



**Department of Energy
Office of Legacy Management**

August 23, 2007

Mr. James A. Saric, Remedial Project Director
U.S. Environmental Protection Agency
Region V-5HSF-5J
77 West Jackson Boulevard
Chicago, Illinois 60604-3590

Mr. Thomas A. Schneider
Ohio Environmental Protection Agency
401 East 5th Street
Dayton, Ohio 45402

Dear Mr. Saric and Mr. Schneider:

SUBJECT: Automation of On-Site Disposal Facility Valve House Functions

Per discussion with Tom Ontko, Ohio Environmental Protection Agency (OEPA) during his site visit on August 17, DOE is proceeding with the automation/remote control of the Leachate Collection System (LCS)/Leak Detection System (LDS) tank monitoring/pump-out functions and the operation of the valve house ventilation fans. Automation of the tank pump-out function will require the following operational changes:

- 1) The tank pump-out hoses will need to stay connected to the pipe piece that drains to the leachate transmission line (which drains to the Permanent Lift Station).
- 2) The tank pump-out valves and the valves on the pipes connecting the tank pump-outs to the leachate transmission line will need to remain in the open position.

Currently, the tank pump-out hose is disconnected and the above noted valves are kept in the closed position except when the tanks are being pumped out. These precautions were necessary to prevent back ups into the tanks when the On-Site Disposal Facility (OSDF) was actively being filled and the possibility of surcharging the leachate transmission line (LTS) was present due to precipitation, runoff, and rapid infiltration through the open cell's catchment area. Since the OSDF is now closed, the LCS flows have diminished such that all the flow is routed into the 300-gallon LCS tanks. Under current and future operations, the only time there is flow in the 6-inch LTS line is when one of the tanks (LCS or LDS) is being pumped out. The flow rate of the tank pump outs through the 1-inch hose is less than 20 gallons per minute into the 6-inch LTS pipe.

2597 B 3/4 Road, Grand Junction, CO 81503	<input type="checkbox"/>	3610 Collins Ferry Road, P.O. Box 880, Morgantown, WV 26507
626 Cochrans Mill Road, P.O. Box 10940, Pittsburgh, PA 15236	<input type="checkbox"/>	1000 Independence Ave., S.W., Washington, DC 20585
11025 Dover St., Suite 1000, Westminster, CO 80021	<input type="checkbox"/>	10995 Hamilton-Cleves Highway, Harrison, OH 45030
955 Mound Road, Miamisburg, OH 45342	<input type="checkbox"/>	232 Energy Way, N. Las Vegas, NV 89030
REPLY TO: Harrison Office		

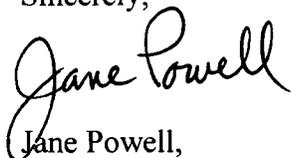
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Mr. Thomas A. Schneider
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The LCS/LDS tanks are currently monitored on a daily basis as part of the operations staff daily rounds. The tanks are pumped out as necessary to prevent overflow. When the automated system is functional, all the LCS and LDS tank levels will be monitored at the Converted Advanced Wastewater Treatment (CAWWT) facility control room and tanks will be pumped out as needed from the CAWWT control system. The CAWWT control system computers will track all tank accumulation rates and pump out volumes.

This new automated system will increase worker safety by reducing the number of times that workers need to go into the valve houses, thereby reducing the number of times that workers need to descend and climb the steps into the valve houses. This automation will also reduce electrical costs for operating the valve house fans. Currently, the fans operate all the time. Under the automated operating scenario, the ventilation fans would only be turned on when operations personnel are doing their rounds. The frequency of the rounds is being reduced from daily to once every two weeks, as discussed with Tom Ontko during his visit. Over time, as the flows into the LCS and LDS tanks further diminish, we anticipate the frequency of the rounds being reduced further.

We will forward you a copy of the drawings depicting the automation panels and wiring diagrams when they are completed. We anticipate the automated system will be fully functional this fall. If you have any questions regarding these improvements, please call me at (513) 648-3148.

Sincerely,



Jane Powell,
Fernald Site Manager
DOE-LM-20.1

cc: M. Cullerton, Tetra Tech.
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Project Record File FER 705.05(A) (thru W. Sumner)
Administrative Records (thru W. Sumner)