0055

file ACT/015/018 #2

utah power
& LIGHT COMPANY
MINING DIVISION
P.O. Box 310
Huntington, Utah 84528

Courtesy copy from Dave Smallone 1/10/89

January 3, 1989

Mark T. Ellis
UST Manager
Bureau of Solid and Hazardous Waste
288 North 1460 West
P.O. Box 16690
Salt Lake City, Utah 84116-0690

RE: Removal of UST at UP&L Mining Division's Deer Creek Mine Site

Dear Mr. Ellis:

On December 6, 1988, after applying for an interim UST certification, UP&L Mining Division started removal of three tanks from the storage yard area of the Deer Creek mine site, southwest of the Huntington Power Plant. Soon after initiating the excavation, we noticed a gasoline odor in the soil. From the small excavated area, the operator removed five - 55 gal drums, one of which was full. The other four drums were crushed and the amount of product in them, if any, is unknown. The contents of the full drum was hydraulic oil. This area had previously been used as a storage area. (See map attachment, Plan View, Sample Area December 6, 1988) We collected five soil samples from this area and mailed them to be analyzed. We also at this point contacted David Ariotti, Department of Health in Southeastern Utah, reporting to him that we had found contaminated soil in the excavation, and was sending it to be analyzed and would continue to dig until we felt good about the soil. We would at that time pull other samples and fill in the hole if the second samples' results were good. The soil samples and all samples analyzed were tested for Total Petroleum Hydrocarbons (TPH), BTEX, and EP Tox Metals.

We continued digging, looking closely for areas around the tanks or piping that would indicate a leaking point. The soil was smelling and looking better than the soil sampled on December 6th. The accumulated soil from the excavation was removed from the area because of congestion and anticipation that the samples would prove the soil clean enough to be landfilled and stored in a pile at an approved landfill (Barney Landfill, Orangeville, Ut) until the results from the samples were received. If the lead content was acceptable, the soil would be spread-out and disposed of. The first soil samples' results arrived and were very good, with the lead content being less than .002 ppm and the TPH highest level of 12.65 ppm. (See Attachment 1) With the December 6th results and believing that our highest contamination levels would be around the tanks, we informed the landfill operator to air-out the soil and landfill it.

Excavation of the area stopped when the excavated area had reached the size shown on the map attachment, because the soil didn't have the gas odor any longer and the soil looked clean.

On December 12, 1988, we collected five more samples of the soil for testing. These samples were from the east section of the hole and are labeled 6 through 10 on the map. The results from the analyses are found in Attachment 2. The TPH is very high in some areas and low in others. Looking at the slope of the excavated site; map attachment, Left Elevation View, sporadic concentrated levels are not explainable if the contamination source was the UST. For example; Why would sample #7 have a higher TPH than #8 and as high as #10 when it is located north of the tanks and the rock slopes south?

An inspection of the tanks and piping was conducted. There were no problem areas around either the tanks or piping. The inspection was thorough and complete and we concluded that they were in sound condition.

On December 15, 1988, five more samples were taken from the west area of the site for analysis. They were pulled prior to receiving the results from the December 12th samples. The December 15th samples labeled #11 through #15 on the map and the analyses results are found in Attachment 3. The analyses show that the highest concentration of TPH is at sample #11 even though it is 15 ft. west of the tanks and slightly north of them. The slope of the rock, in the Left Elevation View of the map attachment, indicates that this area would most likely be one of the cleanest sites rather than the most contaminated.

On December 21, 1988, Mr. Ariotti, Health Department, came to the excavation site with a "sniffer" to check the soil. The "sniffer" had little movement when put in an area that was analytically proven to be contaminated (sample #9). On December 29, in a phone conversation with Mr. Ariotti, he stated that the "sniffer" should have indicated any gas or diesel contamination greater than 10.2 ppm. It would not, however, register much if the "sniffer" was analyzing another petroleum product, such as oil, hydraulic oil, etc.

On December 22, 1988, Lyle Ford, President of Ford Chemical, told us that the extraction from the soil was not gas or diesel, but appeared to be an oil of some type. He stated that at room temperature the extraction could hardly flow. To verify this statement, we collected another soil sample (December 29th), and sent it to Ford Chemical Lab. The results from this sample concluded that the extracted oil was thick and similar in appearance to crank case oil. It had a viscosity of greater than 125 SUF, with a flash point of greater than 300^{o} C. This substantiates his initial statement that the extraction is not diesel fuel due to the fact that the normal flash point of diesel is 140^{o} C. (See Attachment 4) The contaminate, by the results of the BTEX analysis, is already proven not to be gasoline.

The nearest open channel of water is approximately 1700 ft. down the canyon from the UST removal area. We are confident that there is no danger of contamination to the ground water in the area.

More excavation at the site, at this time, is prohibited by the connection box and subsequent power lines from the substation to the mine. Power supply to the mine would be in jeopardy if more digging was done.

During final reclamation of the site, all drainages will be reestablished and any contaminated fill soil in the area will be removed. The reclamation plan is in accordance with our mine permit which is approved by the Utah Division of Oil, Gas and Mining.

As mentioned previously, all soil samples were analyzed for EP Tox Metals. The results, found in Attachments 1,2 and 3, show that all metals tested were at low concentration levels. The analyses show that the contaminated soil is not a hazardous waste.

We feel that the above information is sufficient to show that the contaminated area is not the result of an UST leak nor is it hazardous waste material.

Please inform us as soon as possible as to when we can take action to fill in the excavated area.

If you have any questions concerning this report or the information therein, please contact me at 687-9821 ext. 263.

Sincerely,

Guy Davis

Guy Davis
Associate Environmental
Engineer

GD/do
Enclosures