

MEMORANDUM NOTE DE SERVICE

DATE Feb. 25, 1975

FROM: Mr. H. Veldhuizen
DE: Head
Air Pollution Control Section
EPS, Northwest Region

4221-70/Y24

TO: Distribution List
A:

SUBJECT: Re: Yellowknife Environmental Survey
SUJET:

noted & copied

ACTION		Your file	Votre référence
PA date	BF date		
M 67	7/4/75		
INFORMATION			
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The Yellowknife Environmental Survey encompasses studies involving Health & Welfare Canada, DINA, Northwest Territorial Government, AES, CFS and EPS. The following items outlining the survey are attached to this memorandum:

- 1) Flow diagram - Yellowknife Environmental Survey (Appendix 1)
- 2) Yellowknife Environmental Survey - Environment Canada - Resource Outline (Appendix 2)
- 3) Yellowknife Environmental Survey - Health & Welfare Canada - Resource Outline (Appendix 3)
- 4) Flow diagram - Yellowknife Environmental Survey - Air (Appendix 4)
- 5) Yellowknife Environmental Survey - Air - Objectives and Survey Outline (Appendix 5)

The industrial and atmospheric monitoring program will define the quantity, type and concentration of pollutants which enter the Yellowknife air shed. Analyses will include sulphur compounds, As, Pb, Cu, Zn, Hg, Cd, Be. An attempt will be made to determine particlesizing in the stack and ambient monitoring programs.

If you have any recommendations or comments regarding the survey, please forward these to me at your earliest convenience.

Hennie Veldhuizen
H. Veldhuizen

Attach.

Distribution List

J. J. Eatock
C. A. Lewis
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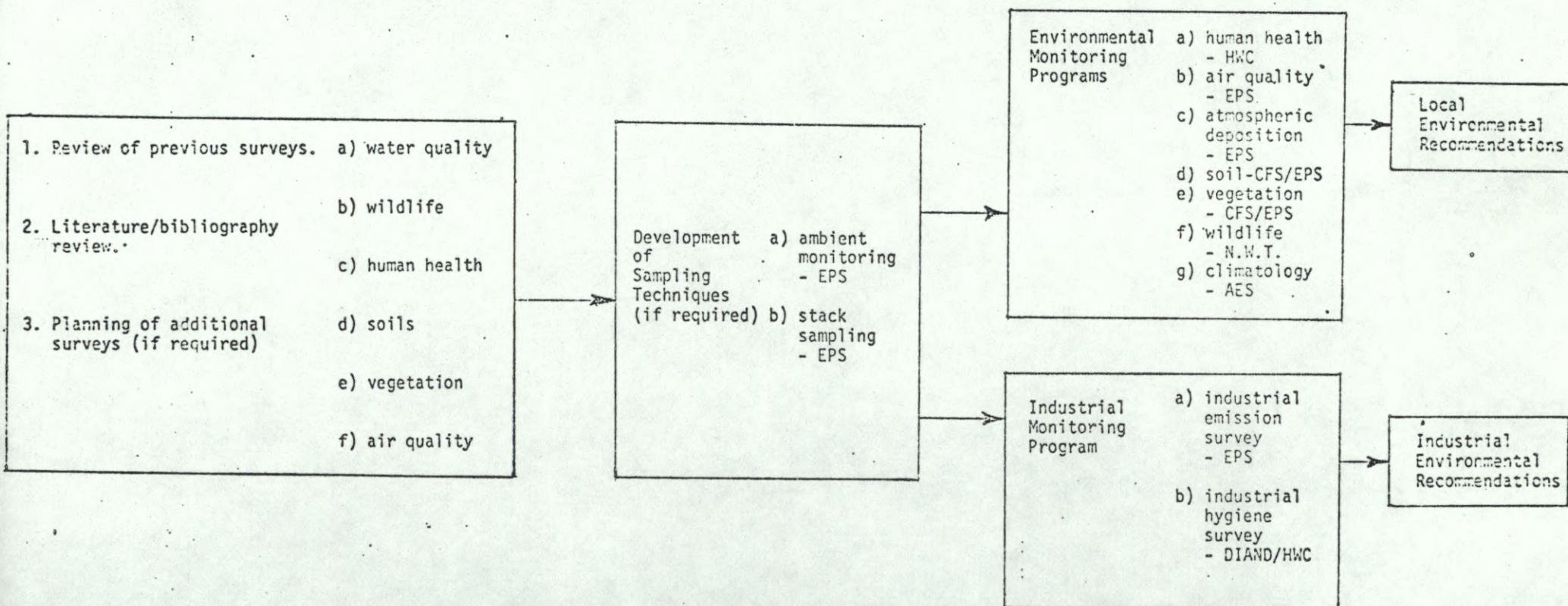
MEDICAL SERVICES
HEADQUARTERS

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QUARTIERS GENERAUX
SERVICES MEDICAUX

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ACTION	BY DATE	BY DATE

Appendix 1



YELLOWKNIFE ENVIRONMENTAL SURVEY

Appendix 2

YELLOWKNIFE ENVIRONMENTAL SURVEY - ENVIRONMENT CANADA

RESOURCE OUTLINE

Atmospheric Monitoring Program

	<u>MY</u>		<u>O&M</u>	<u>Capital</u>	<u>Other</u>
1. Literature/bibliography review. Review of previous studies.	0.1	Regional Office EPS	\$ 2,000		
2. Development of sampling technique. Experimental test work.	0.2	Headquarters Regional Office District Office EPS	5,000	\$ 1,000	
3. Industrial emission surveys.	0.1	Regional Office District Office EPS	2,000		(\$10,000)***
4. Atmospheric monitoring program.					
operation & maintenance	0.5	Regional Office			
	0.5	District Office EPS	10,000	9,000	
data handling/reduction	0.2	Regional Office EPS	5,000		
	0.2	Regional Lab EPS AES	8,000		
climatology*	—	—			
5. Management	0.25	Regional Office EPS	3,000		
6. Meteorological Data**	-	- AES			

Soil and Vegetation Survey

1. Soils and vegetation survey.	.05	Contract CFS/ EPS	25,000		
TOTAL	2.1		\$60,000	\$10,000	
75/76 Budget	-		50,000	1,000	
Deficit			\$10,000	\$ 9,000.	

Appendix 3

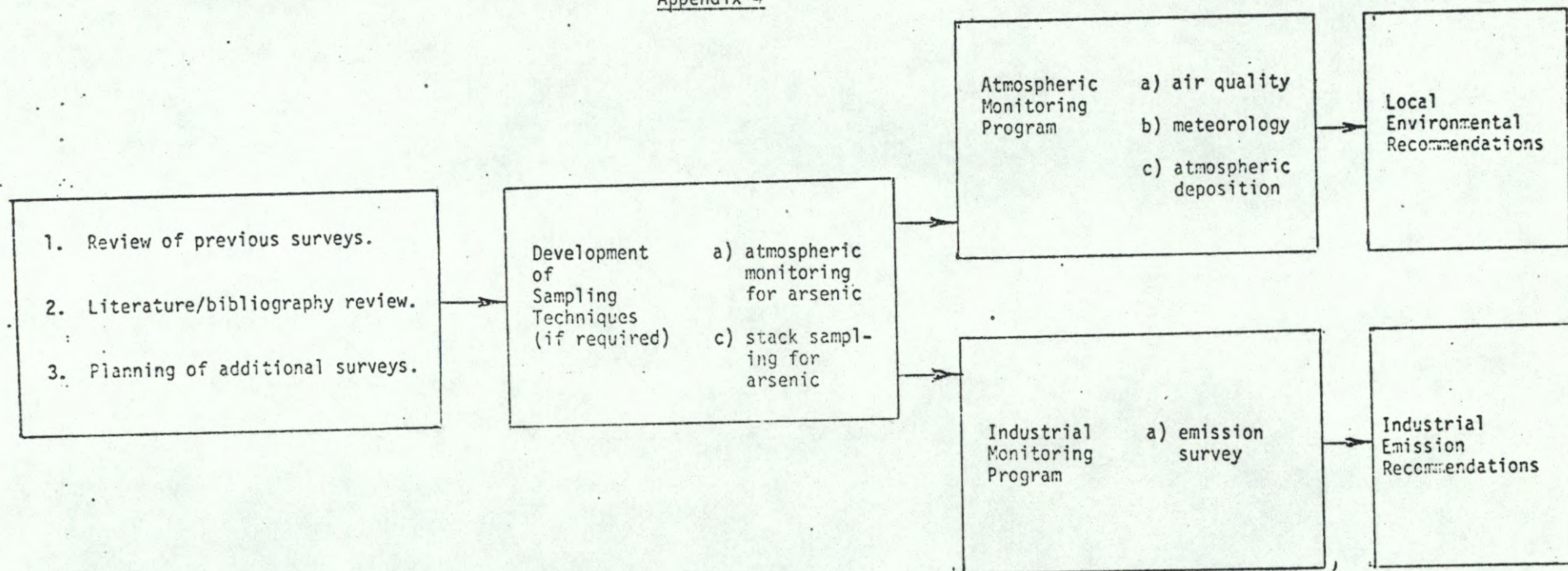
YELLOWKNIFE ENVIRONMENTAL SURVEY - HEALTH & WELFARE CANADA

RESOURCE OUTLINE

	<u>MY</u>	<u>SALARY</u>	<u>O&M</u>	<u>CAPITAL</u>
1. Hair sampling	0.2	\$2,500		
2. Hair assay			\$ 2,500	
3. Urine sampling & assay				
Clinical assessment				
Clinical assessment of those previous surveyed in 1966			10,000	
4. Giant Yellowknife Industrial Hygiene Survey*	0.1			
5. Routine water sampling	... continuing program			
	<u>0.3</u>	<u>\$2,500</u>	<u>\$12,500</u>	

* To be undertaken by DIAND.

Appendix 4



YELLOWKNIFE ENVIRONMENTAL SURVEY - AIR

Appendix 5

YELLOWKNIFE ENVIRONMENTAL SURVEY - AIR

Objectives

1. To define atmospheric emissions from Giant Yellowknife Mines.
2. To determine air quality in the Yellowknife area.
3. To define the quantity and composition of pollutants deposited in the Yellowknife area.
4. To derive local environmental recommendations, if required, and industrial emission recommendations.

Survey Outline

<u>Description</u>	<u>Responsibility Centre</u>	<u>Schedule</u>
1. Arsenic literature review. Review of previous Yellowknife Studies.	Regional Office Regional Office	March 1975-May 1975 March 1975
2. Development of arsenic ambient sampling technique. Development of arsenic stack sampling technique. Experimental stack testing Experimental ambient sampling (if required)	APCD - Chemistry Div. APCD - Chemistry Div. Surveillance Div. Surveillance Div. Regional & District District/Regional Chemistry Div.	Feb. 1975-March 1975 March 1975-May 1975 June 1975 Open
3. Atmospheric Monitoring Development of monitoring network Deposition sampling (snow) Deposition sampling (dustfall) Ambient monitoring (intensive - SO ₂ , SPM, particle sizes) Stack Sampling - Giant Yellowknife	Regional Office District/Regional Offices " " " & APCD	Feb. 1975-March 1975 March 1975 April 1975-Oct. 1975 April 1975-Oct. 1975 July 1975-August 1975
4. Data handling/reduction	Regional Office	Oct. 1975-Dec. 1975
5. Development of local industrial emission recommendations.	APCD - Regional	December 1975
6. Report preparation	Regional/District Office	Jan. 1975-February 1975