



Environment Environnement
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Our file: 4782 048

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RE: NWB3CAP – Hamlet of Cape Dorset – Emergency Amendment

On behalf of Environment Canada (EC), I have reviewed the information submitted with the above-mentioned application. The following specialist advice has been provided pursuant to Environment Canada's mandated responsibilities for the enforcement of the *Canadian Environmental Protection Act*, Section 36(3) of the *Fisheries Act*, the *Migratory Birds Convention Act*, and the *Species at Risk Act*.

The Hamlet of Cape Dorset is applying for an emergency amendment to their current water license to allow for modifications to their old sewage lagoon. These modifications are required as a result of an Environment Canada Inspector's Direction issued May 13, 2004. The letter of direction requires the Hamlet to develop a new long-term sewage treatment and disposal system, as well as to implement interim measures until such as time as the long-term solution is contracted and in use. This emergency amendment addresses the required interim measures. The proposed modifications include enhancing the old lagoon through the construction of new berms and the raising of existing berms. Ancillary components include a truck turn around pad and sewage discharge flume; a control structure at the invert of the lagoon and the downstream, and an overflow structure. The existing lagoon will be used throughout the construction of the proposed modifications.

Environment Canada recommends that the following conditions be applied throughout all stages of the project:

General

- The proponent shall not deposit, nor permit the deposit of any wastes or sediment into any water body. According to the Fisheries Act, Section 36(3), the deposition of deleterious substances of any type in water frequented by fish, or in any place under any conditions where the deleterious substance, or any other deleterious substance that results from the deposit of the deleterious substance, may enter any such water, is prohibited.
- The Hamlet must ensure that all of the conditions of the Environment Canada Inspector's Direction, dated May 13, 2004, are complied with.
- Environment Canada recommends that a minimum freeboard of 1 metre be maintained in both the old lagoon and the existing lagoon during the course of operations.
- Surveillance Network Program (SNP) stations should be established at the final



discharge point of both the old and the existing lagoon systems in order to monitor the quality of the effluent being discharged from the systems.

- An operation and maintenance manual should be developed for all sewage lagoon systems currently in use by the Hamlet.
- It should be noted that the Supplemental Questionnaire referred to by Mr. Gary Strong in the water license amendment application cover letter dated August 16, 2004 was not available on the Nunavut Water Board's ftp site, and therefore was not included in this review.

Old Lagoon

- The proponent must take measures to prevent erosion and resulting sedimentation of water bodies during the construction of the new berms at the old lagoon. Silt fences, or other similar preventative measures, should be employed where necessary.
- The application indicates that the existing berms at the old lagoon will be raised. Environment Canada requests clarification regarding the exact height of the newly raised berms.
- Any quarry activities associated with the rehabilitation of the old lagoon shall not occur within 30 metres of the high water mark of any water body.

Existing Lagoon

- Environment Canada requests confirmation that the existing 3-cell lagoon is structurally sound enough to continue to be used for the retention of sewage throughout the winter of 2004/05 and until a new long-term facility is designed and constructed. It is Environment Canada's understanding from the May 13, 2004 Inspector's Direction that the existing lagoon had reached capacity and that Cell 2 was overflowing, resulting in erosion and the deterioration of the cell wall. Environment Canada requests information, including as-built drawings, regarding any repairs have been completed on the existing lagoon in order to ensure its integrity and prevent further deposition of deleterious substances into Tellik Inlet. If no repairs have been completed to date, EC recommends that the Hamlet develop a plan to complete such repairs in a timely fashion, working within the process established by the Nunavut Water Board. Environment Canada requests the opportunity to review such plans when they are submitted.
- In order to help prevent excessive amounts of runoff from entering the existing lagoon, EC recommends that the ditch adjacent to the lagoon (beside the cliff face) be kept clear of snow and debris, especially during the spring freshet.
- The Hamlet should develop an abandonment and restoration plan for the existing lagoon system if it will no longer be used after the development and construction of a long-term sewage treatment facility.

If there are any changes in the proposed project, EC should be notified, as further review may be necessary. Please do not hesitate to contact me with any questions or comments with regards to the foregoing at (867) 975-4639 or by email at colette.meloche@ec.gc.ca.

Yours truly,

Original signed by

Colette Meloche
Environmental Assessment / Contaminated Sites Specialist

cc: (Stephen Harbicht, Head, Assessment and Monitoring, Environment Canada, Yellowknife)
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