APPENDIX- F

CONSTRUCTION DEFICIENCY REPORT OF THE THERMISTORS

Progress Report of Monitoring the thermistors and depth deficiency Cape Dorset P-Lake Sewage Lagoon

Introduction: All the four thermistors were installed in March 2009. The data loggers are reading temperature at every eight hours intervals and data is being collected from the field on a four month intervals. It was observed that few beads ere not working. These were corrected during the summer.

NWB: In item 6 of Part H of the Water License # 3BM-CAP 0810, NWB has suggested minimum three thermistors to be installed in crest of the west berm and at least one thermistor in the crest of east berm to a minimum depth of 20-25m.

Construction: The equipment available in the community was not adequate to reach 20 to 25m. Kudlik Construction Ltd was hired and they could reach only 18.8m depth due to hard rock. Therefore boring depth was restricted at a depth of 18.8m for all the four locations. Given the type of material encountered and the availability of equipment, it is highly unlikely that a greater depth can be achieved.

ACR System data loggers have been used to read temperature. Following the technical specifications of the manufacturer, the information is recorded at eight hour intervals. This should be sufficient enough to monitor the temperature inside the berm and also in the original ground. A system has been set up to collect the field data on a four month intervals.

Conclusion: The attached spread sheets in Appendix-A will explain the design and constructed thermistors at the field. All the data will be sent to the NWB along with the annual report sometime in January each year. Validating the assumptions of the geothermal analysis through adequate monitoring of the thermal regime will be continued to satisfy the requirements of the Hamlet Water License. The Recorded temperature from December 15, 2008 to November 01, 2009 are attached.