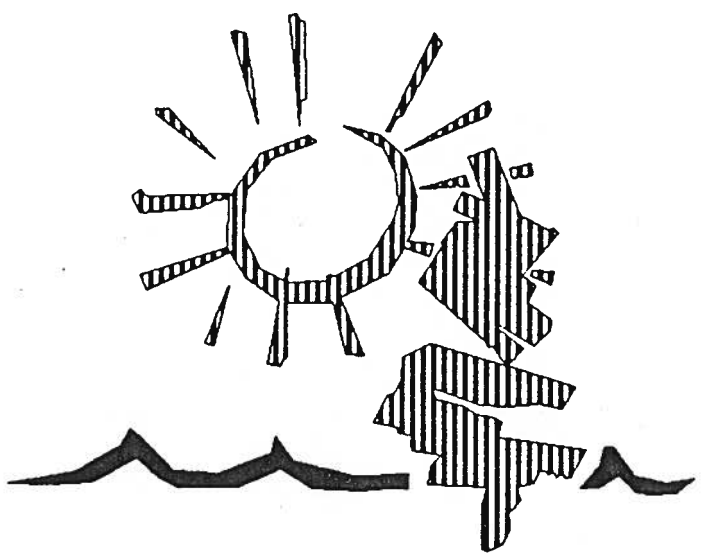


ARCTIC ENVIRONMENTAL STRATEGY
WATER QUALITY NETWORK
MEMORANDUM OF AGREEMENT
YUKON TERRITORY



MEMORANDUM OF AGREEMENT

MEMORANDUM OF AGREEMENT made this day of , 199 .

Between:

THE DEPARTMENT OF THE ENVIRONMENT, hereinafter called "DOE"
represented by the MINISTER OF THE ENVIRONMENT

OF THE FIRST PART

- and -

THE DEPARTMENT OF INDIAN AFFAIRS AND NORTHERN DEVELOPMENT,
hereinafter called "DIAND" represented by the MINISTER OF INDIAN
AFFAIRS AND NORTHERN DEVELOPMENT

OF THE SECOND PART

- and -

The GOVERNMENT of the YUKON TERRITORY hereinafter called "THE
YUKON", represented by the EXECUTIVE COUNCIL MEMBER Responsible for
RENEWABLE RESOURCES

OF THE THIRD PART

Whereas the Arctic Environmental Strategy as part of the Green Plan
is a six year program which seeks to preserve and enhance
the integrity, health, biodiversity, and productivity of
our Arctic ecosystems for the benefit of present and
future generations; and

Whereas DIAND and DOE are jointly responsible for the Water Program
of the Arctic Environmental Strategy of the Green Plan;
and

Whereas DOE is responsible for the national assessment of water
quality; and

Whereas DIAND is responsible for managing water resources within
the Yukon; and

Whereas THE YUKON is responsible for the economic and social well
being of the residents of the Yukon; and

Whereas DOE, DIAND and THE YUKON recognize the importance of
obtaining data on, and undertaking assessments of, the quality
of the aquatic environment; and

Whereas cooperative miscellaneous water quality monitoring has been conducted in the Yukon for a number of years, under various arrangements, for the purpose of securing ambient baseline water quality data and providing joint assessments; and

Whereas it is desirable that the various informal arrangements be replaced by a formal agreement between DOE, DIAND and THE YUKON so that water quality data and information can be collected on a systematic, non-duplicative, and effective basis over the long term; and

Whereas this information is required to advise federal and territorial agencies involved in the support of water resource management programs, pollution control regulations, water quality objective development, environmental assessment studies, research undertakings, legislative formulations, interjurisdictional agreements and commitments, industry and the general public; and

Whereas DOE, DIAND and THE YUKON intend to work together to take advantage of technological advancements that improve the quality of data, the effectiveness of standard procedures, the planning of water quality monitoring networks, and the assessment of water quality; and

Whereas it is recognized that responsibilities for water resources management may be transferred from DIAND to THE YUKON; and

Whereas the Governor General in Council has, by Order-in-Council No. 1833 dated 23 September, 1993 authorized the Minister of the Environment and the Minister of Indian Affairs and Northern Development to execute this Agreement on behalf of CANADA; and

Whereas the Governor General in Council has, by Order-in-Council No. _____ dated _____, and the Government of the Yukon has by Order-in-Council No. _____ dated _____, authorized the Executive Council Member Responsible for Renewable Resources to execute this Agreement on behalf of THE YUKON

NOW THEREFORE, the Parties agree as follows:

PURPOSE

ARTICLE 1

This Agreement is to provide for the coordinated planning, implementation and operation of water quality monitoring activities and water quality studies on a cooperative basis, according to funds provided to the parties to meet their mandates and responsibilities.

OBJECTIVES

ARTICLE 2

The objectives of this Agreement are to:

- 2.1 to provide scientifically sound water quality data and information for water resource management purposes in an effective and efficient manner;
- 2.2 to disseminate timely information on water quality to the public, government agencies, industries, and the scientific community;
- 2.3 to achieve compatibility between respective water quality data bases;
- 2.4 to provide a forum for the exchange, assessment and review of information related to water quality, and;
- 2.5 to promote cooperation between the Parties.

DEFINITIONS

ARTICLE 3

COST RECOVERY - a claim submitted by one of the parties of the Agreement to correct the imbalance between the estimated annual program cost and the final cost.

ESTIMATED ANNUAL PROGRAM COST - a sum, agreed to annually by the Parties, for the upcoming fiscal year that will represent the estimated costs of implementation and operation of Water Quality Monitoring Activities according to the calculation criteria defined in Schedule C.

FEDERAL ACTIVITIES - water quality monitoring activities performed to meet DOE requirements or mandates.

FEDERAL-TERRITORIAL ACTIVITIES - water quality monitoring activities for which the costs are shared by DOE and DIAND.

FINAL ANNUAL COST - the sum representing the cost of implementation and operation of Water Quality Monitoring Activities for a fiscal year based on actual costs.

FISCAL YEAR - period extending from April 1 to March 31 of the following year.

FIXED STATION NETWORK - a group of stations at which water quality information is collected at a specific schedule.

NAQUADAT - DOE's computerized National Water Quality Data Bank for storage and retrieval of physical, chemical, biological, and hydrometric data relevant to the quality of surface waters, ground waters, precipitation, waste waters, and sediments.

OPERATING PARTY - any Party to this Agreement performing water quality monitoring activities.

TERRITORIAL ACTIVITIES - water quality monitoring activities performed to meet DIAND requirements or mandates.

WATER QUALITY MONITORING ACTIVITIES - the sampling of the water, sediment, and biological materials in waters, analysis of the samples and interpretation and reporting the results.

WATER QUALITY MONITORING STATION - a specific location at which water quality information is collected.

WATER QUALITY STUDIES - studies of water quality directed towards specific issues or concerns.

STATION AND ACTIVITY DESIGNATION

ARTICLE 4

Each water quality monitoring activity will be identified for this Agreement in Schedule B according to the designation "federal", "federal-territorial" or "territorial", based on the mandates and responsibilities of the parties.

ARTICLE 5

DOE will be responsible for the costs associated with water quality monitoring activities that have been designated as federal.

ARTICLE 6

DIAND will be responsible for the costs associated with water quality monitoring activities that have been designated as territorial.

ARTICLE 7

DOE and DIAND will be responsible for the costs associated with water quality monitoring activities that have been designated federal-territorial.

OPERATIONAL CONSIDERATIONS

ARTICLE 8

Any party to this agreement may be designated as an operating party for federal, federal-territorial or territorial water quality monitoring activities provided that the Parties agree and costs are apportioned according to the provisions of this Agreement.

- 8.1 The operating party will provide the personnel and resources necessary to meet its responsibilities under this Agreement.
- 8.2 The operating parties will participate in a quality assurance program as described in Schedule E and abide by the Principles For Selection of Laboratory Services as provided in Schedule F.
- 8.3 The parties will share all data collected under this Agreement and will exchange it annually or upon request. DOE and DIAND will store these data in NAQUADAT. Other parties may store these

data as appropriate.

- 8.4 The operating parties will prepare annual reports on data collected under this Agreement and any party may, jointly or individually, produce water quality interpretative reports dealing with issues within their respective mandates.
- 8.5 Where any party deems it desirable, another party may be requested to carry out specified activities under this Agreement.
- 8.6 The parties agree to integrate and coordinate water quality and quantity monitoring activities to improve efficiencies of operation and utility of information.

FINANCIAL CONSIDERATIONS

ARTICLE 9

- 9.1 Each party's obligation under this Agreement is subject to sufficient funds being approved and allocated.
- 9.2 With the agreement of all parties, data may be collected under this Agreement on behalf of others. Any recovery of costs for these activities will be the responsibility of the sponsoring parties.

DETERMINATION OF THE COST OF AGREEMENT ACTIVITIES

ARTICLE 10

- 10.1 Estimated Annual Program Costs and Cost Recovery will be prepared by the Coordinators based on the procedures outlined in Schedule C, and recorded in Schedule D for approval by the Administrators.
- 10.2 The appropriate party may submit a claim based on the estimated annual cost recovery imbalance for the current fiscal year in accordance with the annual cost recovery payment computed in the Schedule D. Payment is to be made as soon as possible after receipt of the claim but within 30 days in any case.
- 10.3 Where one party undertakes work on behalf of another and there is a significant difference between the estimated and final cost, the other party will be promptly notified and an appropriate adjustment will be made.

- 10.4 All parties shall keep complete records of all eligible expenditures and shall support such costs and calculations with proper documentation.
- 10.5 All parties shall have suitable supporting records and documents available in order that an audit may be conducted at the discretion of any party. Such documentation shall be available for a period of six full years.
- 10.6 Any discrepancy disclosed by audit between the amount paid and the amount payable by a party shall be promptly adjusted.

ARTICLE 11

THE YUKON may assume the functions now accepted by DIAND, if transfer of responsibility and acceptable program resources from DIAND to THE YUKON for managing water resources occurs.

ADMINISTRATION

ARTICLE 12

- 12.1 Upon signing this Agreement each party, represented by its Minister or Executive Council Member, will designate one Administrator by the appropriate Notice of Appointment forms annexed as Schedules G (i), (ii) and (iii) respectively.
- 12.2 Any party may replace its Administrator by written notice to the other parties.

ARTICLE 13

The Administrators will be responsible for:

- 13.1 Establishing a Coordinating Committee to coordinate activities under this agreement.
- 13.2 Providing direction to the Coordinating Committee.
- 13.3 Modifying and revising, if appropriate, the terms of reference for the Coordinating Committee (Schedule A).
- 13.4 Ensuring the free exchange of water quality data and related information between the parties.
- 13.5 Ensuring the application of quality assurance principles and guidelines according to Schedule E.

- 13.6 Ensuring that where possible Yukon facilities are used in support of the activities under this agreement
- 13.7 Reviewing and approving estimates, actual implementation and operating costs, and advising the parties on the transfer of funds as per Article 10.
- 13.8 Approving proposed future monitoring activities (Schedules B and D) and modifications or updates of other Schedules to the agreement.
- 13.9 Public consultation

SPECIAL CONSIDERATIONS

ARTICLE 14

No member of the House of Commons of Canada nor of the Legislative Assembly of the Yukon will be permitted to hold any share or part of this Agreement or to profit from any benefit to arise there from.

ARTICLE 15

- 15.1 The operating party shall indemnify and save harmless the other parties, its officers, servants and agents, against all claims and demands of other parties in any way arising out of the implementation of this Agreement, except to the extent to which such claims or demands relate to an act of negligence of any officer, employee, or agent of the other parties.
- 15.2 Where the responsibility for any implementation hereunder or any part thereof is to be vested in another party, the contractual arrangements made between the implementing jurisdiction and said party shall provide a clause to save the parties harmless from any claims, demands, actions, and causes of action which may be made against them arising out of such implementation by the other party.

PERIOD OF AGREEMENT

ARTICLE 16

- 16.1 This Agreement shall become effective and binding on the parties after signing by all Ministers and the Executive Council Member.

16.2 This Agreement may be terminated or renegotiated at the request of DOE, DIAND or THE YUKON, provided that eighteen (18) months notice, in writing, is given, or, at the mutual consent of all parties. The Agreement, excluding the schedules, may be revised only with the consent of the Governor General in Council and the Executive Council of the Yukon, and is subject to any terms and conditions of the Treasury Board of Canada, and the Management Board of the Yukon.


ARTICLE 17


The parties agree to plan, implement and operate a water quality monitoring program in accordance with Articles 1 to 16 inclusive and the Schedules attached hereto.

IN WITNESS WHEREOF the Ministers of the Environment and Indian Affairs and Northern Development have hereunto set their hands on behalf of CANADA, and the Executive Council Member Responsible for Renewable Resources has hereunto set his hands on behalf of the YUKON


THE GOVERNMENT OF CANADA

By: 
Minister of Environment

Witness:  Date: _____
Minister of Indian Affairs and Northern Development

Witness:  Date: 95-01-04

THE GOVERNMENT OF THE YUKON

By: 
Executive Council Member Responsible for Renewable Resources

Witness:  Date: 95:01:19

SCHEDULE A

COORDINATING COMMITTEE TERMS OF REFERENCE

Each Administrator may name up to two members, such that there is equal representation from the parties, to the Coordinating Committee. The Coordinating Committee shall:

1. Advise the Administrators of water quality monitoring activities performed under the terms of the Agreement.
2. Ensure data exchange, quality control and assurance, and the production of interpretative reports in a timely and effective manner.
3. Review and recommend annual modifications to Schedule B and the supporting technical plan to meet changing needs and to improve the overall operation of water quality monitoring activities, including the selection and classification of stations.
4. Implement the water quality monitoring activities Schedule B, including the frequency of sampling, the variables to be measured, timing, and other technical details of the monitoring program.
5. Review and recommend program activities and station classifications to ensure an equitable data exchange consistent with each party's mandate and interest in the stations.
6. Determine station costs, activity costs and annual payments in accordance with Schedules C and D for review and approval by the Administrators.
7. Appoint and supervise subcommittees and working groups for tasks such as network planning and review, quality assurance and control, laboratory operations, study design, and other aspects involved in the operation of this Agreement.
8. Prepare an Annual Report on activities under the Agreement for the Administrators.
9. Carry out other duties as assigned by the Administrators.

SCHEDULE B

YUKON WATER QUALITY MONITORING ACTIVITIES FOR 1992/93

FIXED STATION NETWORK

<u>Station Description</u>	<u>Frequency</u>	<u>Sub basin</u>
FEDERAL-TERRITORIAL		
Yukon River at Carmacks	52	09AH
Yukon River at Marsh Lake	13	09AB
Pelly River at Pelly Crossing	52	09BC
Pelly River at Faro	26	09BC
Stewart River at Stewart Crossing	52	09DD
Takhini River at Klondike Highway	26	09AC
Porcupine River at Old Crow	52	09FD
Slims River at Alaska Highway	52	09CA
Firth River/Babbage River (N.Y.N.P.)	4	10MD
Peel River at Fort McPherson	52	10MC
Ogilvie River at Dempster Highway	26	10MA
Dezadeash River at Haines Junction	52	08AB

FEDERAL

Yukon River at Eagle	26	09ED
Liard River at Lower Crossing	26	10AA

TERRITORIAL

Klondike River at Dawson	26	09EA
Nares River	13	09AA
Tagish River	13	09AA
Wheaton River at Bridge	52	09AA

WATER QUALITY STUDIES

Takhini River organics
Survey Priority Chemicals
White River site evaluation
add costs by party by station

SCHEDULE C

1. CONSIDERATIONS FOR CALCULATION OF ANNUAL PROGRAM COSTS

ELIGIBLE EXPENDITURES

- a) laboratory analyses in accordance with the price list of each party;
- b) shipping of samples and sampling equipment;
- c) contracts for personnel such as lay samplers, consultants and data compilers;
- d) travel expenses including per diem expenses for accommodation, vehicle costs as applicable to each party, public and government transportation and fuel for boats and rented vehicles;
- e) purchase, operation, and maintenance of capital equipment, including but not limited to samplers, meters, vehicles, laboratory analytical equipment, and computers including applicable fees and taxes;
- f) consumable items such as ice, rope, tape, forms, containers, and chemicals;
- g) rentals of vehicles, aircraft, equipment and boats;
- h) computer costs, including data transfer charges, cost of development work to enable data storage and transfer, and cost of computer time for data evaluations, but not storage charges;
- i) eligible salaries, overtime and fringe benefits for staff assigned to duties covered by the Agreement; and
- j) services, such as the cost of establishing necessary fuel caches.

NON-ELIGIBLE EXPENDITURES

- a) depreciation,
- b) salaries, overtime and travel expenses of Administrators, and Coordinators, and the costs of audits.

2. PROCEDURES FOR PREPARATION OF ESTIMATED ANNUAL PROGRAM COSTS AND COST RECOVERY

- a) The estimated annual costs of Operating Parties shall be calculated for each year the Agreement is in effect for the purpose of establishing each Party's planned expenditure including any costs to be recovered from another party;
- b) Federal/Territorial Station costs shall be shared on a 50:50 basis; the cost of each Federal/Territorial study shall be shared as agreed upon by the Administrators;
- c) Any imbalance in cost recovery shall form the basis of transfer of funds between the parties;
- d) Data to be used as a basis for calculating the estimated annual cost will be the cost data from the latest available full fiscal year, as well as appropriate estimates for the costs of proposed water quality studies and any capital expenditures;
- e) An inflation factor may be used in computing the estimated annual costs, for the year in question, commensurate with sound financial practices.

SCHEDULE D

APPROVED ESTIMATED ANNUAL COST FOR 1992/93

	ENVIRONMENT CANADA	INDIAN AND NORTHERN AFFAIRS CANADA
Water Quality Monitoring Network		
Lay sampling	10,206	12,078
Transportation	9,922	11,742
Shipping	5,670	6,710
Analytical Services	41,958	49,654
Computer Services	8,505	10,065
Staff	43,092	50,996
Sub-Total	119,353	141,245
Water Quality Studies		
Transportation	8,155	3,835
Shipping	5,912	5,500
Analytical Services	35,000	18,000
Computer Services	9,000	9,000
Staff	67,580	67,420
Sub-Total	125,647	103,755
Equipment		
Field Equipment	25,000	5,000
Laboratory Equipment	5,000	25,000
Sub-Total	30,000	30,000
=====		
<u>Summary</u>		
Operating Expenses	65,000	65,000
Salaries (4 pys)	180,000	(4 pys) 180,000
Capital Expenses	30,000	30,000
Total Agency Expenditures	275,000	275,000
GRAND TOTAL	550,000	

SCHEDULE E

QUALITY ASSURANCE/QUALITY CONTROL

The Coordinating Committee will formulate a quality assurance program to assure the compatibility of all data and ensure that the plan is implemented. The quality assurance program will include, but not be limited to:

- a) the establishment and revision of sample collection procedures and manuals, to assure valid and representative samples for water, biota and sediment;
- b) the establishment and revision of field measurement methods and manuals, including calibration and maintenance of field equipment;
- c) the establishment and revision of sample preservation protocols;
- d) the selection of sample containers;
- e) the establishment and revision of procedures for laboratory analyses;
- f) the establishment and revision of procedures for keeping laboratory records on sample handling;
- g) the establishment and revision of criteria for the use of sample controls, spiked samples, replicate sampling and analysis, and reagent blanks;
- h) the review of data within 60 days of collection to assure that only the data that meet acceptance criteria are reported and stored;
- i) the documentation of changes in sampling, analysis and data management procedures;
- j) the implementation of methods that reflect technological advances;

SCHEDULE F

PRINCIPLES FOR SELECTION OF LABORATORY SERVICES

Water quality laboratory analysis will be done in Yukon where it is operationally effective and cost effective and for which agreed quality assurance /quality control standards can be met. Other analyses will be performed at DOE or private laboratories which also meet the required quality assurance/quality control standards. It is the intention of DIAND to provide laboratory capabilities for the majority of analyses.

SCHEDULE G (i)

NOTICE OF APPOINTMENT

Pursuant to the Agreement made the ___
day of _____, 199__ between the
Government of Canada and the Government
of the Yukon regarding water quality
monitoring, I, the undersigned,
_____, Minister of the
Department of Indian Affairs and Northern
Development for Canada, hereby designate

Department of Indian Affairs and Northern
Development to serve as Administrator
within the context of the said Agreement
on behalf of the Department of Indian
Affairs and Northern Development for
Canada.

Signed this ___ day of _____, 199__ .

Minister of Indian Affairs and Northern
Development

SCHEDULE G (ii)

NOTICE OF APPOINTMENT

Pursuant to the Agreement made the ___
day of _____, 199 between the
Government of Canada and the Government
of the Yukon regarding water quality
monitoring, I, the undersigned,

Minister of the Environment for Canada,
hereby designate _____

Conservation and Protection, Pacific and
Yukon Region, Environment Canada, to
serve as Administrator within the context
of the said Agreement on behalf of the
Department of Environment for Canada.

Signed this ___ day of _____, 199 .

Minister of Environment

SCHEDULE G (iii)

NOTICE OF APPOINTMENT

Pursuant to the Agreement made the ____ day of _____, 199__ between the Government of Canada and the Government of the Yukon regarding water quality monitoring, I, the undersigned,

Executive Council Member Responsible for Renewable Resources for Yukon, hereby designate, _____

to serve as Administrator within the context of the said Agreement on behalf of the Yukon.

Signed this ____ day of _____, 199__ .

Executive Council Member Responsible for Renewable Resources