If cattle are properly distributed we would expect one third (462 head) of the herd to be in this area, a cow drinks approximately 20 gallons of water a day, this would require around 9, 250 gallons of water per day at this watering location. The amount of water needed each day may vary based on actual distribution of livestock and weather conditions. Two years ago water was hauled to and placed in Johnson Pond, this did not work well and did not provide for distribution into the Rock Pond area. Placing two or three water troughs, that hold at least 500 gallons, at the above location would be needed. Water would need to be kept in these troughs at all times to keep cattle distributed into this area. If cattle come to the troughs to drink and there is no water they will move to an area where there is water. This would result in overgrazing of portions of the unit where water availability is constant and increased trailing impacts as livestock are redistributed.

/s/ Sandra Kaminski

SANDRA KAMINSKI
Range Management Specialist





Canyon Fuel Company, LLC
SUFCO Mine
397 South 800 West
Salt Lake, Utah 84654
(435) 637-4880 Fax: (435) 636-4499

July 28, 1999

Mr. Jeff DeFreest
U.S. Forest Service
Manti-LaSal National Forest
599 West Price River Drive
Price, UT 84501

Dear Mr. DeFreest:

Johnson and Rock Stock pond 1999 water haul activity. Forest Service requested SUFCO to provide water troughs with a 500 gal capacity to be located between Johnson and Rock ponds in Section 28, T21S, R5E.

SUFCO WATER HAUL

- June 15, 1999 Took two water troughs (700 gal and 225 gal) up and placed them between Johnson and Rock ponds. (Total trough capacity 925 gal) Filled troughs and left water truck full of water. (2,400 gal hauled)
- June 17, 1999 Took two more 225 gal troughs to area. (Total trough capacity 1375 gal) Filled them and left water truck full of water. (450 gal)
- June 20, 1999 Hauled 3 loads water to troughs. (4500 gal)
- June 21, 1999 Took two more 700 gal troughs to area. (Total trough capacity 2775 gal) Hauled 3 loads water. (4,500 gal)
- June 22, 1999 Hauled 2 loads water. (3,000 gal)
- June 23, 1999 Hauled 3 loads water. (4,500 gal)
- June 24, 1999 Hauled 2 loads water. (3,000 gal)
- June 25, 1999 Hauled 3 loads water. (4,500 gal)
- June 26, 1999 Hauled 1 loads water. (1,500 gal)
- June 27, 1999 Hauled 3 loads water. (4,500 gal)
- June 28, 1999 Hauled 7 loads water. (10,500 gal)
- June 29, 1999 Took three more troughs out to Dry Point pond area at request of range rider to help keep cattle in this area. (1-700 gal and 2-500 gal) (Total trough capacity 4475 gal) Hauled 8 loads water. (12,000 gal)
- June 30, 1999 Hauled 7 loads water. (10,500 gal)
- July 1, 1999 Hauled 6 loads water. (9,000 gal)
- July 2, 1999 Hauled 7 loads water. (10,500 gal)
- July 3, 1999 Hauled 6 loads water. (9,000 gal)
- July 4, 1999 Hauled 7 loads water. (10,500 gal)
- July 5, 1999 Hauled 5 loads water. (7,500 gal)
- July 6, 1999 Hauled 6 loads water. (9,000 gal)

Total of 121,350 Gallons of water were hauled to Stock Pond area.

Sincerely,
CANYON FUEL COMPANY, LLC
SUFCO Mine

Michael L. Davis,
Environmental & Construction Supervisor