

850-5-X751

MEDICAL SERVICES BRANCH

RECORDING & TRANSMITTAL FORM

MINISTER'S CORRESPONDENCE

SUBJECT:		ARSENIC CONTENT - LEAFY VEGETABLES - YELLOWKNIFE, NWT.			FILE NO: 850-5-X751		
FROM:		MR. IAN HOWARD MINISTER'S OFFICE.			DATE: 5 June 70		
TO:		DR. WIEBE			INITIATED IN BRANCH <input type="checkbox"/>		
RECEIVED IN D.G.'S OFFICE:		9 June 70 (Date)			PASSED: 9-6-70 (Date)		
ACTION:		REQUESTING FULL REPLY FOR THE MINISTER'S HOUSE BOOK					
TO	DATE	REPLY			B.F.	DATE SENT TO MINISTER	SIGNED
		INTERIM	FINAL	DATE			
✓ M16	12-6-70						
	25-11-70		✓	26-11-70			

REMARKS: For discussion *[signature]*

MEMORANDUM

850-5-X751

CLASSIFICATION

TO	FOR IN.O	FOR ACTIC	REMARKS	DISPOSAL AND DATE
1119				

YOUR FILE No.
Votre dossier

OUR FILE No.
Notre dossier

DATE June 5, 1970

TO
A

Dr. J. H. Wiebe,
Director General
Medical Services

FROM
De

Ian Howard
Executive Assistant to the Minister

FOLD

SUBJECT
Sujet

Arsenic Content - Leafy Vegetables
Yellowknife

Further to our conversation, I would appreciate it if you would prepare a full reply for the Minister's House Book on this problem and if you would further coordinate the activities of Dr. Watkinson and Dr. Chapman who, I understand, are also involved in the problem.

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MEDICAL SERVICES
SUB-REGISTRY

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MEMORANDUM

850-5-X751
CLASSIFICATIONTO
A

Director General, Medical Services

YOUR FILE No.
Votre dossierOUR FILE No. 151-1-5-N (N1)
Notre dossier

DATE June 9 1970

FROM
De

Northern Region

SUBJECT
SujetArsenic Problems at Yellowknife

TO	FOR INFO.	FOR ACTION	REMARKS	DISPOS. AND
11-12-70				11-12-70

In October 1965, Dr. Powell, Medical Health Officer at Yellowknife, sent samples of vegetables to the Occupational Health Division for analysis of arsenic content. Dr. Monkman replied on October 27 1965 giving the following results:

Lettuce	52 ppm
Swiss Chard leaves	43.4 ppm
Swiss Chard Stems	7.5 ppm
Celery Leaves	26.8 ppm
Celery Stems	9.68 ppm

Dr. Brett, the Mackenzie Area Director at that time, wrote to the Edmonton Branch of Public Health Engineering for advice and was informed that the allowable limit of arsenic in food was 1 part per million and Dr. Brett wrote to Dr. Powell on December 1 1965 advising him of this fact. At this time it was also known that the water in Yellowknife Bay was highly contaminated with arsenic.

The Northern Region then took up the matter with the Environmental Health Division and it was agreed that a full investigation of the problem was advisable and they agreed to undertake the necessary investigations if Northern Health would absorb the cost of the survey. Northern Region agreed to do so and the survey was arranged for the summer of 1966 and was carried out as planned.

We patiently awaited for the results of the survey but as no information was forthcoming we complained to Dr. Procter who wrote the attached letter to the Director General of Health Services on September 29 1967. Since then we have repeatedly requested (20 - 30 reminders) completion of the necessary report. Branch have written supporting our request but to date have not yet received a copy. This failure to produce a report has left our Service open to justifiable criticism and the recent interest in pollution has renewed local interest in the problem.

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MEDICAL SERVICES
SUB-REGISTRY

JUN 12 2 50 PM '70

On February 3, 1970 I wrote the attached letter to Public Health Engineering requesting answers to specific questions. Their reply of March 18 1970 is also attached and you will note that most questions were left unanswered and we were just referred to other persons. A further letter addressed to Public Health Engineering on April 10 1970 is also attached and although it was immediately forwarded to the Ottawa Office of Public Health Engineering, we have had no reply to date.

A full report on the situation is required and this report should include (1) the results of the clinical survey, (2) results of tests of vegetable and fish for arsenic content, (3) chimney stack fall-out figures over the past five years, (4) analysis of soil samples in various areas for arsenic, and, (5) concentration of arsenic in snow samples before breakup.

The composite report should also include recommendations for further action.


Regional Director

Enc.

500 Chancery Hall, Edmonton, Alta

April 10, 1970

Mr. J. Grainge,
Public Health Engineering Division,
Dept. National Health & Welfare,
Federal Building,
Edmonton, Alta.

Dear Mr. Grainge:

Re: Arsenic Pollution in Yellowknife, N.W.T.

Further to my letter of February 3 1970 and the reply from Mr. Tait, which you forwarded to this office, many of my queries are really left unanswered.

As you are aware, there is a very increased interest in pollution control and this has even reached the Northwest Territories and I am receiving queries from municipalities and Consumer Associations which I cannot answer.

Occupational Health and Public Health Engineering are both in the one Branch of the Department and it would be very helpful if they could prepare a report for our Branch on the present situation.

In addition to the questions raised in my letter of February 3 1970, I have now received the following queries:

1. What is the percentage of arsenic concentration in vegetables grown in Yellowknife? You will remember that in 1963 the arsenic concentration was 30 times the allowable limit. If we sent in specimens could your Branch arrange for the necessary examination?

Mr. J. Grainge

Page 2

2. What is the arsenic content of fish caught in Great Slave Lake and Yellowknife Bay?

I would appreciate any assistance you could provide in this matter.

Yours sincerely,

Original Signed by
G. C. BUTLER, M. D

G. C. Butler, M.B., B.Ch., D.P.H.
Chief Medical & Health Officer

N 3

February 3, 1970

Mr. J. Grainge,
Regional Engineer,
Public Health Engineering Division,
Dept. National Health & Welfare,
Federal Building,
Edmonton, Alta.

Dear Mr. Grainge:

Re: Arsenic Pollution - Yellowknife, N.W.T.

Many residents of Yellowknife are still concerned about the arsenic pollution situation and they are eliciting information from this office.

I would appreciate it if the Environmental Health Division could advise me on the following aspects of this problem:

- (a) How much arsenic per day is being emitted from the gold mines at the present time?
- (b) Have the mining companies carried out all the recommendations of your Division in an effort to reduce the emission to an allowable limit?
- (c) What is the arsenic concentration in the snow (a) near the mines, and, (b) at measured distances from the mines?
- (d) What studies are planned to monitor the on-going arsenic pollution of Yellowknife Bay and Great Slave Lake?
- (e) Would it be possible to obtain a six monthly report from your Division which would keep this office up to date on the state of arsenic pollution in the Yellowknife area?

Mr. J. Grainge

Page 2

It would be appreciated if you could elicit information on these matters as there is an increasing awareness among the residents of Yellowknife and we are being asked questions which we cannot answer. An Internist in Edmonton has recently suggested to a resident of Yellowknife that she may be suffering from chronic arsenic poisoning and as this lady has informed others of this fact, we are likely to have a great increase in enquiries.

Yours very truly,

Original Signed by

G. C. BUTLER, M. D.
G. C. Butler, M.B., B.Ch., D.P.H.
Chief Medical & Health Officer

cc - Area Director, Mackenzie

MEMORANDUM

CLASSIFICATION

P. H. E. D. EDMONTON	
MAR 23 1970	
J. W. Grainge	/
R. E. Tait	
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Mr. J. W. Grainge, P. Eng.,
Regional Engineer,
Edmonton, Alberta.

YOUR FILE No.
Votre dossier

OUR FILE No. 368-1-Y2
Notre dossier

DATE March 18, 1970

FROM
De

Chief, Public Health
Engineering Division.

SUBJECT
Sujet

Arsenic Pollution - Yellowknife, N.W.T.

This is in reference to questions raised in Dr. Butler's letter to you, dated February 4, 1970. As indicated verbally, the Occupational Health Division did not respond to my request for information until I personally sought it.

ANSWERS

- (a) O.H. receives reports on occasions, but detailed records would have to be obtained from the Companies.
- (b) Yes, with regard to O.H. recommendations for control of stack emissions. Liquid waste discharges are another matter - it is very doubtful that any recommendations made to date would in effect produce an allowable limit.
- (c) Studies have not been undertaken for some time now, nor are any currently planned.
- (d) J. W. Grainge can reply.
- (e) We presently provide Medical Services Branch with all data received, concerning arsenic levels in the water. Data on stack emissions would have to be provided by the plants.

You might also indicate that this problem, as far as stack emissions are concerned, will now reside with the new Air Pollution Division. Also, it is expected that Dr. de Villiers's report covering the study that was undertaken some time ago, will be completed very soon. It is felt that this report will be helpful to Dr. Butler.

R. E. Tait
R. E. Tait, P. Eng.