



Environment Environnement
Canada Canada

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Our file: 4704 001

Via Facsimile

RE: NIRB 03YN005 – The Mars Society – Campsite and Research Station, Devon Island, NU

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 Mars Society, a private international society, is proposing to continue their existing Flashline Mars Arctic Research Station (FMARS) research at the Haughton impact crater site on Devon Island, NU. This research had previously been permitted under land permit N2000J0041. The research, which seeks to simulate the conditions that would be encountered if a manned spacecraft landed on Mars, would be carried out during the months of June – September, and would involve 7 scientists and engineers.

Environment Canada requires the following information in order to facilitate the review of this project:

- A map detailing the location of the campsite in relation to water
- A map detailing the location of any proposed sumps in relation to water
- A map detailing the location of fuel caches in relation to water
- A spill contingency plan, outlining a clear path of response in the event of a spill.

The following conditions should be applied throughout all phases of the project:

- The proponent shall not deposit, nor permit the deposit of wastes or fuels associated with the project 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.
- All sumps shall be located above the high water mark of any waterbody and in such a manner as to prevent the contents from entering any waterbody frequented by fish. Further, all sumps shall be backfilled and restored at the end of each season to prevent the contents from entering any waterbody.

- Environment Canada recommends that spill basins and fuel caches be located above the high water mark of any waterbody and in such a manner that the contents do not enter any waterbodies.
- When storing barreled fuel at the location, EC recommends the use of secondary containment with impervious liners, such as self-supporting insta-berms.
- All garbage and debris shall be kept in a covered metal container until disposed of.
- Environment Canada recommends the use of an approved incinerator for the disposal of combustible camp wastes and food wastes. Any non-combustible waste should be segregated and disposed of at an approved landfill facility.
- Drip pans should be used when refuelling equipment on site.
- All spills are to be documented and reported to the NWT Spill Line at (867) 920-8130.
- The permittee shall not erect camps or store material on the surface ice of streams or lakes.

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,

Colette Meloche
Environmental Assessment Specialist

cc: (Mike Fournier, Northern Environmental Assessment Coordinator, Environment Canada, Yellowknife)