

Follow Up Report: #2019-123

March 20, 2019 MSB Retention Tank Drain Pipe

Description of Incident:

At approximately 6:45AM a site services electrician reported a liquid spilling from a pipe above the MSB lift station (Figure 1). The pipe was the drain leading to the MSB lift station. Due to the heat trace breaker tripping, the heat trace was off for an undetermined amount of time, this caused a freeze in the line. The area affected was a 'Y' in the pipe (Figure 2) - the dead end of the 'Y' was capped. This cap was forced off by the freeze/pressure. Due to this the sewage drained from that 'Y' onto the ground.



Figure 1: Location of the MSB Lift station where the spill occurred.

Spill Response & Cleanup:

Immediate response was to stop the supply of potable water to the camp, and to send out a water/sewage outage e-mail. The environment team was then notified. The lift station pumps were then locked out in order to eliminate any supply of sewage towards the MSB lift station; a vac-truck controlled the rising sewage at the main camp lift station. This allowed the BME and plumber to repair the cap. During this time an electrician repaired the heat trace. The repair was complete around 10:15AM. On 2019-04-03, remaining contaminated snow was removed after a two-day blizzard took place. Contaminated material was brought to the Meliadine landfarm for disposal; some material froze to the structure of the building. The remaining frozen material cannot be scraped up at this time, as it is felt if this is done it could affect the structural integrity of the building. This material will be scraped up

once material thaws and brought to the landfarm once it falls; as contaminated ice melts; secondary basins shall be placed under to catch contaminated ice material.



Figure 2: Area of contaminated snow removed and brought to the Meliadine Landfarm; contaminated ice will be collected when ice melts to prevent structural damage with equipment

Spill Cause and Corrective Measures

The cause of the spill was traced back to a heat trace line, which had switched off due to a breaker tripping. This led to the pipe accumulating frozen liquid inside which ultimately cause the end cap on the pipe to break off. The heat trace was fixed and the end cap on the pipe was replaced and sealed.



Figure 3: Upon arrival of the Environment Technicians water was periodically draining from the 'Y' in the pipe. It was not a steady, constant flow of water. It is unknown how long this was going on before it was noticed.