



WATER LICENCE INSPECTION FORM

☒ Original
☐ Follow-Up Report

| | | | |
|--|--|-----------------------------|--|
| Licensee | | Licensee Representative | |
| Department of Community Government and Services Government of Nunavut | | Bhabesh Roy | |
| Licence No. / Expiry | | Representative's Title | |
| 3BM-YRB1621 | | Regional Engineer | |
| Land / Other Authorizations | | Land / Other Authorizations | |
| | | | |
| Date of Inspection | | Inspector | |
| June 23,2017 | | Jonathan Mesher | |
| Activities Inspected | | | |
| <input type="checkbox"/> Camp <input type="checkbox"/> Drilling <input type="checkbox"/> Mining <input type="checkbox"/> Construction <input type="checkbox"/> Reclamation <input type="checkbox"/> Fuel Storage | | | |
| <input type="checkbox"/> Roads/Hauling <input type="checkbox"/> Other: Water Discharge <input checked="" type="checkbox"/> Other: Municipal | | | |

| | | | | | | | | | | | |
|--|----|----------------|---------|------------------------------|----|------------------|---------|---------------------|----|--------------------|---------|
| Conditions: | | A - Acceptable | | C - Concern | | U - Unacceptable | | NA – Not Applicable | | NI – Not Inspected | |
| Water Use | | Condition | Comment | Site Conditions | | Condition | Comment | Haz/Mat Management | | Condition | Comment |
| Intake/Screen | NI | | | Water Management Structures | U | | | Storage | NA | | |
| Flow Measure. Device | NA | | | Culverts / Bridges | NA | | | Spills | C | | |
| Source: | NI | | | Drainage | NA | | | Spill Plan | NA | | |
| Water Use: | A | | | Erosion / Sediment | U | | | | | | |
| Recirculation (y /n) | NA | | | Mitigation Measures | NA | | | Administrative | | | |
| | | | | Reclamation Activities | NA | | | Records | A | | |
| | | | | Materials Storage | NA | | | Reports | NI | | |
| Waste Disposal | | | | Signage | U | | | Plans | NI | | |
| Waste Water | U | | | | | | | Notifications | U | | |
| Solid Waste | NA | | | Monitoring | | Other | | | | | |
| Hazardous Waste | NA | | | Sample Collection / Analysis | A | | | | | | |
| | | | | | | | | | | | |
| *The number in the comments field will correspond with specific comments provided below. | | | | | | | | | | | |
| Samples taken by Inspector: | | | | Location(s): | | | | | | | |
| <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No | | | | | | | | | | | |

| | | | |
|--|---|---|--|
| SECTION 1 | <input checked="" type="checkbox"/> Comments (s.____) | <input type="checkbox"/> Non-Compliance with Act or Licence (s.____) | <input type="checkbox"/> Action Required (s.____) |
| Inspectors Statement | | | |
| <p>On June 23, 2017, a water licence inspection was conducted at the Hamlet of Resolute Bay, Qikiqtani Region, Nunavut. The Licence 3BM-YRB is one of 3 licences in the community, this licence allows the community to deposit waste into the airport sewage lagoon and to use of 1 cubic metres per year of water for sampling purposes.</p> <p>Between 2006 and 2017 there have been 8 inspections of this facility. Since 2006 this non-engineered lagoon has overtopped or breached every year. Due to the erosions of the berm walls, frequent overtopping and the unsatisfactory condition of the structure the licensee is in contravention of;</p> <p>PART D: CONDITIONS APPLYING TO WASTE DISPOSAL</p> <p>4. The Licensee shall ensure that a Freeboard limit of 1.0 metre, or as recommended by a qualified Geotechnical Engineer and approved by the Board, is maintained at all dykes and earth-fill structures associated with the Sewage Disposal Facilities.</p> <p>5. The Licensee shall advise an Inspector at least ten (10) days prior to initiating any decant of the Sewage Disposal Facility.</p> <p>6. The Sewage Disposal Facilities shall be maintained to the satisfaction of an Inspector, and operated in such a manner as to prevent erosion and structural failure.</p> <p>Inspection</p> <p><u>Airport sewage lagoon</u></p> <ol style="list-style-type: none">During the inspection the lagoon was not in satisfactory condition to the inspector.Both cells had significant erosion on the berm walls.The lagoon did not appear to have the required 1.0 metre of freeboard.There was significant sign of slumping on the berm walls. | | | |
| SECTION 2 | <input type="checkbox"/> Comments (s.____) | <input checked="" type="checkbox"/> Non-Compliance with Act or Licence (s.____) | <input checked="" type="checkbox"/> Action Required (s.____) |



PART D: CONDITIONS APPLYING TO WASTE DISPOSAL

- 4.The Licensee shall ensure that a Freeboard limit of 1.0 metre, or as recommended by a qualified Geotechnical Engineer and approved by the Board, is maintained at all dykes and earth-fill structures associated with the Sewage Disposal Facilities.
5. The Licensee shall advise an Inspector at least ten (10) days prior to initiating any decant of the Sewage Disposal Facility.
6. The Sewage Disposal Facilities shall be maintained to the satisfaction of an Inspector, and operated in such a manner as to prevent erosion and structural failure.

Due to the continual failure of this facilities ability to contain water, the inspector is requesting that Department of Community Government and Services, Government of Nunavut develop a plan to address the lagoons capacity issues before March 30, 2018 in order to be completed in the summer of 2018. This Lagoon has been under capacity since 2006 and should be addressed in a timely manner.

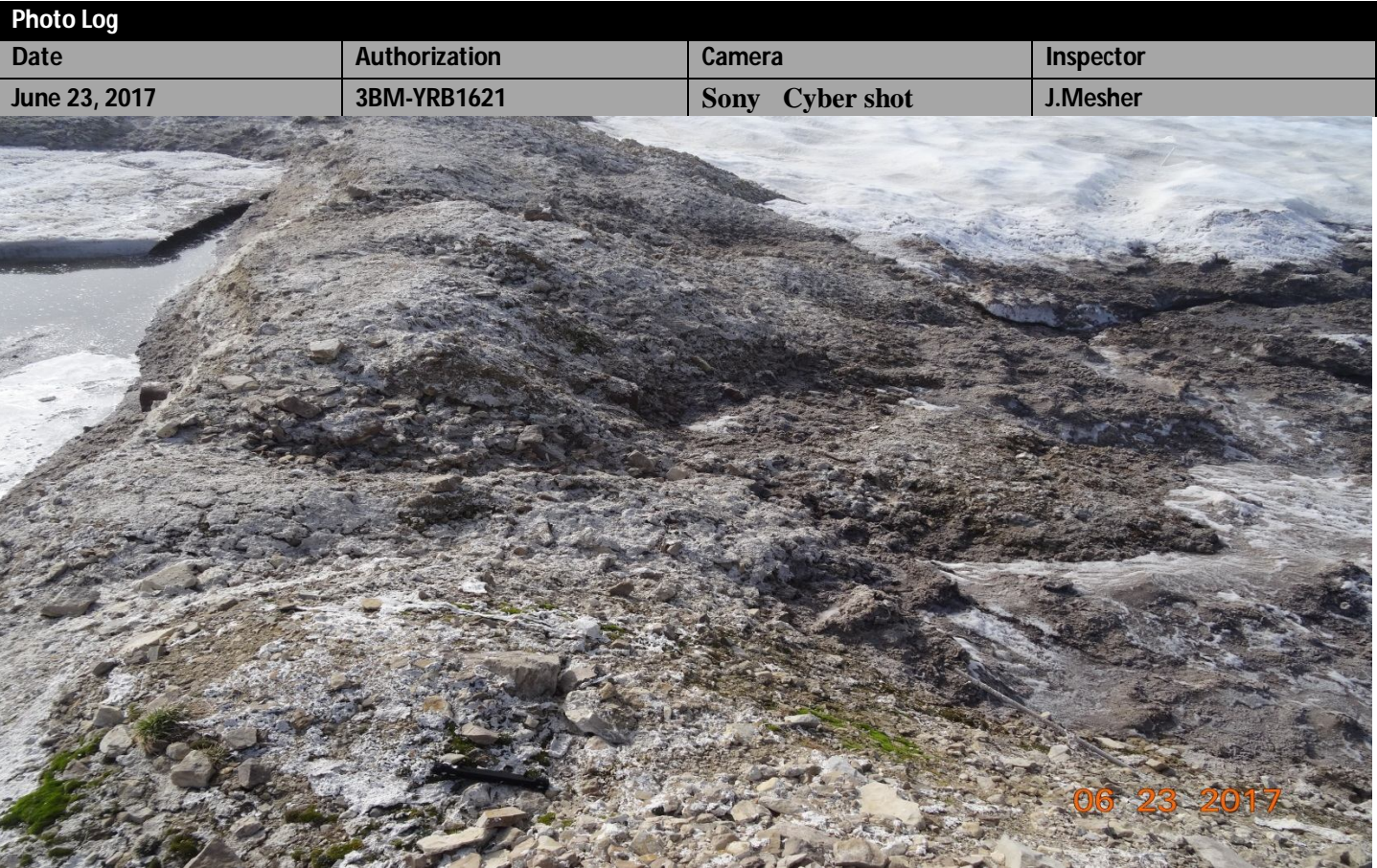


Figure 1: Erosion on cell #2 leading to the environment



Figure 2: Erosion of cell #1 leading to cell #2



Figure 4: Condition of Berm Wall

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|----------------------------|------------------|
| Licensee or Representative | Inspector's Name |
| | J. Mesher |
| Signature | Signature |
| | Original On File |
| Date | Date |
| | August 15 2017 |