



The State
of Wyoming



Department of Environmental Quality

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Email followed by U.S. Mail

April 4, 2005

Mr. Gary Janosko, Branch Chief
Fuel Cycle Facilities Branch
Division of Fuel Cycle Safety and Safeguards
Office of Nuclear Material Safety and Safeguards
U.S. Nuclear Regulatory Commission
11545 Rockville Pike
Rockville, MD 20852

Re: Draft Environmental Assessment, Catchment Basin Remediation Amendment Request,
Kennecott Uranium Company, Sweetwater Uranium Project (TAC LU0073)

Dear Mr. Janosko:

The Wyoming Department of Environmental Quality (DEQ), Water Quality Division (WQD) has reviewed the above referenced draft Environmental Assessment (EA). The EA addresses recently discovered contamination in the catchment basin at Kennecott's Sweetwater mill site. The basin has leaked allowing contamination of soil and the near surface aquifer by a variety of contaminants including radiological, inorganic, and organic compounds. Kennecott is proposing to excavate the contaminated soil, dispose of it in to the facilities tailings impoundment, and initiate a groundwater recovery system to contain and remediate the groundwater plume. The recovered groundwater will also be placed in the tailings impoundment. We have a few comments on the draft EA as follows:

1. Because the primary organic contaminant at the catchment site is kerosene, the soil excavation under and around the catchment basin will use the WDEQ soil clean up standard for total petroleum hydrocarbons, diesel range organic compounds (TPH-DRO) of 2,300 mg/kg. This standard is explained in the WDEQ's Voluntary Remediation Program (VRP) Fact Sheet #12.

The draft EA states that once the soil is removed, the excavation will be filled with clean soil from the site. We ask that Kennecott perform confirmation soil sampling of the excavation prior to backfilling. VRP Fact Sheet #10 provides Wyoming's guidance on confirmation sampling.

2. Because the contaminated soil and groundwater from the catchment basin area will be placed into the tailings impoundment, we believe that the groundwater monitoring, which is performed as part of the on-going corrective action, should include analyses for the additional contaminants identified at the catchment basin. In case of another liner failure, this will provide a relatively quick way to determine if contamination is leaving the impoundment.

3. In table 2 of the draft EA, there are a couple of errors that need to be corrected. The groundwater protection standard for DRO and GRO is 10 mg/l *only* when benzene and naphthalene are not present in concentrations above their respective groundwater standards. Benzene (EPA MCL = 5.0 ug/l) is considered the main "risk driver" for GRO and naphthalene is the main driver for DRO. Therefore, benzene needs to be added to the list of analytes for this site in order to evaluate the use of the 10mg/l standard.

The standard for naphthalene in the VRP is 1.5 mg/l (VRP Fact Sheet #12), the standard for LAUST sites is 1.3 mg/l. The VRP standard of 1.5 mg/l should be used. Also, please double check the standards for 1,2,4-Trimethylbenzene and for 1,3,5-Trimethylbenzene. We found them listed as 0.0012 mg/l in the EPA Region 3 Risk Based Concentration (RBCs) tables.

We appreciate the opportunity to review and comment on this draft EA. Please contact me at 307/332-3144 or at the address above if you have any questions concerning this letter or our comments.

Sincerely,



Mark Thiesse
West District Supervisor
GPC Program, Water Quality Division

cc: Mr. Stephen J. Cohen, Mail Stop T8-A33, 11545 Rockville Pike, Rockville, MD 20852-2738.
Mr. Oscar Paulson, Kennecott Uranium Company, P.O. Box 1500, Rawlins, WY 82301
Mr. Kevin Frederick, DEQ/WQD
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File (2) Kennecott Uranium, Sweetwater Co. / Chronologic