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DIVISION OF
OIL, GAS & MINING
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Mr. Rick P. Summers
Hydrologist
Utah Department of Natural Resources
Division of Oil, Gas and Mining
355 West North Temple, 3 Triad Center
Suite 350
Salt Lake City, UT 84180-1203

RE: Reduction of Hydrologic Monitoring - Wellington
Preparation Plant

Dear Mr. Summers:

Please find enclosed an application to modify the ground water monitoring for the Wellington preparation plant. The plant has operated under baseline monitoring requirements as outlined in the Division's guidelines. Kaiser Coal is requesting a change from baseline to operational monitoring. This request is in response to the Division's letter dated May *21, 1986.

The Division's concerns regarding surface monitoring should have been addressed by Doug Pearce back in July, 1986. If the Division did not receive this response, a copy will be forwarded to you upon request.

} not found

An annual hydrology report for 1986 will be submitted to the Division no later than March 31, 1987. A summary of the surface and ground water hydrology for the preparation plant area will be addressed.

If you have any questions, please feel free to contact me at the letterhead address.

Sincerely,

James Smaldone
James Smaldone
Mining Engineer

JS/kk
Enclosure

Two sets of well sites have been selected to monitor the refuse pond system. Wells GW-2 and 3 monitor the north end while wells GW-4, 5, and 6 all monitor the south end. Because the diversion ditch acts as a barrier between the upper refuse pond and the undisturbed field, it is unlikely water from the pond will enter the field. Kaiser would like to suspend monitoring GW-1 and GW-2 but continue monitoring GW-3. This would allow continued baseline data for the north end of the ponds.

Of the three wells (GW-4, 5, and 6) located at the south end of the pond system, Kaiser proposes to suspend monitoring of wells GW-4 and 5. Since GW-6 is located down gradient of the slurry ponds, any changes in the ground water would be documented prior to contact with the Price River.

Ground Water Monitoring Frequency

Ground water monitoring will be conducted as outlined in the guidelines for ground water monitoring provided by the Division of Oil, Gas and Mining (revised January 1986). Since two years of baseline data has been collected, Kaiser Coal proposes to continue monitoring on an operational basis. All parameters classified under the "operational" category will be measured.

Because the plant is under temporary cessation, Kaiser also proposes to reduce monitoring to a semi-annual basis.

Conclusion

The ground water monitoring program initiated in 1984 was established to document the rate and quality of ground water in the Wellington prep plant area. It's primary objective has been to monitor any impacts the prep plant may have on the ground water near the plant. From the data enclosed, it is evident that the plant has had no adverse effect on the surrounding ground water.

When operations at the plant are again initiated, monitoring will be conducted on a quarterly basis. All 14 wells will be measured and sampled. All wells will remain in place and well maintained to avoid any disturbance to the hydrologic balance.

Present Ground Water Monitoring Plan

Ground water monitoring for the Wellington preparation plant was initiated in November, 1984. According to the State of Utah Guidelines, regarding ground water hydrology monitoring, two years of baseline sampling are required. Because two years of monitoring have been completed, Kaiser would like to propose an alternative ground water monitoring program.

There are currently 14 ground water wells being sampled on a quarterly basis. The original monitoring plan was designed to correspond to three potential sources of ground water contamination. These sources are:

1. The coarse refuse pile
2. Road and auxiliary pond area
3. Refuse impoundments

The wells have been completed in the alluvium which overlies the blue gate shale.

Alternative Ground Water Monitoring Plan

Because operations have been suspended at the plant, Kaiser would like to reduce the number of wells presently being monitored. The intent of the original monitoring plan will remain the same with fewer wells required for monitoring.

Three wells are being used to monitor the down gradient effects of the coal refuse pile (GW-7, 8, and 9). Because no additional refuse has been hauled to the pile since December, 1985, monitoring well GW-7 would be sufficient to measure any chemical alterations in the pile. Because GW-7 is hydraulically the lowest well, any changes from the refuse pile will be evident at this site.

Two wells (GW-13 and GW-14) located up gradient of the refuse pile should also be deleted from the present monitoring plan. In reviewing the data accumulated since October, 1984, water levels have remained consistent throughout. The major chemistry of the natural ground water is dominated by sulfates and sodium species. High levels of total dissolved solids and electro conductivity is also present. This is a direct result of the formation in which the well is completed.

Regarding the three wells (GW-10, 11, and 12) located around the auxiliary pond area, monitoring should continue for GW-12 only. This well not only monitors any chemical changes in the ponds, but it is useful in documenting the gradient of the water table toward the river. Because no water is presently being run through the wash plant, one well should be sufficient to monitor any changes in water chemistry.