



DEPARTMENT OF ENVIRONMENT AND CONSERVATION
DIVISION OF REMEDIATION
William R. Snodgrass Tennessee Tower
312 Rosa L. Parks Avenue, 14th Floor
Nashville, Tennessee 37243

June 13, 2016

Ed Worth, Director
Environmental Management Project Management Division
US Department of Energy
PO Box 2001
Oak Ridge TN 37831

Dear Mr. Worth

TENNESSEE DEPARTMENT OF ENVIRONMENT AND CONSERVATION (TDEC) POSITION REGARDING THE POTENTIAL FOR FURTHER MERCURY IMPACTS IN BEAR CREEK ON THE OAK RIDGE RESERVATION

TDEC has learned of a project for removal of mercury-contaminated equipment from the COLEX process at Building Alpha 5 in the West End Mercury Area. While we understand the current scope of the project is not to dispose of Colex material in the Environmental Management Waste Management Facility (EMWMF); for future reference we feel it is appropriate to identify our position on mercury disposal in EMWMF. TDEC recognizes a significant, near-term issue the Department of Energy (DOE) can encounter, associated with management of any mercury-contaminated waste on the Oak Ridge Reservation.

Since Bear Creek currently receives contaminated inputs from various legacy sites (e.g. Bear Creek Valley Burial Grounds and S-3 Ponds) and from CERCLA waste disposal operations at EMWMF in Bear Creek Valley, the stream is impaired and does not meet the parameters for its water quality classifications. Placement of mercury-bearing waste in the existing EMWMF would inevitably generate landfill wastewater containing mercury and said wastewater would eventually need to be discharged. No discharges should occur without sampling and treatment, as necessary, to meet all the limits. In addition, the WEMA area itself is located on Upper East Fork Poplar Creek, which is also impacted and does not meet water quality classifications.

The wastewater discharge, including both contact water and leachate, to Bear Creek has at times exceeded the recreational use water quality standard, according to DOE's own sampling and records. The TDEC mercury position is further elaborated in our comments to the Water Management FFS dated March 31, 2016. Therefore, TDEC is restricting the acceptance in the EMWMF of all mercury-bearing waste until the DOE provides assurance

that no discharge would be made of either contact water or leachate to Bear Creek without treatment to meet the effluent concentration of 51 ng/l.

DOE's WEMA approach to remove any type of equipment, structural debris, or D&D waste, should be subject to thorough methods of characterization and processing/handling to remove any residual free liquid mercury, as much as technically practicable.

Questions or comments concerning the contents of this letter should be directed to Andy Binford at (615) 532-0911.

Sincerely



Steve Goins
Director, Division of Remediation

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