



Environment Canada
Environnement Canada

NWT DIVISION
ENVIRONMENTAL PROTECTION BRANCH
PRAIRIE AND NORTHERN REGION
Box 370
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PH. (403) 920-6050

July 23, 1997

Our File: 4782-046

Ken Johnson
UMA Engineering Ltd.
17007-107 Ave
Edmonton, AB T5S 1G3
7070

By Facsimile 403-486-

Dear Ken:

Re: Grise Fiord Sewage Lagoon - Breach of Secondary Containment Cell with Overland Effluent Flow

On behalf of the Environmental Protection Branch, Environment Canada (EPB) (and Brian Heppelle (Environmental Engineering)) have reviewed your request to breach the sewage lagoon's secondary containment cell and direct effluent flow around the east side of the new lagoon which is under construction.

Further to our telephone conversation, I understand that the secondary containment cell is draining by exfiltration downslope to the construction site, and so would have to be completely emptied to minimize the problem of sewage flow into the new lagoon area. Effluent quality will be poorer due to shortened retention time, and overland distance to the receiving waters will be shortened by about twenty metres. Total effluent volumes are not known, however the flow is to be directed over the tundra rather than into a discrete channel which would limit treatment en route to the receiving waters.

In the interests of expediting completion of the new system, which will provide much better treatment and control, as well as recognizing the health concerns for the project, breach of the secondary containment is acceptable provided mitigation measures are implemented if necessary to ensure overland treatment is maximized. Single channel flow of the effluent should be prevented, which may require such measures as construction of a cross trench or berm to disperse the drainage path. Diversion of effluent is on a temporary basis only, until August 31st as specified in your letter.

Please do not hesitate to contact me at (403) 869-4735 or Brian Heppelle with any questions on the foregoing.

Canada



Yours truly,

M. A. Wilson

Anne Wilson
Water Pollution Specialist

cc: Steve Harbicht (Head, Assessment & Monitoring, EPB)
Brian Heppelle (Environmental Engineer, EPB)