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November 24, 1993

Department of Environmental Quality
Division of Water Quality
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Copy Rudy &
Bill Malencik
File ACT/007/035 #2

Attention: Donald A. Hilden
Mike Herkimer

Subject: UPDES Permit No. UT0024759
UPDES Permit Limit Exceedance
Total Suspended Solids
UPDES Outfall 004
October, 1993 Monitoring Period
Sunnyside Cogeneration Facility
HCN Job No. 5-137.1-91

Dear Mr Hilden and Mr. Herkimer:

The purpose of this letter is to inform you that the total suspended solids (TSS) concentration for the effluent samples collected at the Sunnyside Cogeneration Facility (SCF) UPDES outfall 004 (outfall 004) during the month of October, 1993, are in exceedance of the SCF UPDES permit limits. Huntingdon Chen-Northern (HCN) personnel collected analytical samples from outfall 004 on October 13 and 26, 1993. The TSS concentrations for these sampling events are 115 and 66 milligrams per liter (mg/l). The above referenced TSS concentrations exceed both the UPDES permit daily maximum limit of 70 mg/l and the 30-day average limit of 25 mg/l. Verbal communication with the HCN analytical laboratory in Billings, Montana, indicate the TSS concentrations for the effluent sample collected at outfall 004 are approximately 257 mg/l.

On November 22, 1993, I submitted a letter to you documenting the elevated TSS concentrations in the effluent from outfall 004 for the September, 1993 monitoring period. In that correspondence I indicated the coal fines and accumulated sediment present in the channel that carries the effluent away from outfall 004 may have caused the elevated TSS concentrations for the September, 1993, monitoring period.

Given the pattern of elevated TSS concentrations in the outfall 004 effluent, we are investigating additional factors that may contribute TSS to the effluent. Possible TSS contributors to the outfall 004 effluent include: a leak or defect in the clear water pond discharge piping, allowing water laden with coal fines to enter the effluent stream; a change in the wash down process at the Sunnyside Coal Company mine that may increase the amount of coal fines in the slurry entering the clear water pond; and airborne coal fines (generated via mining of the coarse refuse pile) settling in the outfall 004 discharge ditch and clear water pond.

As stated in the letter dated November 22, 1993, HCN personnel will inspect the clear water pond and outfall 004 during the week of November 29, 1993 to determine if water entering the clear water pond discharge system differs from the effluent leaving UPDES outfall 004. In addition to this inspection, we intend to interview the Sunnyside Coal Company mine-engineering and environmental staff to determine if any changes in the mine slurry have occurred; and inspect the dust-suppression records for the mining activities associated with the coarse refuse pile.

To further evaluate the TSS concentrations in the outfall 004 effluent, and determine if the effluent is impacting the local surface water, we propose the following.

- Increase the collection and TSS analysis of effluent samples from outfall 004 from monthly to twice each month for the months of November and December, 1993.

- Collect effluent samples downstream from the current outfall 004 sampling point, at a location prior to mixing with the local surface water.

- Review the analytical data for water samples collected downstream from outfall 004 at Whitmore Springs and Icelander Creek to check for increases in TSS.

Please note that we will also be collecting the required acute-toxicity testing sample for this quarter during the above referenced site visit.

If you have any questions concerning this letter, please contact me at (801) 972-4787.

Sincerely;

Chuck Wemple
Hydrogeologist

cc Mr. David Pearce, Environmental Power Corporation
Mr. Ed Ghantous, Parsons Main, Inc
Mr. Kendall Reed, Tampella Services, Inc., Sunnyside Cogeneration Facility
Mr. Brian Burnett, Calister, Duncan and Nebeker
Mr. Hugh Klein, State of Utah, Division of Oil, Gas and Mining
Ms. Alane Boyd, Eckhoff, Watson and Preator Engineering
Mr. Pete Hess, Sunnyside Coal Company

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