

**D.B. DEWAR**

**Assistant Deputy Minister of Medical Services**

**Sous-ministre adjoint des Services médicaux**

TO M14  
A \_\_\_\_\_

DATE May 5, 1975

☐ ACTION  
DONNER SUITE

☐ INFORMATION  
PRENDRE CONNAISSANCE

☐ COMMENTS  
COMMENTAIRES

☐ SIGNATURE  
SIGNER

☐ APPROVAL  
APPROUVER

☐ RETENTION  
RETENIR

☐ DIRECT REPLY  
RÉPONDRE DIRECTEMENT

☐ MAKE:  
FAIRE: ..... COPIE(S)

☐ AS REQUESTED  
À VOTRE DEMANDE

☐ MAY WE DISCUSS  
DISCUTER AVEC NOUS

☐ DRAFT REPLY  
PROJET DE RÉPONSE

☐ NOTE AND RETURN  
NOTER ET RETOURNER

☐ PREPARATION OF REPLY  
RÉDIGER RÉPONSE VERS LE \_\_\_\_\_ 19 \_\_\_\_\_

FOR SIGNATURE OF  
POUR LA SIGNATURE DE \_\_\_\_\_

REMARKS Can we have a word about this ?  
REMARQUES \_\_\_\_\_

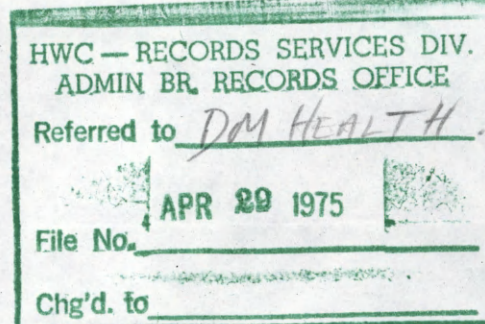
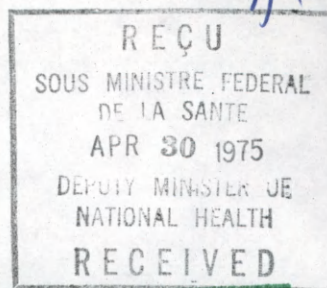
D.B. Dewar.



Deputy Minister  
Environment CanadaSous-ministre  
Environnement Canada

M14  
Can we have a  
word about this?  
JBL  
2/5/75

APR 23 1975

Ottawa, Ontario  
KIA OH3

Mr. A. Kroeger,  
Deputy Minister,  
Department of Indian & Northern Affairs,  
Centennial Tower,  
400 Laurier Avenue, West  
Ottawa, Ontario  
KIA OH4

Dear Mr. Kroeger,

SEWAGE DISPOSAL FOR THE CITY OF YELLOWKNIFE

As you may be aware the City of Yellowknife is actively pursuing a course of action which would lead in the near future to the discharge of untreated municipal sewage from the entire City to Kam Lake. This course of action was approved as a possible interim measure by Environment Canada and Health and Welfare Canada in 1971.

Recently, at the request of the City of Yellowknife, officers of this Department and Health and Welfare Canada have reviewed the consequences of this proposed action. It has been determined that Kam Lake supports a viable fish population, offering recreational potential, which would be destroyed if this course of action is pursued. Therefore, this action is now unacceptable to Environment Canada. Furthermore, I am advised that Health and Welfare Canada is opposed to this course of action because of public health concerns and had so notified the city prior to recent construction activity.

In view of the federal jurisdictions, leadership, and responsibilities in the Northwest Territories it would be undesirable to create an environmentally unsound precedent which would be in conflict with stated federal policies and priorities.

M20 22/4/75  
Have discussed with Albers & Co. Mill.  
Have written memo to R. J. 2/27/75 on this issue.  
Say I did not discuss it with you before.  
JCL



I would, therefore, ask that we co-operate in actively seeking acceptable alternatives to resolve the above situation, realizing that additional Government funding to the City of Yellowknife will likely be necessary. Although Environment Canada's support in this area is restricted to the demonstration of innovative technology, we are familiar with applicable Government financial assistance programs and would be pleased to co-operatively examine alternatives with members of your staff.

I would, therefore, request that a decision on the licence be postponed for a month or so, in order that alternative courses of action can be examined.

Yours sincerely,

ORIGINAL SIGNED BY  
ORIGINAL SIGNÉ PAR  
Jean Lupien

J.B. Seaborn



850-5-X751



Government  
of Canada

Gouvernement  
du Canada

MEMORANDUM

NOTE DE SERVICE

TO  
À  
Director General,  
Program Management  
Medical Services Branch

FROM  
DE  
Regional Director  
Northwest Territories Region

SECURITY - CLASSIFICATION - DE SÉCURITÉ
OUR FILE - N/RÉFÉRENCE 150-5-M (N1)
YOUR FILE - V/RÉFÉRENCE
DATE April 23 1975

SUBJECT  
OBJET  
YELLOWKNIFE SEWAGE DISPOSAL

Further to my letter of March 21st on this subject, I enclose for your perusal additional information which has been forwarded by Mr. C. A. Lewis, who is District Manager of the Environmental Protection Service of Yellowknife.

This may be relevant to Dr. Frost's attendance at the N.W.T. Water Board meetings.

F. J. Covill, M.B., B.S., M.F.C.M., D.P.H.  
Regional Director

Enc.

ACTION		PA date	BF date
M	14		
INFORMATION			
M	67	M	M
M	16	M	1
M	18	M	1



MEDICAL SERVICES  
HEADQUARTERS

QUARTIERS GENERAUX  
SERVICES MEDICAUX

M	M	M
M	M	M
M	M	M
INFORMATION		
M		
ACTION	BY DATE	BY DATE



204457

N3

MEMORANDUM NOTE DE SERVICE

RECEIVED  
NORTHERN REGION  
MEDICAL SERVICES

DATE April 18, 1975

FROM: C. A. Lewis, District Manager  
DE: Environmental Protection Service  
P.O. Box 2310  
Yellowknife, N.W.T.

APR 21 '75

Our file Notre référence

4045-1/Ye

TO: J. J. Eatock, Regional Director  
λ: Environmental Protection Service  
Northwest Region  
Edmonton, Alta.

Your file Votre référence

SUBJECT: RE: CITY OF YELLOWKNIFE SEWAGE DISPOSAL - KAM LAKE  
SUJET: -----

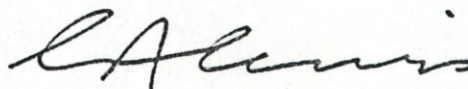
Attached for your information is the latest news article on the above.

I'm reliably informed that the N.W.T. government executive was very close to going to Treasury Board for funds to explore the alternatives we recommended.

If we can categorically state that the lake will not function adequately as a sewage lagoon and, as stated in the report, there is a significant potential public health hazard if it is used for sewage purposes, then we should vigorously pursue the matter from the Ottawa end.

I believe that pressure from the top would contribute greatly to strengthening our hand, and arriving at some positive action on the matter.

I would suggest consultation with Dr. Covill and that the above action be taken by both Departments.




C. A. Lewis  
District Manager

cc: J. Marsh  
A. Pick  
Dr. R. Eaton ✓  
V. Christensen  
M. Hardin

Encl.

CAL/cb





Environment  
Canada

Environnement  
Canada

Environmental  
Protection

Protection de  
l'Environnement

P.O. Box 2310  
Yellowknife, N.W.T.  
X0E 1H0

April 18, 1975

Your file    Votre référence

Our file    Notre référence

4045-1/Ye

The Editor  
NEWS OF THE NORTH  
Yellowknife, N.W.T.

Dear Sir:

I feel obliged to reply to your April 16/75 article captioned "Council laughs off objections to sewage lagoon."

The reported reaction of some members of City Council suggests to me a certain lack of appreciation of the long term implications of using Kam Lake for untreated sewage disposal.

To set the record straight, Environment Canada was asked by City Council on September 25/74 to "conduct a study as to the biological effects of this usage of Kam Lake on the sewage, fish, water and environment."

A group of highly qualified scientists, and sanitary engineers (including representation from Health & Welfare Canada) examined the proposal and made their report which is now a public document.

Major points in the report were as follows:

1. "...the discharge of sewage to Kam Lake would undoubtedly create a significant potential hazard to public health by establishing a microbiologically contaminated water body in close proximity to major residential areas."
2. Oxygen depletion will occur, increasing the production of arsenite from arsenate (two forms of arsenic), a phenomenon that "will likely impede sewage degradation in the lake."



3. There is a significant arsenic problem identified in Kam Lake but the causes appear to be under control and could result in the recovery of the lake in about 20 years (assuming no sewage is added).
4. A number of alternatives were explored and it was the opinion of the review group that probably "discharge to Great Slave Lake, after treatment, through a properly designed and located long outfall, would be acceptable wastewater treatment."

As further background, it was pointed out that the approach of the City is not consistent with recommendations of its own consultants who in 1971 recommended "adequate treatment" before discharge to Kam Lake.

Further, the City consultants examined various alternatives for treatment systems at four sites: Niven Lake, Yellowknife Bay, Pud Lake (currently used by Con Mine for tailings effluent), and Kam Lake. The least expensive alternative was Kam Lake based on the following provisions as extracted from the consultants' report:

- i. "The area surrounding the Lake is not contemplated for development in the foreseeable future....."
- ii. "Treatment must be adequate to prevent occurrence of nuisance or health hazards, and in addition, should be such that no irreversible changes were wrought to the Lake...."
- iii. "..., it might be possible and worthwhile at some time in the future to overcome the arsenic pollution now in Kam Lake and thus create new value for the Lake and its environs as a development area."
- iv. "Provision for advanced treatment as may be required or desirable in the future to permit its reclamation for development purposes...."

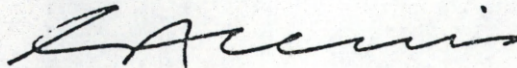
My basic point is that the City should, through its consultants, seriously review the entire situation in the light of current information, including a cost and engineering evaluation of the alternatives suggested.



April 18, 1975

This will clearly indicate to the citizens of the Capital of the N.W.T. that their elected representatives are taking a responsible approach to a question that has serious long term implications that a future City Council may have to face.

Sincerely,



C. A. Lewis  
District Manager

cc: J.J. EAtock  
A. Pick  
Dr. R.D.P. Eaton ✓  
P. Higgins

CAL/cb



# Council laughs off objections to sewage lagoon

BY CINDY CLEGG

Yellowknife's City Council plans to go ahead with its plans to use Kam Lake as a sewage lagoon despite some advice not to.

At last week's City Council committee meeting a letter from Environment Canada was read condemning the City's action of planning to use Kam Lake. Several members of the committee apparently found this very funny, as witnessed by the roars

of laughter heard as the letter was read.

According to Archie Pick, Head of Water Pollution Control Section, I am surprised that having degraded Niven Lake, the City of Yellowknife would seriously consider doing the same thing to Kam Lake.

Mr. Pick pointed out in his letter that "any body of water can function as a lagoon...The question is adequacy of the function." He said "the

engineering requirements were largely ignored in the Kam Lake proposal".

Because of this, there will be several implications said Mr. Pick. "After a few years, an intense release of hydrogen sulphides will occur" and he suggested Kam Lake would turn into a health hazard.

He added that the arsenic in the lake could retard the biological processes involved in breaking down the sewage.

Our service cannot endorse the

discharge of untreated municipal waste discharges to Kam Lake any more than it can condone raw waste charges in Montreal, P.Q. or Selkirk, Manitoba."

He then suggested a sewage treatment plant.

This was batted about the Council chambers as it has been in the past, but with little result, other than noting the act that it would be an "extremely sophisticated" plant and very costly.

In an interview, Jack Kraft,

City Works Superintendent said the plant would be "a great idea", but only if someone else paid for it. He said the plant requires 24 hour supervision and qualified people for the job are very much in demand.

He said the cost of operating and maintaining a treatment plant would be well over the heads of Yellowknife taxpayers.

Mr. Kraft, in speaking about Mr. Pick's letter, said "Environment Canada based its

(continued page 3)

whole study on aesthetics and fishing." He said the department is concerned with marine life and cannot say whether or not there will be "any harmful effects to human life."

Kam Lake has the approval of not only the Treasury Board, who footed the bill for construction of the sewage line, but the acceptance of the Public Health Board.

Stanley and Associates of Edmonton conducted a study on the use of Kam Lake and did have some reservations about the use, but also stated that there really wasn't much choice for the city.

Mr. Kraft pointed out that Mr. Pick suggested dumping the raw sewage into Yellowknife Bay instead of Kam Lake.

"The bay is used as a commercial source of fishing for natives and many other people" he said. "Kam Lake is fairly isolated and there are a good many other places a guy can go fishing".

To date, the City Council made a motion to go ahead with Kam

Lake and has made an application to the Water Board. The Water Board, which opens at the end of the month will hold a public hearing on the use of Kam Lake as a sewage lagoon.

Mr. Kraft said the Water Board hearings shouldn't affect the plans and the sewage system can be put into action in one month.

During discussions at the last City Council committee meeting, Alderman Colin Wynne said, "the hearing will determine what will happen."

NEWS OF THE NORTH  
April 16/75