

June 18, 2009

License 3BM-CAP0810

Cape Dorset Operation and Maintenance Manual, Sewage Treatment System Conformity Assessment

Received June 17, 2009

Part, Item	Condition	Location in O&M Manual	Comment/Issue	Response by the Licensee
F,1	The Licensee shall submit to the Board, for approval in writing, within ninety (90) days of issuance of the License and prior to commissioning of the 2007 Sewage Disposal Facilities, a revised Operation and Maintenance Manual, Sewage Treatment System, Hamlet of Cape Dorset, November 7, 2007. The revision shall include the requirements of Schedule 2.	Plan received June 17, 2009.	The cover page is dated October 24, 2007, which is earlier than the version currently on the record which is dated November 7, 2007. This is confusing since the License requires an revision to the November 7, 2007 O&M Manual. The cover page should be revised and an explanation provided for why it was submitted with an October 24, 2007 cover. The OM Manual should also be resubmitted in an unlocked electronic pdf format that has not been scanned. This will facilitate its review by parties.	The O&M manual has been revised satisfying schedule 2 of the water license on July, 2009. Previously the document was submitted as a hard copy and also in a CD. The revised O&M manual will be submitted electronically and also as a hard copy.
Schedule 2				
i	Expansion of Section 3.4.5 to include terms and conditions for the disposal of sludge as provided for in the Draft Guidelines for Discharge of Domestic Wastewater in Nunavut, 2000;	Section 3.4.5 has not been updated	Response from Licensee required.	Please see the response in the O&M manual.
ii	Section 3.4.6 should include a description of the installation of thermistors required under Part H, Item 6, including the number, locations and depths of thermistor beads used to monitor the berms, and a description of the method and frequency of monitoring requirements;	Section 3.4.6.; Table 7; Figure 5, pg 16.	The description of the method and frequency of monitoring appears to lack some detail. E.g. Calls for daily and/or weekly monitoring and recording of thermistor measurements and calibration on an as required basis, while Mr. Roy's letter of November 25, 2008 states regular thermal temperatures of the berms will be taken every four months.	Yes, the thermistors reading will be taken on a four months interval as indicated in the O&M manual. Again, thermistor beads are recording temperature at every eight hours interval.
iii	Section 3.4.6 should include a description of the installation of monitoring wells required under Part H, Item 7, including the number, locations and depths of thermistor beads used to monitor the berms, and a description of the method and frequency of monitoring requirements	Section 3.4.6.; Table 7; Figure 5, pg 16.	Same as previous. Further, Part H, Item 7 of the License requires the submission of geothermal monitoring results with an Engineer's Report, validating the assumptions of the geothermal analysis through adequate monitoring of the thermal regime for the East and West Berms and downstream foundations. Based on information on the public registry, this has not been provided.	We have been monitoring the thermistors and collecting data from the data loggers. Recently data were collected from Dec.15, 2008 to May 15, 2009. According to the geothermal modeling done by AMEC,2005, the data will be collected and analyzed for first twelve months period during the operation of the new sewage Lagoon in order to validate the assumed parameters in the geothermal modeling during the design phase. Unfortunately the Lagoon was not approved to commission yet. The temperature data were obtained only from Dec.15 2008 to May 15, 2009 during empty condition of the lagoon.
iv	Description of the details of any repairs, upgrades and maintenance required for the use of part or all of the 2001 Sewage Disposal Facility or Emergency Sewage Disposal Facility;	Not found. Work may not have been carried out. Clarification required.	Part G, Item 1 requires the Licensee submit to the Board, for approval in writing, within ninety (90) days of issuance of the License, a detailed Final Abandonment and Restoration Plan for the 2001 Sewage Disposal Facility and the Emergency Sewage Disposal Facility. The Plan should incorporate, where applicable, the appropriate sections as described in Part G, Item 2.	The existing three cells lagoon berms have been repaired to keep using until the new facility will be commissioned. During using the new facility, the old facility will be still kept active for any emergency backup. The photos attached in Appendix -E shows the location of these cells and repair works done on the berms.
v	Include a contingency plan for the operation of the 2007 Sewage Disposal Facility during periods where accessibility to the facility is limited and alternative measures are required for the handling of sewage. This may include operation and maintenance of any older facility or portion of, that would be retained as the contingency;	Not found.	Response from Licensee required.	The existing 3 -cells lagoons entirely will be used for any kind of emergency. This is the contingency plan. After one year satisfactory operation of the new lagoon, it might be wise to decide whether all three cells or a part will be retained as the contingency plan/emergency backup.
vi	Provision for the monitoring of effluent discharges from the 2001 Sewage Disposal Facility and the Emergency Sewage Disposal Facility;	Table 5, Pg 11 lists CAP-4 and CAP-5 Monitoring Stations. P. 12 indicates the frequency of sampling required.	Ok.	N.A
vii	Inspection program for the 2001 Sewage Disposal Facility, the Emergency Sewage Disposal Facility and 2007 Sewage Disposal Facility, detailing the frequency and inspection requirements by the operator(s) of the facility;	Section 3.4.7, Pg 17.	It is unclear in the O&M Plan what facilities are subject to geotechnical review by the engineer during the site inspection. Clarification from the Licensee required.	This should be 2007 sewage disposal facility.

viii	Appendix C of the O&M Manual to include forms to document the recommendations and follow up work required as a result of the annual geotechnical inspection.	Appendix C is entitled "Guidelines for Wastewater Sampling". Appendix D contains O&M log sheets.	Forms to document the recommendations and follow up work required as a result of the annual geotechnical inspection were not found in Appendix C or D. Response from the Licensee required.	The follow up inspection result will be accommodated in 2009 Hamlet Annual report.
ix	Section 4 – Spill Contingency Plan be revised to comprehensively address specific recommendations provided during the review process by GN DoE as follows:	There appears to have been no revisions made to Section 4. It appears ix.a through ix.l not addressed.	There appears to have been no revisions made to Section 4. It appears that no other SCP is on file therefore the information should be provided in Section 4 of the O&M Manual as requested. Response from Licensee required.	This has been revised and shown in the revised O&M manual on July ,2009.
ix.a	The date the contingency plan was prepared.			See the Revised O&M manual
ix.b	The name and address of the person in charge, management or control. This is an on-site person responsible for managing the facility. This person would be initially responsible for clean-up activities.			See the Revised O&M manual
ix.c	The name and address of the owner if different from the person in charge. This is the person ultimately responsible for the facility, usually the owner.			See the Revised O&M manual
ix.d	The name, job title and 24 hour telephone number for the persons responsible for activating the contingency plan. This ensures the employee discovering the spill can activate a response and provides a 24 hour point of contact for the authority investigating the spill.			See the Revised O&M manual
ix.e	A description of the facility including the location, size and storage capacity. This is important if persons are unfamiliar with the facility or area. The description could include a map and/or diagrams.			See the Revised O&M manual
ix.f	A site map that is intended to illustrate the facilities relationship to other areas that may be affected by the spill. The map should be to scale and be large enough to include the location of your facility, nearby buildings or facilities, roads, culverts, drainage patters, and any nearby bodies of water.			See the Revised O&M manual
ix.g	The steps to be taken to report, contain, and clean up and dispose of a contaminant in the case of a spill.			See the Revised O&M manual
ix.g.1	Reporting: Notification of all parties involved. This can include internal and external reporting procedures as well as a copy of the spill report;			See the Revised O&M manual
ix.g.2	Clean up: Removal of the contaminant from the environment, a detailed of actual containment and clean up techniques. (2 steps: contain and remediate; be aware of fire);			See the Revised O&M manual
ix.g.3	Disposal: Is the treatment of the contaminant such that it is no longer a threat to the environment. Plans may include location of disposal sites approved to accept wastes, means of storage prior to disposal and other approvals required. (Waste Manifest document).			See the Revised O&M manual
ix.h	The means by which the contingency plan is activated. This should outline internal company procedures to activate appropriate response equipment and personnel.			See the Revised O&M manual
ix.i	A description of the training provided to employees to respond to a spill. A sound training program is necessary when dealing with an emergency situation.			See the Revised O&M manual
ix.j	An inventory and the location of response and clean up equipment available to implement the plan. This includes your equipment as well as any to be used by another person responding to the spill on your behalf.			See the Revised O&M manual
ix.k	SPILL KIT (FUEL)The kit can include but not limited to the following: shovel, pick-axe, drums, booms, absorbent pad/sheet, disposable protective gloves/coveralls, sorbent and containment materials, and disposal bags.			See the Revised O&M manual
ix.l	A list of local contractors or clean up specialists who may be called upon to assist in responding to spills. A list of emergency numbers such as fire, ambulance and police.			See the Revised O&M manual

x	Section 4 – describe the measures to be implemented for a spill during the collection and transportation of wastewater. This spill response is to be expanded to include spill scenarios resulting from the leakage or failure of a containment structure for the Sewage Disposal Facilities; and	Not found.	Section 4 has not been revised. Response from Licensee required.	See the Revised O&M manual
xi	Appendix B to include specific reference to monitoring stations and required frequency of sampling and the analyses required by the License.	Not found.	The Appendix has not been revised. Response from Licensee required.	See the Revised O&M manual