

Technical Specification of RESOLUTE BAY MUNICIPAL Metal Dump Site

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The Hamlet of Resolute Bay has a new Water licence #3BM-RES 1520; Type B, which covers existing Land fills site (Municipal Dump site) and the existing metal dump site (MDS). Both sites are almost full and have near capacity. The Municipality is planning to build a new waste management site within a few years. Currently the buried pipes of the Utilidor system are being replaced. At the same time Federal Governmental agencies have started demolishing their old and unused buildings. It may be cost effective to retain these metals and non- hazardous materials in the Community rather than shipping them out to the South. The Hamlet of Resolute Bay is planning to amend their exiting WL licence # 3BM-RES1520 Type B to accommodate the 2001 built waste site situated at N 74°44'29.2" and W 095°00'24.9", which is located next to the Resolute Bay Airport Sewage Lagoon. Since this facility was constructed in 2001, this was never licensed and used.

The site has a perimeter fence with an entrance gate located on the south face, east side of the enclosure. A gravel road with ditch provides access through the entrance gates into the enclosed site. The site has an area of approximately 50,000 m².

Generally, the site consists of a higher topographic zone (in the east half of the site; "the eastern zone") in the vicinity of the entrance gate with a slope of about 1H: 22V, and a zone of steeper grade (in the west half of the site; "the western zone") with a slope of about 1H: 10V. The dimensions of the site are approximately 285 m x 175 m with an overall elevation change of about 15 m. An outcrop ridge of highly fractured bedrock is located at a topographic elevation of about 60 m; and separates the two zones noted above. The lowest point within the proposed MDS, located along the west side of the fence is at a topographic elevation of 52 m, while the highest point at the east side of the enclosure is 67m. Typical ground cover in the eastern zone ranges from about 1 to 2 m of overburden sandy-gravel material to highly fractured bedrock and boulder size materials. The western zone of the site consists mainly of highly fractured bedrock to 1 to 2 m of boulder size materials.

The galvanized steel chain link fence making up the enclosure for the proposed new MDS consists of twenty-eight (28) 88.9 mm dia. hollow post sections at various spacing, with smaller 66 mm dia. posts between, spaced at approximately 2 m. All posts appear to be drilled and backfilled into the surrounding soils. The top rail and bracing members located adjacent to doors, and in changes of direction along the length of the fence, were found to be 42.9 mm dia. as per drawings. The height of the fence is approximately 1.8 m. The gates providing access to the enclosure consist of two (2) 88.9 mm posts spaced at 1.8 m complete with gate hinges, drop latch and latch catch. Adjacent to the gates there is a pedestrian door between two (2) 88.9 mm posts complete with gate hinges and door latch. The fence installation appeared to be true and was found to be stable.

The Engineering design and as built drawings of the fence are not available. The Hamlet of Resolute Bay feels that this is a suitable site for metal waste storage until the new waste management facility is built and commissioned. Hamlet also feels that this site has no Environmental and Ecological concerns.

Hamlet will monitor the leachate quality and provide the test results in their annual report to NWB. Hamlet will be taking full responsibility to operate and maintain this site to the acceptable standard.

