

Follow Up Report: #18-440

October 30th, 2018 Lift Station Sewage Spill

Description of Incident:

On October 30th, pump #1 of the main lift station failed, causing untreated sewage to begin spilling out onto the gravel pad a few meters west of the main entrance of the camp. The current design of the lift station wiring works in such a way that when one pump goes into failure mode, the circuitry shuts off both pumps. Consequently, both pumps shut off within the effluent storage tank and it overfilled, resulting in sewage being released onto the ground.

Spill Response & Cleanup:

Initially, an employee who was outside at the time noticed the water flowing and called the E&I supervisor over the radio. The system was then shut down and E&I began using gravel to contain/absorb the spill, and a vacuum truck to remove as much standing water as possible. Peat moss was then used to further absorb any more saturated ground and was left to sit overnight.

The following day the contaminated material was scraped up with a loader and brought to the License A Landfarm (approximately 6m³), and will later be spread over existing windrows to enhance the bio-remediation process. INAC was first contacted to ensure that this was a suitable plan of action for disposing of the sewage-contaminated material.

Spill Cause and Corrective Measures

An investigation was completed and the cause of the spill was determined to be a failed pump, which lead to an overflow of the effluent storage tank. A new pump is being brought in on a rush order to replace to broken one. The system's circuitry will be reconfigured so that when one pump fails, the other will remain operating. An alarm horn will be added to warn of high levels in the storage tank, and will send a signal advising central control.



Photo 1: Panorama showing the extent of the affected area.



Photo 2: Peat moss applied to contaminated area to absorb material.



Photo 3: Excavation of the contaminated material.



Photo 4: Contaminated material brought to the License A Landfarm (the dark material).