

Solving Cleanup Challenges Through Risk Reduction

C-746-U Landfill Leachate Treatment System

Presentation to the
Paducah Citizens Advisory Board

March 20 , 2008

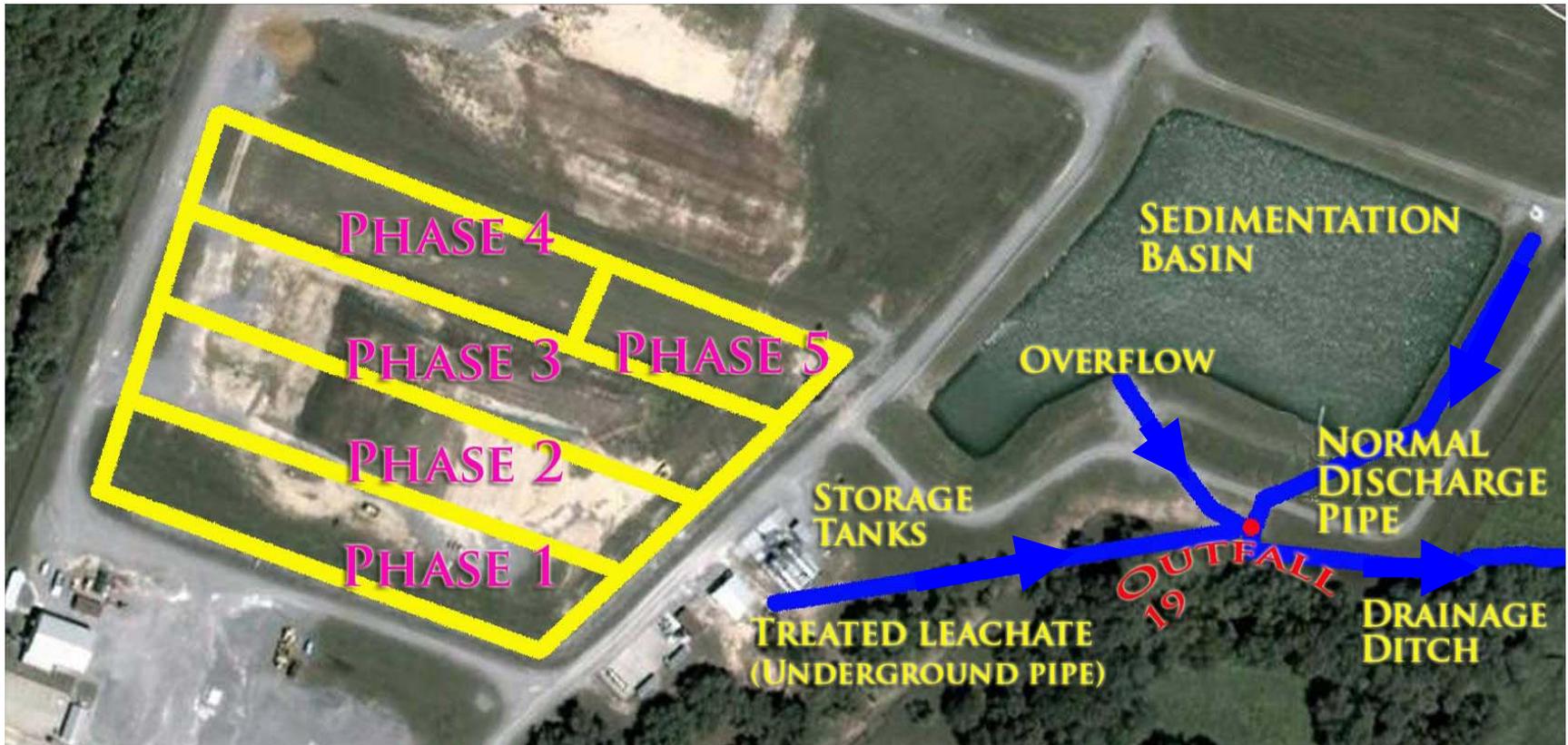


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C-746-U Leachate Treatment System



- Operational May 2007; treats leachate from three active phases on the U-Landfill and leachate from the S-Landfill
 - U-Landfill leachate flows into and out of system through underground pipes
 - S-Landfill leachate moved into treatment system by mobile tanker
- More than 98,000 gallons treated and discharged in 2007



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C-746-U Leachate Treatment System



The level is measured in one of the leachate treatment system's 31,000-gallon storage tanks.



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C-746-U Leachate Treatment System

- System removes suspended solids and volatile organic compounds (VOCs)
- Suspended solids and VOCs collected in filters
 - Fiber filters for solids
 - Activated carbon for VOCs
- Samples collected routinely during discharges
- Results reported to Kentucky quarterly
- No operational problems; system has performed as designed
- Leachate all within KPDES permit limits
- Operates as needed; on average, 2 days/week sufficient to treat leachate



An operator adjusts flow rate at the system's control panel.



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C-746-U Leachate Treatment System

Untreated
leachate
comes in

Solids
filter

VOC
filter

Treated
leachate

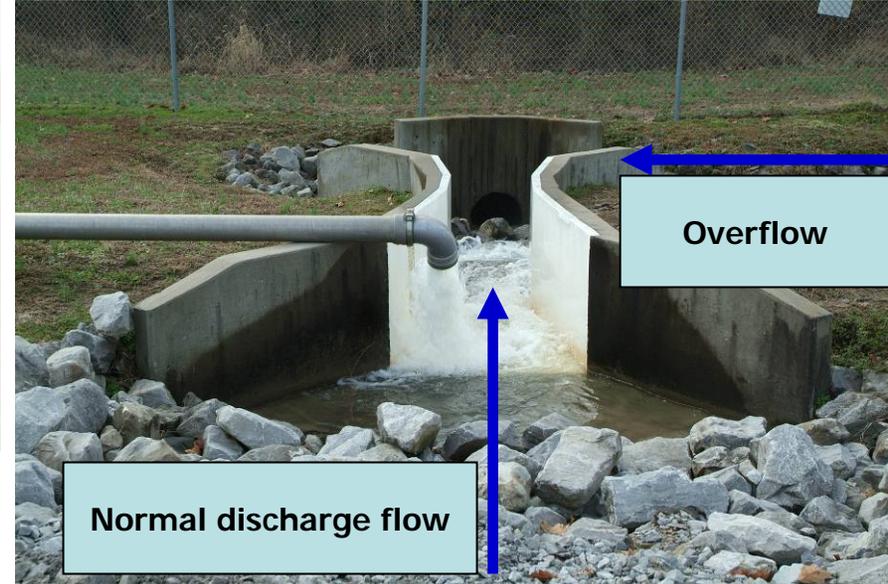


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Landfill Sedimentation Basin



Above left, the basin as shown from the head of the spillway on the south side of the basin; above right, looking down the spillway at the outfall; below left, looking from the outfall back toward the basin (the pipe where normal discharges are made is located on the right).



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