

Red Hills Landfill Update

February 2022

General Overview

Since the update letter in December, conditions in Phase 6 are getting better. In 2022, we have put most of our waste in Phase 5 in preparation for that area to be partially closed 2022. During this inactive period for Phase 6, it has develop a nice crust. The Red Hills operator has reported the odors as overall mild. There have been a couple of incidents where the odor was stronger; they are pushing around the slag material the east module, and when portions of our drainage berms sluffed off and formed a cracks. We believe the berm cracks were created by a settling of the waste as the leachate levels continue to be drawn down.

Ahlstrom-Munksjo has approved construction of the new leachate collection system and Phase 6 module 2. PO's are being released. The 1st tasks include ordering the leachate collection tanks and parts. We will be working with our suppliers to monitor delivery times.

Surface Condition

As you can see from below there is a nice crust forming on all modules. We did try to push some material in the West Module in late January only to find that the area was not completely frozen. Right now we are focusing on leachate removal, and drainage berm repair.

West Module Phase 6 Sequence 1



Center Module Phase 6 Sequence 1



East Module Phase 6 Sequence 1



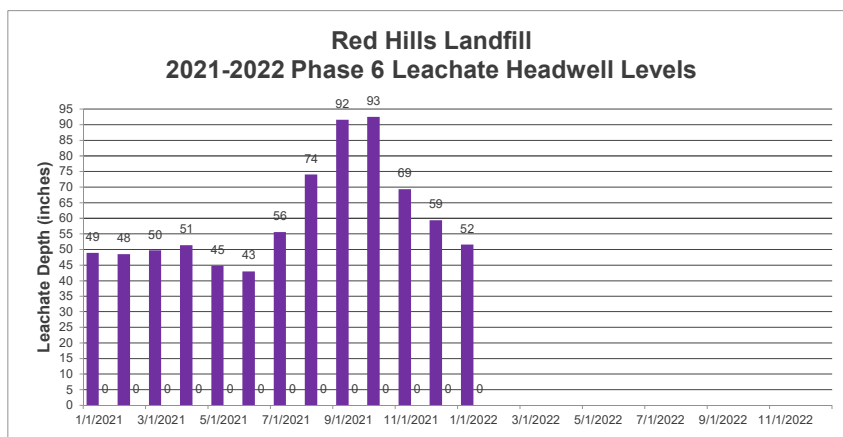
Leachate Management

Leachate levels in Phase 6 have been coming down nicely since the August and September rains.

West Leachate Levels

10/14/21	92"
12/8/21	59"
1/12/21	52"

The graph to the right shows our trend in leachate levels since 1/1/21.

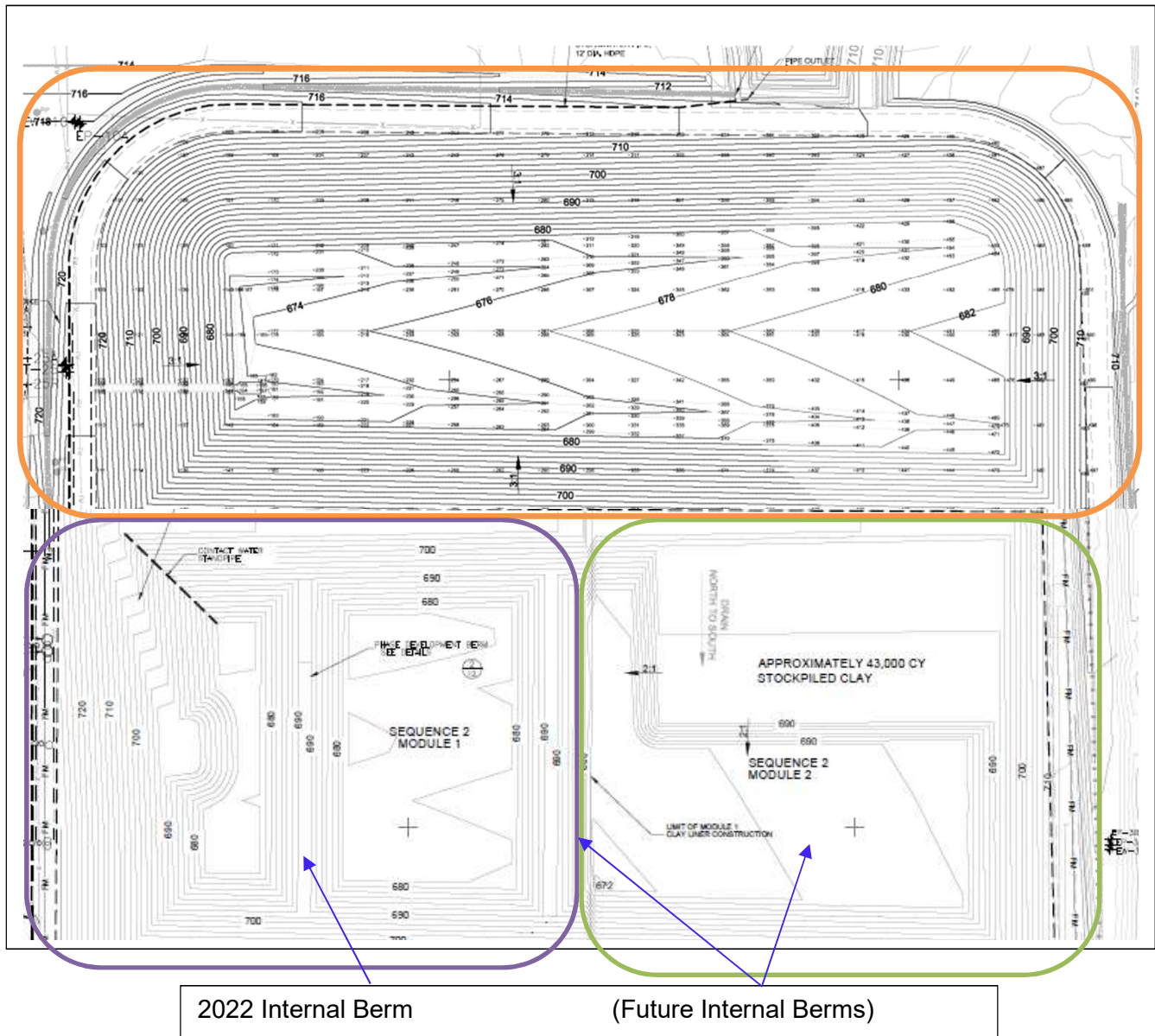


New Leachate Collection System

The project for the new leachate collection system was approved by our CEO, and the purchase order has been placed. Right now we are working on delivery times for the equipment. This system will allow for leachate to be removed from Phase 6 100% of the time. Currently, we are removing leachate from Phase 6 approximately 60% of the time. This is a slight increase in condensate collection from the last update. Keeping our leachate levels low prevents the re-saturation of the paper mill sludge. This re-saturation can lead to an increase in odors.

Phase 6 Sequence 2 Construction

Phase 6 Sequence 2 project has been approved. Construction will begin in the 2nd quarter and finish in the 3rd quarter. All of the previously discussed design changes are included in this project.



Number of Leachate Pipe – Sequence 1 has 2 leachate lines, and Sequence 2 will have 3 leachate lines. This will mean the leachate will have to travel shorter distances to be collected.

Leachate Line Diameter – Sequence 1 has 6" diameter leachate collection, and Sequence 2 will have 8" diameter leachate collection lines. This will allow for better drainage and leachate removal.

